

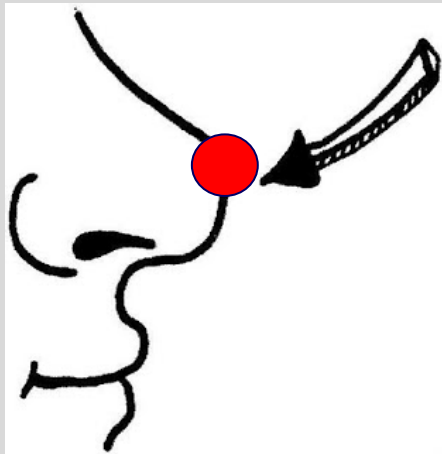
Investing for Successful Retirement

UD Osher – OLLI Fall 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.

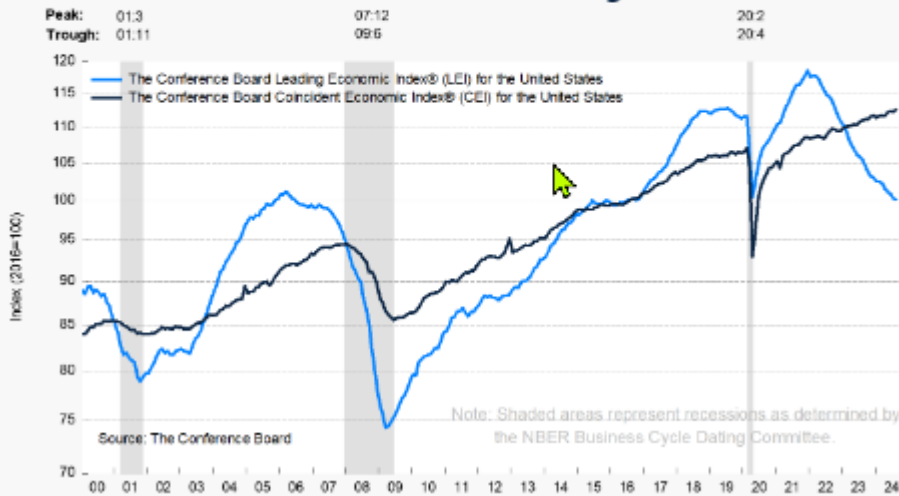
Form your own opinion, make your own investment decisions.

Sixth Class – Oct. 9th

- Market Update – Rajeev – 20 minutes
- ETFs deep dive – Part 1
 - What is an ETF?
 - How does it work?
 - Performance Criteria for an ETF

Conference Board forecast

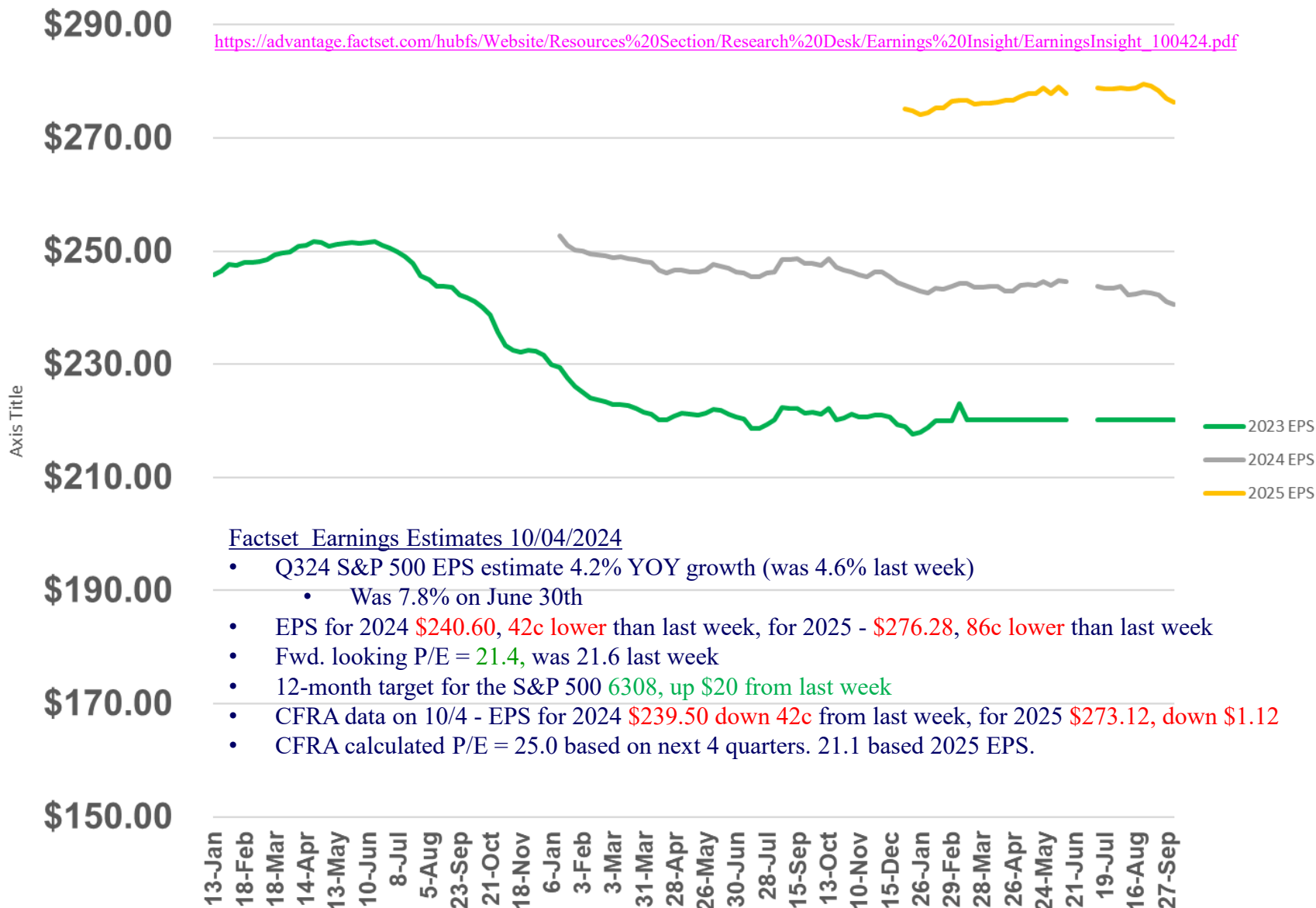
The LEI has continued to fall in 2024, but the rate of decline has moderated since last year



"In August, the US LEI remained on a downward trajectory and posted its sixth consecutive monthly decline," said Justyna Zabinska-La Monica, Senior Manager, Business Cycle Indicators, at The Conference Board. "The erosion continued to be driven by new orders, which recorded its lowest value since May 2023. A negative interest rate spread, persistently gloomy consumer expectations of future business conditions, and lower stock prices after the early-August financial market tumult also weighed on the Index. Overall, the LEI continued to signal headwinds to economic growth ahead. The Conference Board expects US real GDP growth to lose momentum in the second half of this year as higher prices, elevated interest rates, and mounting debt erode domestic demand. However, in the Fed's September 2024 Summary of Economic Projections, policymakers suggested 100 basis points of interest rate cuts are likely by the end of this year, which should lower borrowing costs and support stronger economic activity in 2025."

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

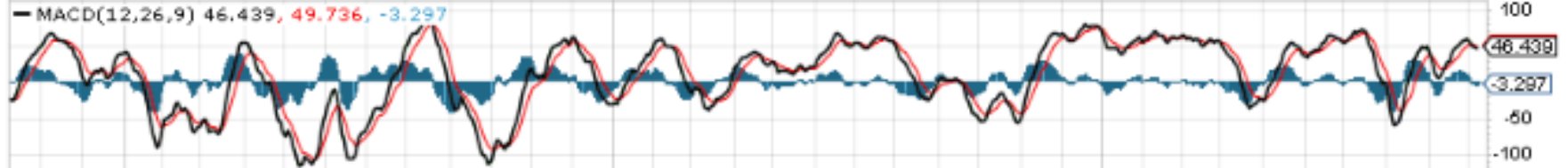
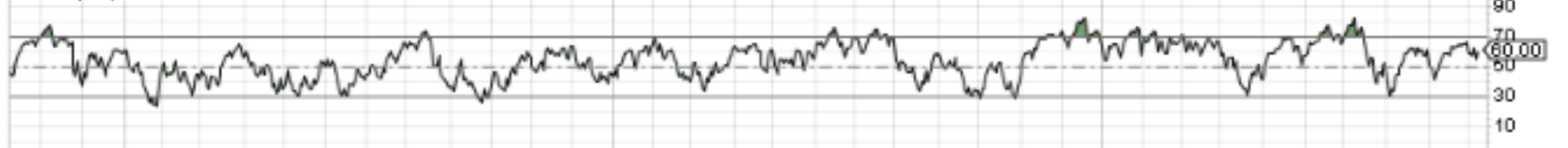
https://advantage.factset.com/hubfs/Website/Resources%20Section/Research%20Desk/Earnings%20Insight/EarningsInsight_100424.pdf



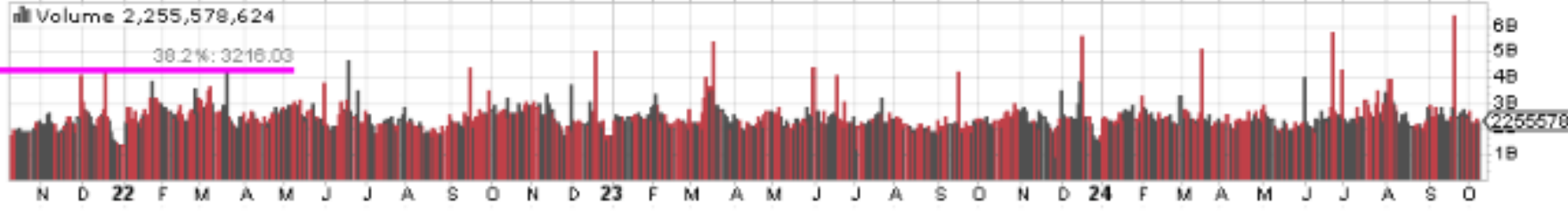
Factset Earnings Estimates 10/04/2024

- Q324 S&P 500 EPS estimate 4.2% YOY growth (was 4.6% last week)
 - Was 7.8% on June 30th
- EPS for 2024 **\$240.60, 42c lower** than last week, for 2025 - **\$276.28, 86c lower** than last week
- Fwd. looking P/E = **21.4**, was 21.6 last week
- 12-month target for the S&P 500 **6308, up \$20 from last week**
- CFRA data on 10/4 - EPS for 2024 **\$239.50 down 42c** from last week, for 2025 **\$273.12, down \$1.12**
- CFRA calculated P/E = 25.0 based on next 4 quarters. 21.1 based 2025 EPS.

▲ RSI(14) 60.00



- \$SPX (Daily) 5751.13
 - MA(50) 5564.42
 - MA(200) 5263.96
 - BB(20,2,0) 5575.58 - 5690.71 - 5805.84

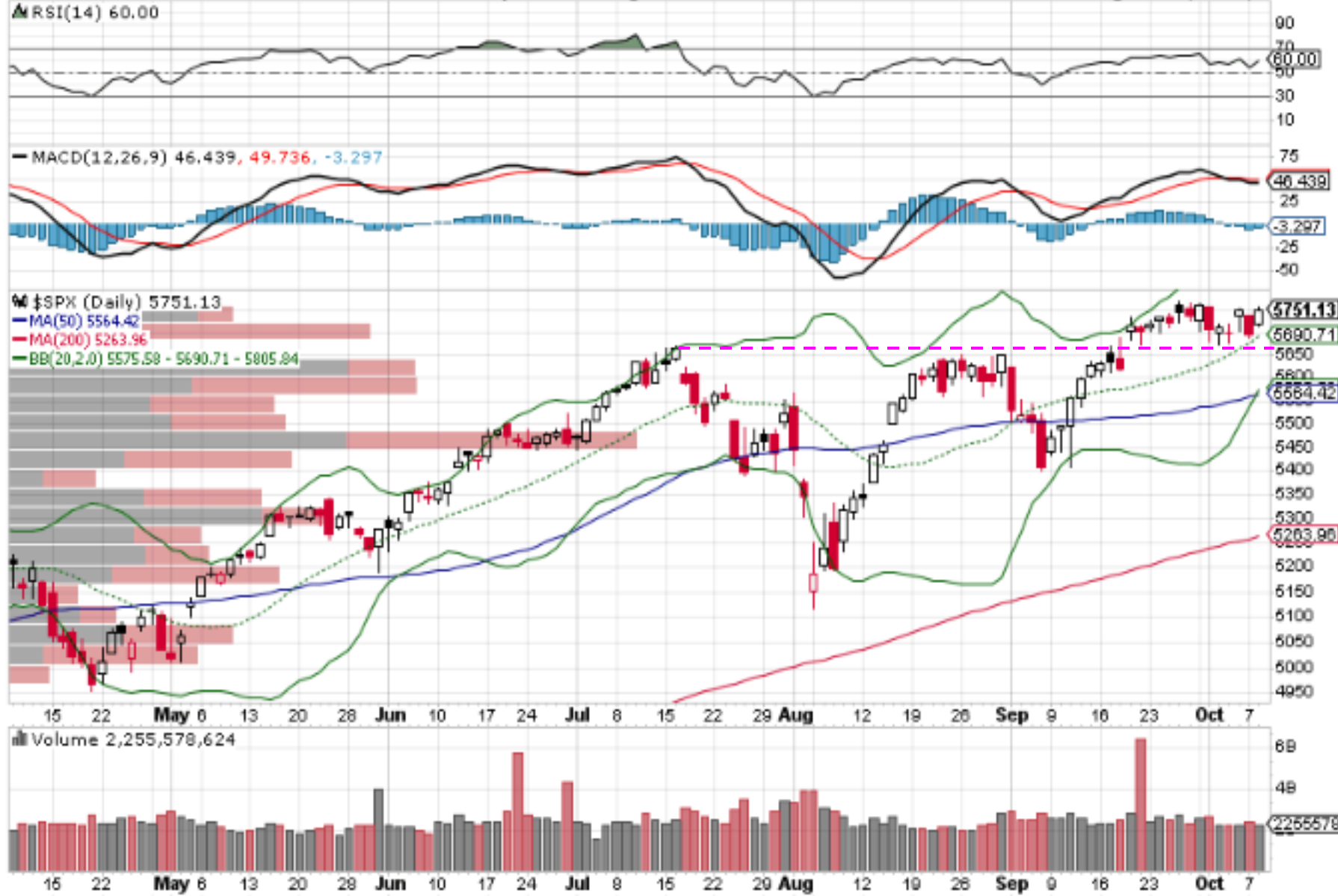


\$SPX S&P 500 Large Cap Index INDX

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8-Oct-2024

Open 5719.14 High 5757.80 Low 5714.56 Close 5751.13 Volume 2.3B Chg +55.19 (+0.97%) ▲



Market Breadth – another way

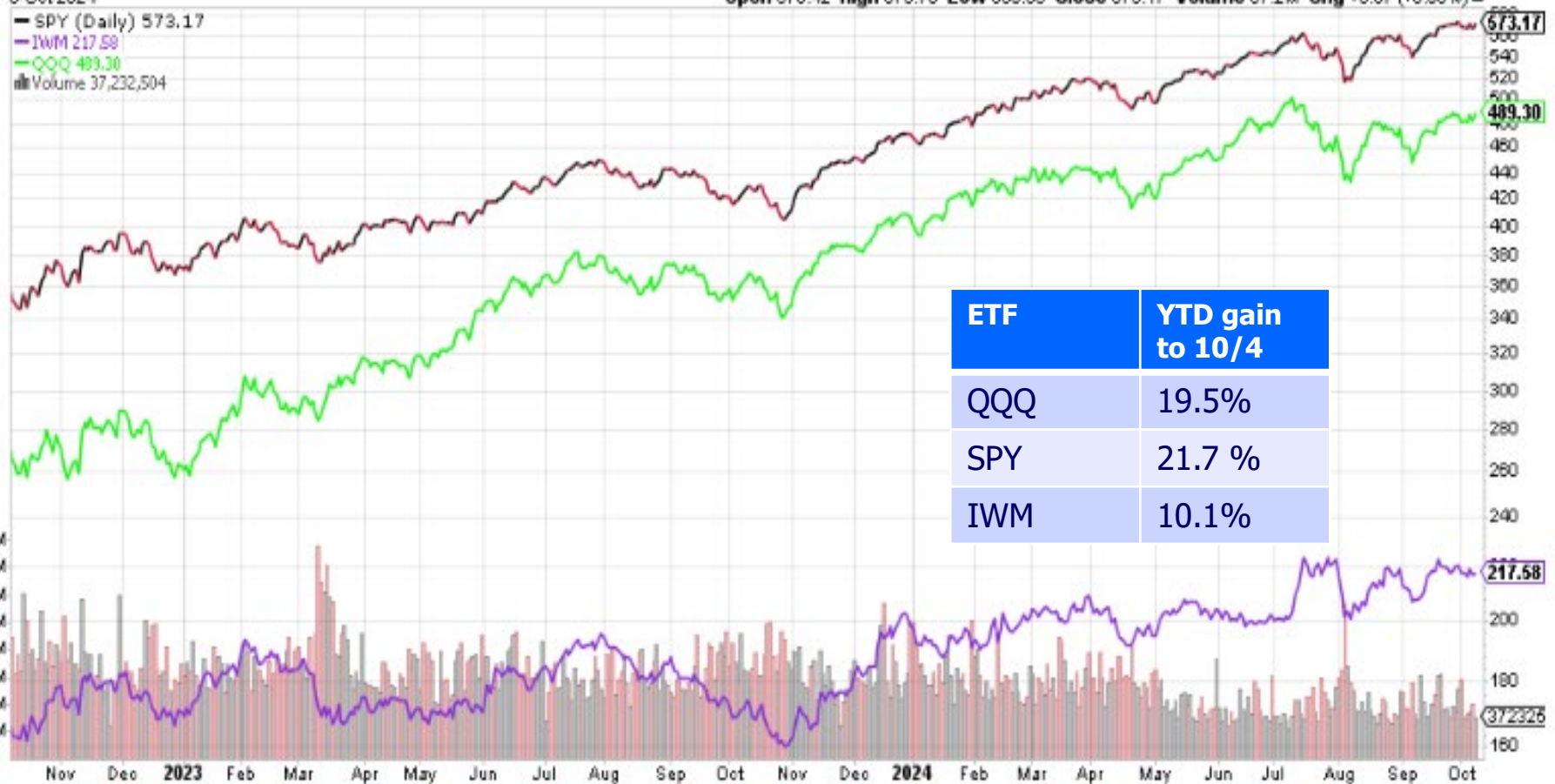
SPY SPDR S&P 500 ETF NYSE

8-Oct-2024

Open 570.42 High 573.78 Low 569.53 Close 573.17 Volume 37.2M Chg +5.37 (+0.95%) ▲

© StockCharts.com

— SPY (Daily) 573.17
 — IWM 217.58
 — QQQ 489.30
 ■ Volume 37,232,504



List of Market corrections > 10% since 1980

#	Start Date	End Date	% Correction	# of days	\$NYAD	\$SPX50R	\$USHL5	MA50/200
1	9/20/2018	12/24/2018	19.8%	95	divergence	Coincident	Coincident	
2	1/26/2018	2/8/2018	10.2%	13	No signal	Coincident	Coincident	
3	11/3/2015	2/11/2016	13.3%	100	No signal			
4	5/21/2015	8/25/2015	12.4%	96	divergence			
5	4/29/2011	10/3/2011	19.4%	157	No signal			
6	4/23/2010	7/2/2010	16.0%	70	No signal			
7	10/09/2007	3/9/2009	56.8%	517	divergence			
8	11/27/2002	3/11/2003	14.7%	104	No signal	NA		
9	3/23/2000	10/7/2002	49.0%	929	divergence	NA		
10	7/16/1999	10/15/1999	12.1%	91	divergence	NA		
11	7/17/1998	8/31/1998	19.3%	45	divergence	NA		
12	10/7/1997	10/27/1997	10.8%	20	No signal	NA	Coincident	
13	7/16/1990	10/11/1990	19.9%	87	divergence	NA	NA	
14	1/2/1990	1/30/1990	10.2%	28	divergence	NA	NA	
15	08/25/87	12/4/1987	34.4%	101	divergence	NA	NA	
16	10/10/1983	7/24/1984	14.4%	288	divergence	NA	NA	
17	11/26/1980	8/10/1982	27.1%	622	divergence	NA	NA	
18	2/14/1980	3/26/1980	17.1%	43	NA	NA	NA	

8-Oct-2024

Open 35262.00 High 35262.00 Low 35262.00 Close 35262.00 Chg +01.00 (+0.23%) ▲



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

	DATE	MARKET PULSE (IBD) FOR THE WEEK	DISTRIBUTION DAYS		S&P 500 TRIPLE SCREEN						NASDAQ TRIPLE SCREEN					
			S&P 500	NASDAQ	3-27 EMA	MACD	RBI	CLOSING	Δ	%CHANGE	3-27 EMA	MACD	RBI	CLOSING	Δ	%CHANGE
	09/21/24	FOR THE WEEK							76	1.35%				265	1.50%	
SUN	09/22/24	YTD							833	19.56%				2,837	19.57%	
MON	09/23/24	CONFIRMED UP (80% -100%)	4	6	P	P	P	5,718	16	0.28%	P	P	P	17,874	26	0.14%
TUE	09/24/24	CONFIRMED UP (80% -100%)	4	6	P	P	P	5,732	14	0.24%	P	P	P	18,074	100	0.56%
WED	09/25/24	CONFIRMED UP (80% -100%)	4	6	P	P	P	5,722	-10	-0.17%	P	P	P	18,082	8	0.04%
THUR	09/26/24	CONFIRMED UP (80% -100%)	4	6	P	P	P	5,745	23	0.40%	P	P	P	18,190	108	0.60%
FRI	09/27/24	CONFIRMED UP (80% -100%)	4	6	P	P	P	5,738	-7	-0.12%	P	P	P	18,119	-71	-0.39%
SAT	09/28/24	FOR THE WEEK							36	0.63%				171	0.96%	
SUN	09/29/24	YTD							969	20.32%				3,108	20.70%	
MON	09/30/24	CONFIRMED UP (80% -100%)	4	5	P	P	P	5,762	24	0.42%	P	P	P	18,189	70	0.39%
TUE	10/01/24	CONFIRMED UP (80% -100%)	4	6	P	P	P	5,708	-54	-0.94%	P	P	P	17,910	-279	-1.53%
WED	10/02/24	CONFIRMED UP (80% -100%)	4	6	P	P	P	5,709	1	0.02%	P	P	P	17,925	15	0.08%
THUR	10/03/24	CONFIRMED UP (80% -100%)	3	5	P	F	P	5,699	-10	-0.18%	P	0	P	17,918	-7	-0.04%
FRI	10/04/24	CONFIRMED UP (80% -100%) JOBS FRI	3	4	P	0	P	5,751	52	0.91%	P	P	P	18,137	219	1.22%
SAT	10/05/24	FOR THE WEEK							13	0.23%				18	0.10%	
SUN	10/06/24	YTD							982	20.59%						
MON	10/07/24	CONFIRMED UP (80% -100%)	4	5	P	F	P	5,685	-56	-0.97%	P	0	P	17,823		
TUE	10/08/24	CONFIRMED UP (80% -100%)	4	5	P	F	P	5,751	66	0.98%	P	0	P	18,182	259	1.45%

https://drive.google.com/drive/folders/0B6Qc_gipshXMelkzQ245d2R1eTQ?resourcekey=0-5pWgINqaJPJ12L2qYurMWg

TLT – 20 yr U.S. Treasury ETF

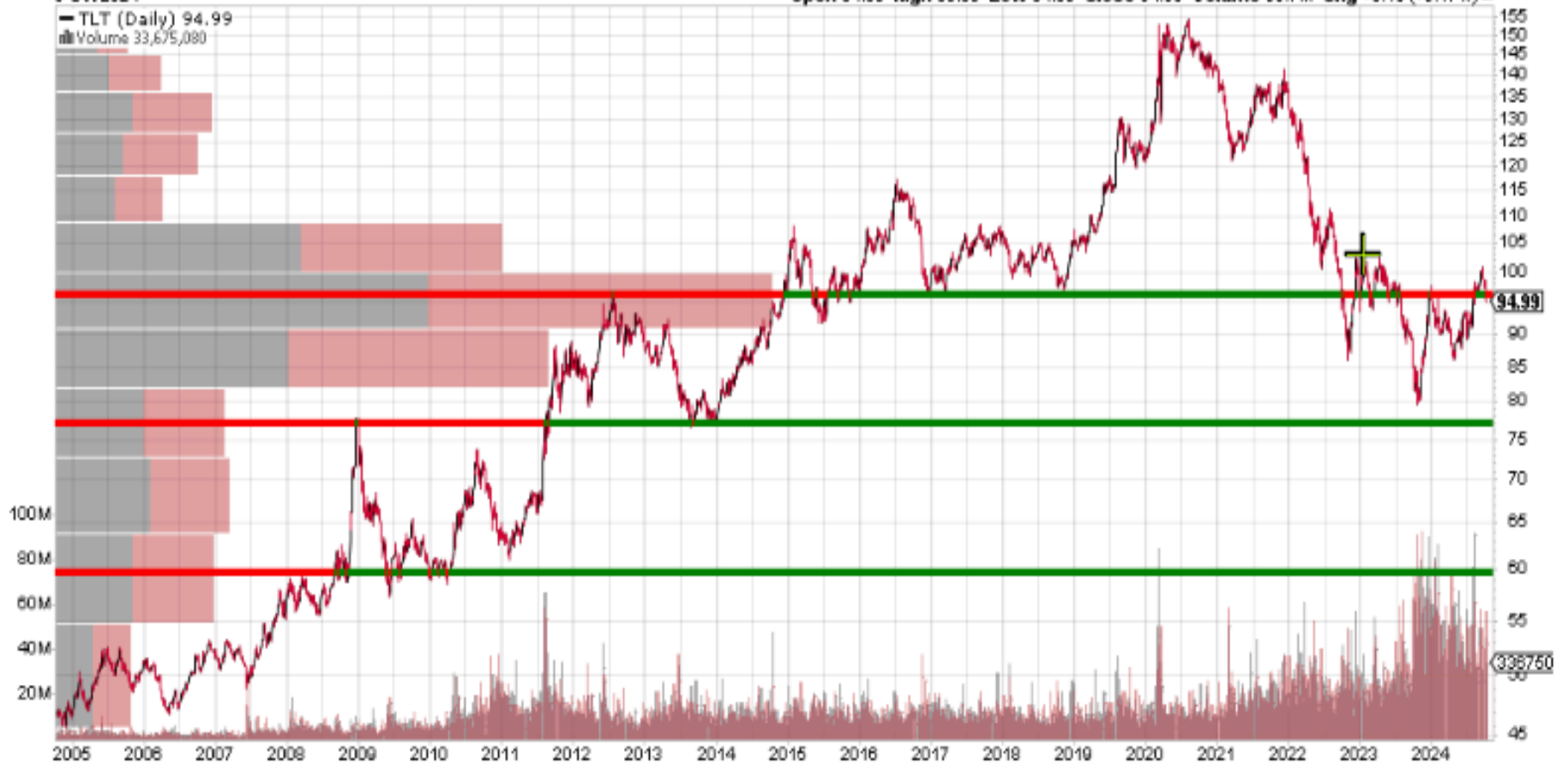
TLT iShares 20+ Year Treasury Bond ETF Nasdaq GM

8-Oct-2024

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Open 94.39 High 95.03 Low 94.33 Close 94.99 Volume 33.7M Chg +0.18 (+0.17%) ▲

TLT (Daily) 94.99
Volume 33,675,080



U.S. Dollar



Geopolitical Events And Stock Market Reactions

Market Shock Events	Event Date	S&P 500 Index		Calendar Days To	
		One-Day	Total Drawdown	Bottom	Recovery
Iranian General Killed In Airstrike	1/3/2020	-0.7%	?	?	?
Saudi Aramco Drone Strike	9/14/2019	-0.3%	-4.0%	19	41
North Korea Missile Crisis	7/28/2017	-0.1%	-1.5%	14	36
Bombing of Syria	4/7/2017	-0.1%	-1.2%	7	18
Boston Marathon Bombing	4/15/2013	-2.3%	-3.0%	4	15
London Subway Bombing	7/5/2005	0.9%	0.0%	1	4
Madrid Bombing	3/11/2004	-1.5%	-2.9%	14	20
U.S. Terrorist Attacks	9/11/2001	-4.9%	-11.6%	11	31
Iraq's Invasion of Kuwait	8/2/1990	-1.1%	-16.9%	71	189
Reagan Shooting	3/30/1981	-0.3%	-0.3%	1	2
Yom Kippur War	10/6/1973	0.3%	-0.6%	5	6
Munich Olympics	9/5/1972	-0.3%	-4.3%	42	57
Tet Offensive	1/30/1968	-0.5%	-6.0%	36	65
Six-Day War	6/5/1967	-1.5%	-1.5%	1	2
Gulf of Tonkin Incident	8/2/1964	-0.2%	-2.2%	25	41
Kennedy Assassination	11/22/1963	-2.8%	-2.8%	1	1
Cuban Missile Crisis	10/16/1962	-0.3%	-6.6%	8	18
Suez Crisis	10/29/1956	0.3%	-1.5%	3	4
Hungarian Uprising	10/23/1956	-0.2%	-0.8%	3	4
N. Korean Invades S. Korea	6/25/1950	-5.4%	-12.9%	23	82
Pearl Harbor Attack	12/7/1941	-3.8%	-19.8%	143	307
Average		-1.2%	-5.0%	22	47

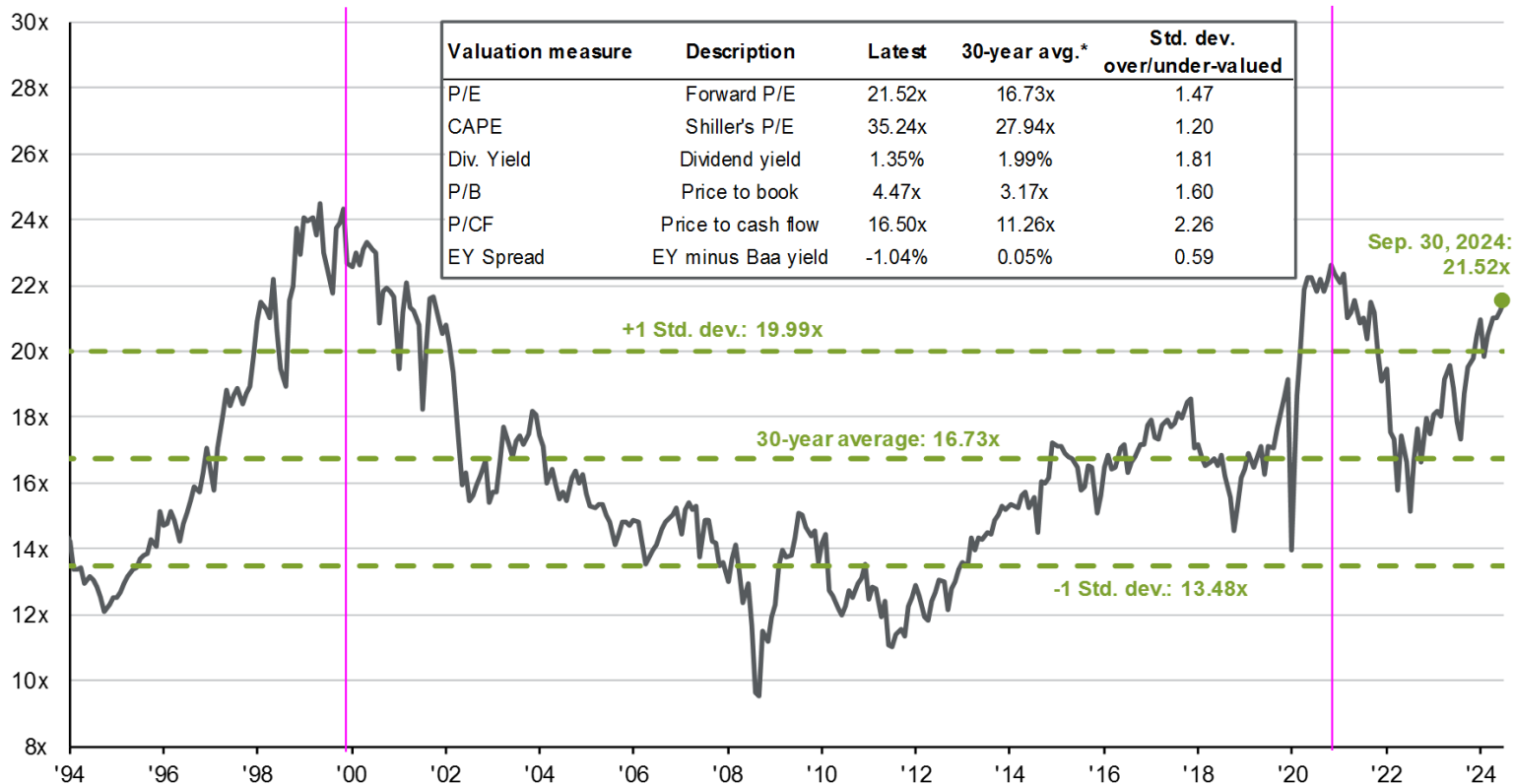
Source: LPL Research, S&P Dow Jones Indices, CFRA, 01/06/20



S&P 500 valuation measures

Equities

S&P 500 Index: Forward P/E ratio



Source: FactSet, FRB, Refinitiv Datastream, Robert Shiller, Standard & Poor's, Thomson Reuters, J.P. Morgan Asset Management. Price-to-earnings is price divided by consensus analyst estimates of earnings per share for the next 12 months as provided by IBES since March 1994 and by FactSet since January 2022. Average P/E and standard deviations are calculated using 30 years of history. Shiller's P/E uses trailing 10-years of inflation-adjusted earnings as reported by companies. Dividend yield is calculated as the next 12-months consensus dividend divided by most recent price. Price-to-book ratio is the price divided by book value per share. Price-to-cash flow is price divided by NTM cash flow. EY minus Baa yield is the forward earnings yield (consensus analyst estimates of EPS over the next 12 months divided by price) minus the Moody's Baa seasoned corporate bond yield. Std. dev. over-/under-valued is calculated using the average and standard deviation over 30 years for each measure. *Averages and standard deviations for dividend yield and P/CF are since November 1995 due to data availability. Guide to the Markets – U.S. Data are as of September 30, 2024.

J.P.Morgan
ASSET MANAGEMENT

What, Me Worry?

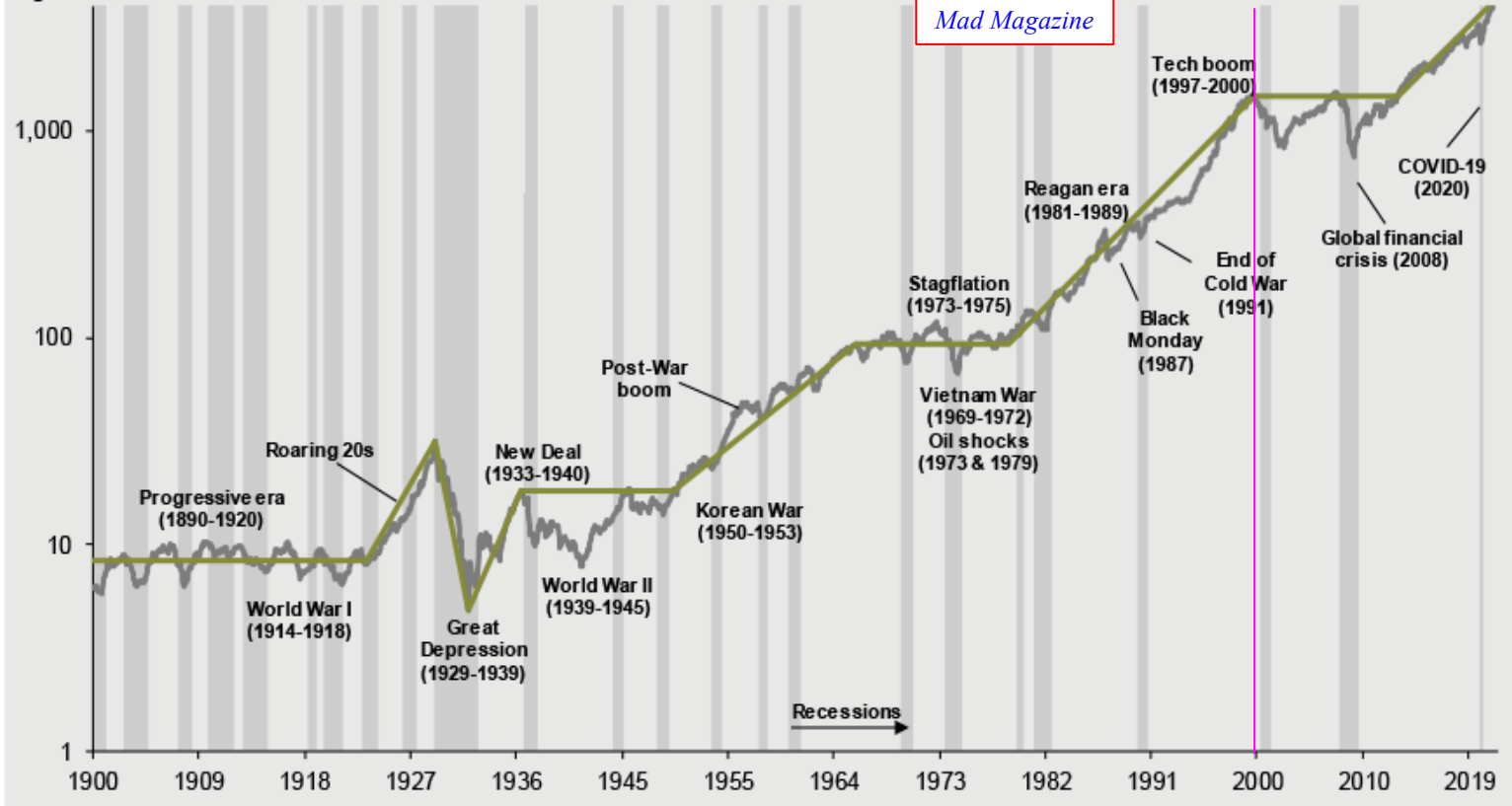


Mad Magazine

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.

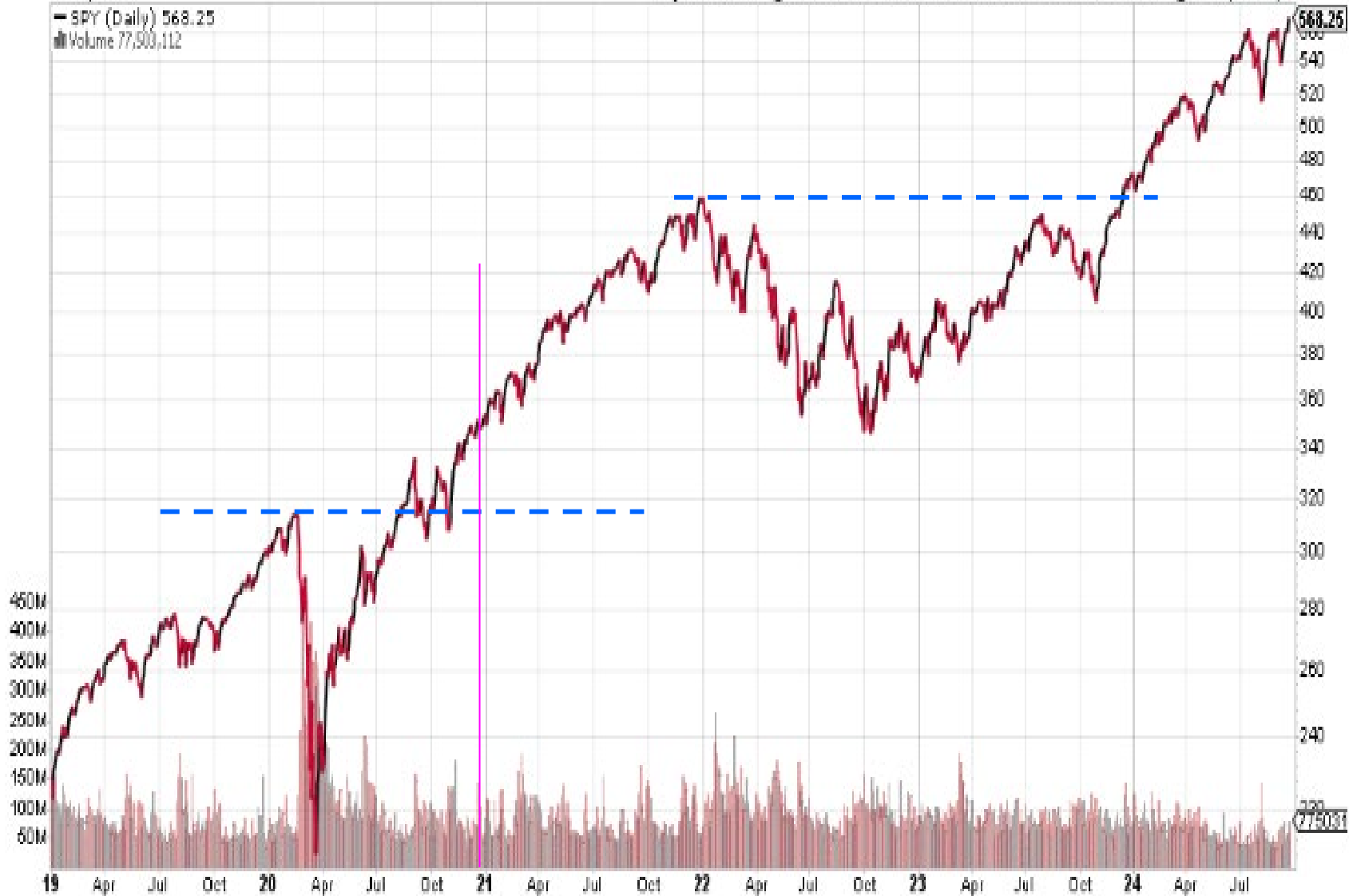
SPY SPDR S&P 500 ETF NYSE

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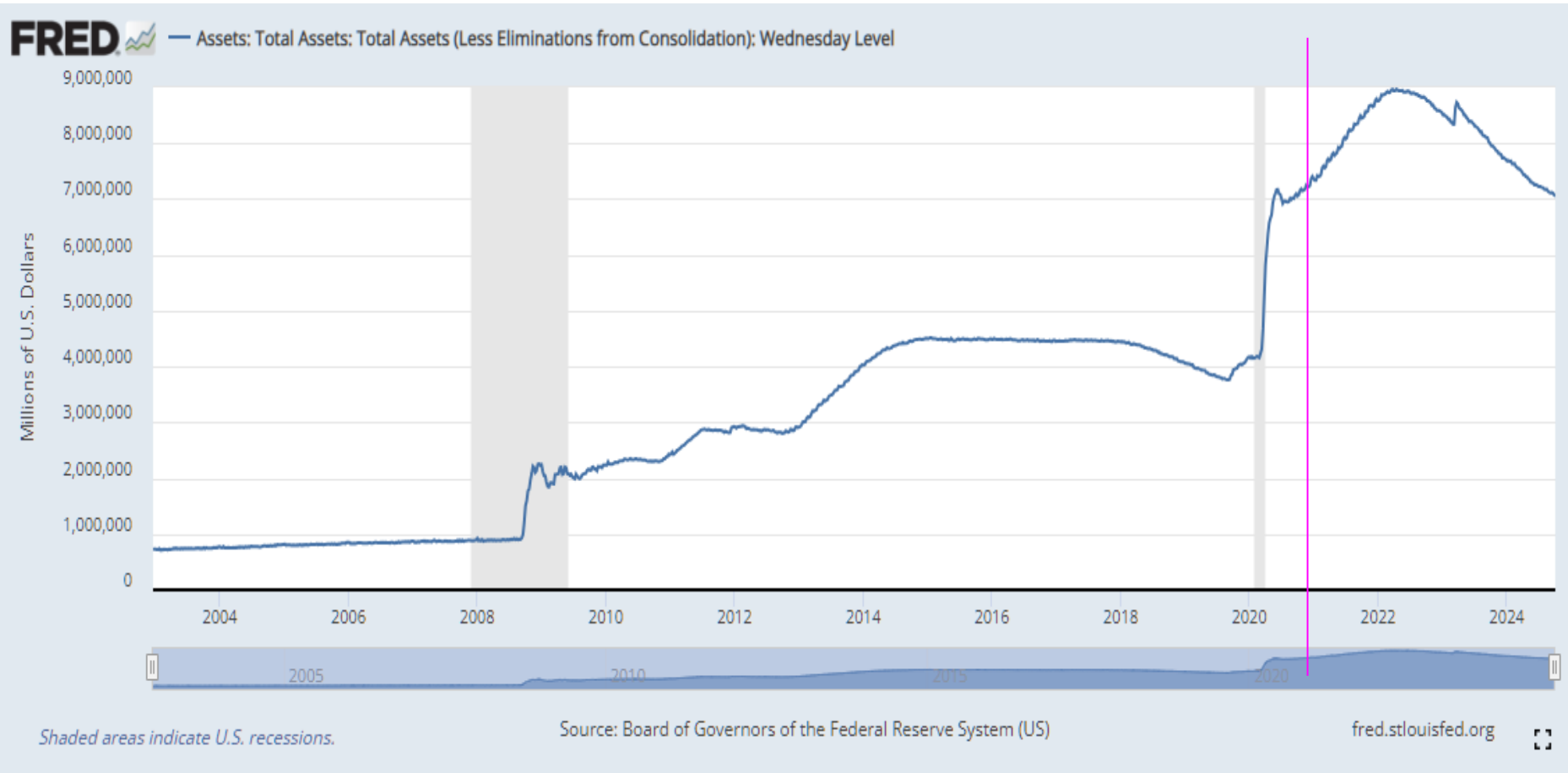
20-Sep-2024

Open 567.84 High 569.31 Low 565.17 Close 568.25 Volume 77.5M Chg -0.98 (-0.17%)

— SPY (Daily) 568.25
■ Volume 77,500,112



Federal Reserve Balance Sheet



Sixth Class – Oct. 9th

- Market Update – 20 minutes
- ETFs deep dive – Part 1
 - What is an ETF?
 - How does it work?
 - Performance Criteria for an ETF

Funds and ETFs

- Mutual Funds and ETFs
 - What are they?
 - How do they work?
 - How do you buy them?
- Pre-reading if you have time
 - Investopedia links:
 - <https://www.investopedia.com/terms/m/mutualfund.asp>
 - <https://www.investopedia.com/terms/e/etf.asp>
 - <https://www.investopedia.com/ask/answers/09/mutual-fund-etf.asp>
 - https://www.investor.gov/sites/investorgov/files/2020-04/mutual-funds-ETFs_2_0.pdf

What is a Fund?

- A pool of money (Company) that is invested in a portfolio of investments. Run by a bank or a financial company.
- Portfolio can be equities in
 - A market
 - A sector
 - A strategy
 - Etc.
- Investors can invest in the Fund and get exposure to the entire portfolio
 - Investors own a fraction of the portfolio.

Funds –

- Funds are regulated by the govt.
 - SEC
 - Investment Company Act of 1940
- Who offers them
 - State Street, Blackrock
 - JP Morgan, etc.
 - Vanguard, Fidelity etc.
 - Many others
- US registered ETFs \$ 7t AUM ... Mutual Funds \$27t AUM
 - Less than 5% actively managed
 - Data from statista.com end of 2021

Largest Mutual Funds

Rank	Symbol	Fund Name
1	VSMPX	Vanguard Total Stock Market Index Fund;Institutional Plus
2	FXAIX	Fidelity 500 Index Fund
3	VFIAX	Vanguard 500 Index Fund;Admiral
4	VTSAX	Vanguard Total Stock Market Index Fund;Admiral
5	SPAXX	Fidelity Government Money Market Fund
6	VMFXX	Vanguard Federal Money Market Fund;Investor
7	FDRXX	Fidelity Government Cash Reserves
8	VGTSX	Vanguard Total International Stock Index Fund;Investor
9	FGTXX	Goldman Sachs FS Government Fund;Institutional
10	SWVXX	Schwab Value Advantage Money Fund;Investor
11	VFFSX	Vanguard 500 Index Fund;Institutional Select
12	VIIIX	Vanguard Institutional Index Fund;Inst Plus
13	FRGXX	Fidelity Instl Government Portfolio;Institutional
14	VTBNX	Vanguard Total Bond Market II Index Fund;Institutional
15	OGVXX	JPMorgan US Government Money Market Fund;Capital
16	TFDXX	BlackRock Liquidity FedFund;Institutional
17	VTBIX	Vanguard Total Bond Market II Index Fund;Investor
18	GVMXX	State Street US Government Money Market Fund;Prem
19	AGTHX	American Funds Growth Fund of America;A
20	FCTDX	Fidelity Strategic Advisers Fidelity US Total Stk
21	FCNTX	Fidelity Contrafund
22	TTTXX	BlackRock Liquidity Treasury Trust Fund;Institutional
23	VINIX	Vanguard Institutional Index Fund;Institutional
24	MVRXX	Morgan Stanley Inst Liq Government Port;Institutional
25	VMRXX	Vanguard Cash Reserves Federal Money Market Fd;Adm

AUM 552.8 B

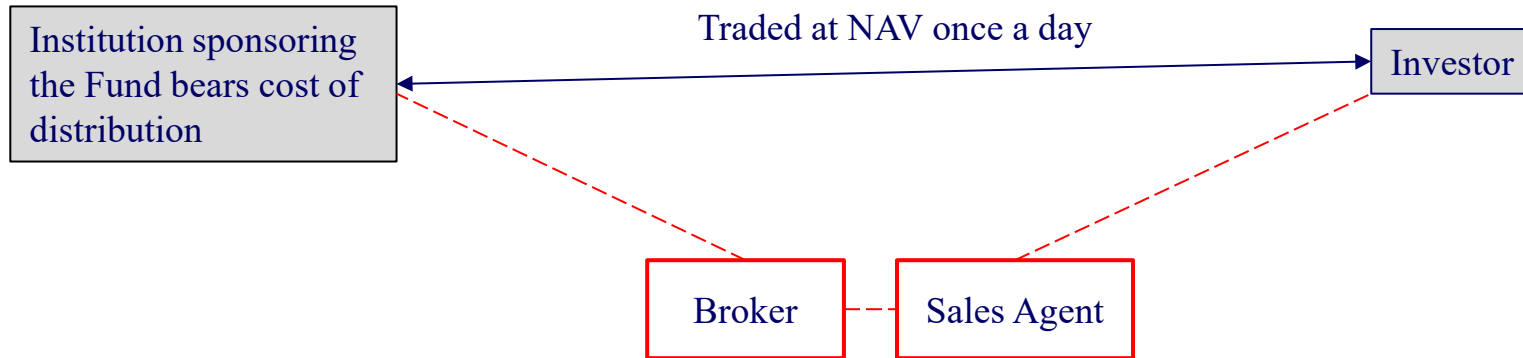
Higher min investment
Lower expense ratio

Largest ETFs

<https://etfdb.com/compare/market-cap/>

Symbol	Name	AUM in billions	Avg Daily Share Volume (3mo)
SPY	SPDR S&P 500 ETF Trust	585.5	52,287,906
VOO	Vanguard S&P 500 ETF	526.4	5,791,926
IVV	iShares Core S&P 500 ETF	522.6	5,157,745
VTI	Vanguard Total Stock Market ETF	440.1	2,898,511
QQQ	Invesco QQQ Trust Series I	293.5	37,640,379
VEA	Vanguard FTSE Developed Markets ETF	141.6	7,903,205
VUG	Vanguard Growth ETF	140.4	983,798
VTV	Vanguard Value ETF	127.5	1,724,057
IEFA	iShares Core MSCI EAFE ETF	124.4	6,650,452
AGG	iShares Core U.S. Aggregate Bond ETF	120.2	7,353,300
BND	Vanguard Total Bond Market ETF	118.5	5,751,206
IWF	iShares Russell 1000 Growth ETE	99.2	1,285,797
IJH	iShares Core S&P Mid-Cap ETF	90.1	8,057,026
VIG	Vanguard Dividend Appreciation ETF	85.6	701,537
IJR	iShares Core S&P Small-Cap ETF	84.6	3,916,883
IEMG	iShares Core MSCI Emerging Markets ETF	82.8	9,018,038
VWO	Vanguard FTSE Emerging Markets ETF	82.4	8,783,733
VXUS	Vanguard Total International Stock ETF	78.0	2,805,871
VGT	Vanguard Information Technology ETF	77.0	491,925
GLD	SPDR Gold Shares	75.0	6,617,341
XLK	Technology Select Sector SPDR Fund	69.7	5,360,805
VO	Vanguard Mid-Cap ETF	69.4	529,418
IWM	iShares Russell 2000 ETF	67.9	32,726,965
RSP	Invesco S&P 500® Equal Weight ETF	63.6	6,574,077
ITOT	iShares Core S&P Total U.S. Stock Market	61.3	1,298,234

How a Mutual Fund works



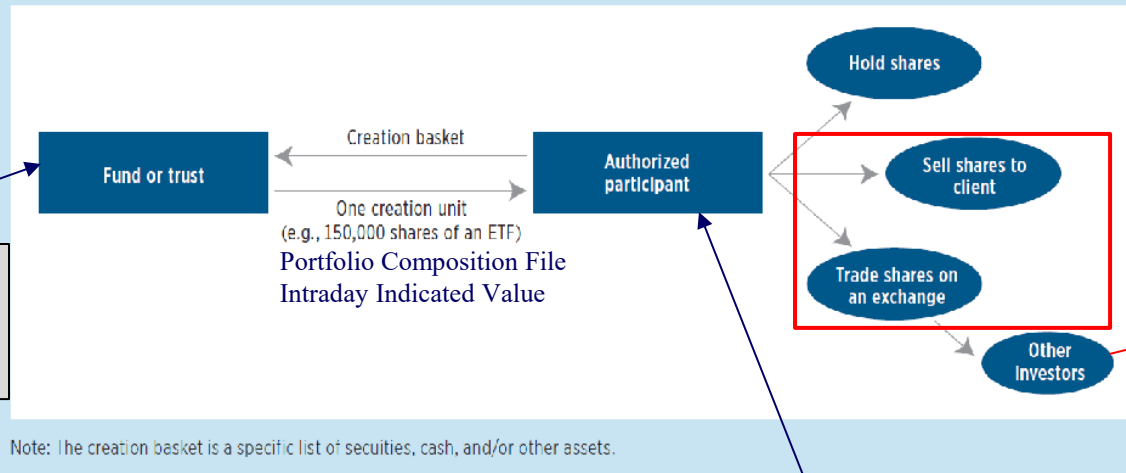
ETF?

- Hybrid – Investment features of Mutual funds married to trading features of common stocks.
 - Like a mutual fund, an investor owns a proportional interest in pooled assets.
 - Generally managed by an investment company for a fee.
 - Regulated by the Investment Company Act of 1940.
 - Traded in continuous markets on global stock exchanges – continuous pricing and liquidity throughout the trading day.
- Over 8000 global ETFs, over 2600 in the US (not updated)

How an ETF works

FIGURE 3

Creation of ETF Shares



Institution sponsoring the ETF does not distribute

Traded all day long like a stock

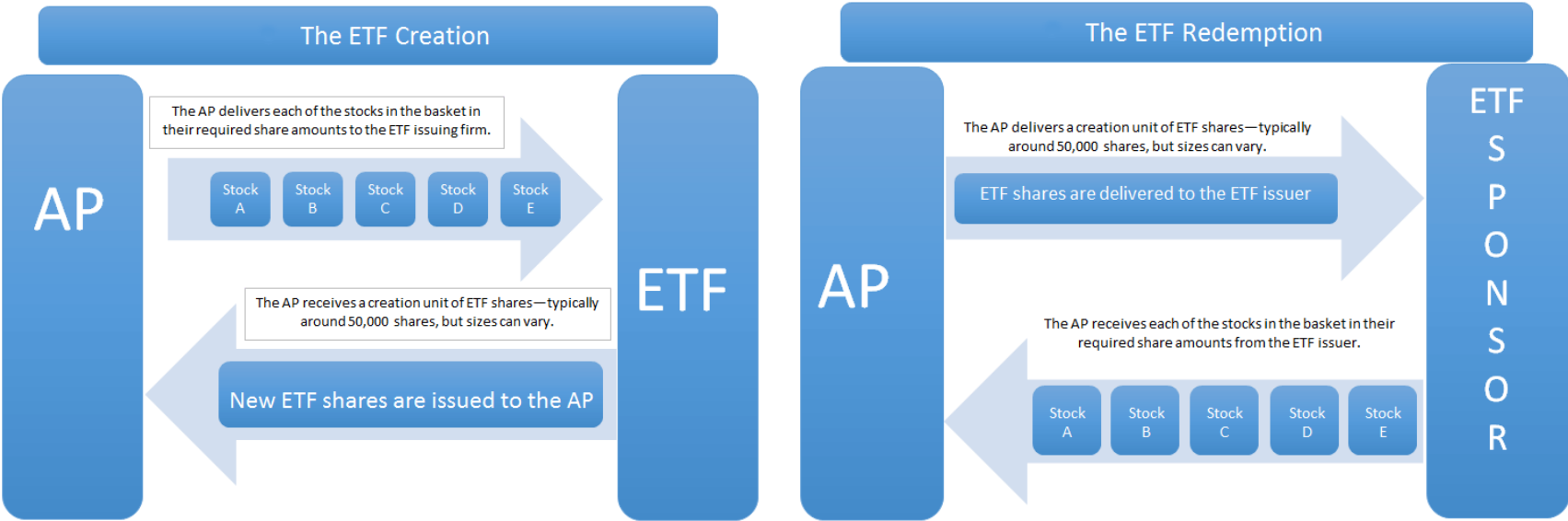
large market maker or institution with a ETF trading desk. Make profits through arbitrage of the ETF NAV vs. underlying assets and through trading commissions and fees in the secondary market.

How ETFs work - Investment Company Institute

https://www.ici.org/etf_resources/background/explain_18_etfs

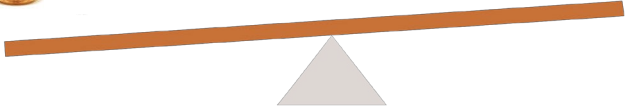
https://www.ici.org/etf_resources/background/faqs_etfs

Arbitrage



Basket of Stocks

Share of the ETF



<https://www.etf.com/etf-education-center/etf-basics/what-is-the-creationredemption-mechanism>

ETFs – Pros and Cons

Pros	Cons
Like an individual stock – tradeable intraday, go long or short, optionable, marginable etc.	An ETF for anything – makes unfamiliar markets accessible to novices.
Lower expenses – no distribution expense, passive strategies.	Transaction Costs, Bid/Ask Spreads
Transparency – portfolio, price discovery	
Less taxable distributions, more investor control on taxes.	
Investment or redemption by one investor does not impact others directly.	
No minimum investments.	

How an investor benefits

- Dividend payments
 - Funds pay all dividends minus costs back to investors
 - Taxable for the investor
- Capital Gains/Losses
 - When a fund makes a gain or a loss by selling shares, it must pass the gain/loss minus costs back to the investor.
 - Happens regularly for a Mutual Fund .. Not for an ETF
 - Taxable for the Investor
- Gain or loss from buying and selling the fund shares for the investor
 - Investor makes a gain or loss from buying and selling
 - Taxable for the investor

Fees and Expenses

Mutual Funds

- ❑ Management (12-b-1) fees
- ❑ Sales or Redemption Loads
 - ❑ Fees earned by sales agent
- ❑ Account Management fees

Vary by share class (?)
Often based on investment size

ETFs

- ❑ Management (12-b-1) fees
- ❑ Trade commissions by broker
- ❑ Bid – Ask spread

Charles Schwab broker website

▾ Fees & Expenses

Description	VFIAX	VFINX	VOO: NYSE Arca
Net Expense Ratio ⓘ	0.04%	0.14%	0.03%
Gross Expense Ratio ⓘ	0.04%	0.14%	0.03%
Schwab Mutual Fund OneSource® ⓘ	No Load, Transaction Fee	No Load, Transaction Fee	N/A

▾ Quotes

Description	VFIAX	VFINX	VOO: NYSE Arca
Last Close 10/04/2024	\$525.99	\$526.07	\$521.84
52 Week Range	\$380.14 - \$531.71	\$380.19 - \$531.80	\$375.95 - \$529.92

▾ Yields

Description	VFIAX as of 10/04/2024	VFINX as of 10/04/2024	VOO: NYSE Arca as of 10/04/2024
SEC 30 Day Yield ⓘ	1.25%	1.15%	1.26%
Distribution Yield ⓘ	1.27%	1.18%	1.28%
Distribution Frequency	Quarterly	Quarterly	Quarterly

▾ Risk & Returns

Description	VFIAX as of 09/30/2024	VFINX as of 09/30/2024	VOO: NYSE Arca as of 09/30/2024
Standard Deviation ⓘ	17.52	17.52	17.53
Sharpe Ratio ⓘ	0.52	0.51	0.52
Beta (3 yr) ⓘ	1.00	1.00	1.00
Alpha (3 yr) ⓘ	-0.04	-0.14	-0.04

▾ Initial Minimums

Description	VFIAX	VFINX	VOO: NYSE Arca
Basic	\$3,000	No minimum	N/A for ETFs
IRA	\$3,000	No minimum	N/A for ETFs
Custodial	\$3,000	No minimum	N/A for ETFs

What do you want in a Fund?

- Reputable Sponsor
- Liquidity
- Delivers exposure to the asset class / index you want exposure to
 - Fits your asset allocation plan
 - Matches performance of the asset class
- Low Expense Ratio and transaction fees
- Rated well by rating agencies

Sources of information for ETFs

- 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 – Oct. 16th

- Market Update – Rajeev – 20 minutes
- ETFs deep dive – Part 2
 - Performance metrics
 - Risk
 - ETFs for various asset classes & strategies

Thanks !!

□ Happy Investing !!

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