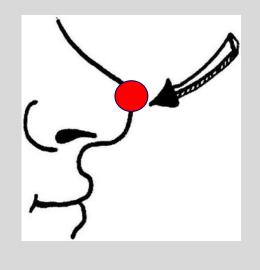
Investing for Successful Retirement

<u>UD Osher – OLLI</u> 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.

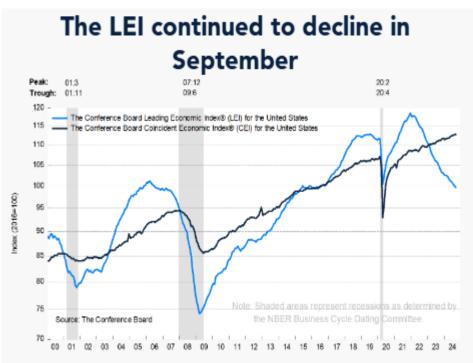
Class 10 – Nov. 6th

□ Market Update – Rajeev – 20 minutes

Precious Metals

- Precious as defined today
- Precious for green energy

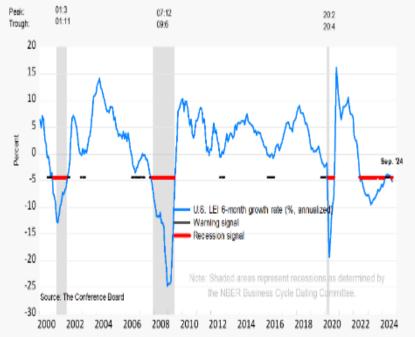
Conference board LEI

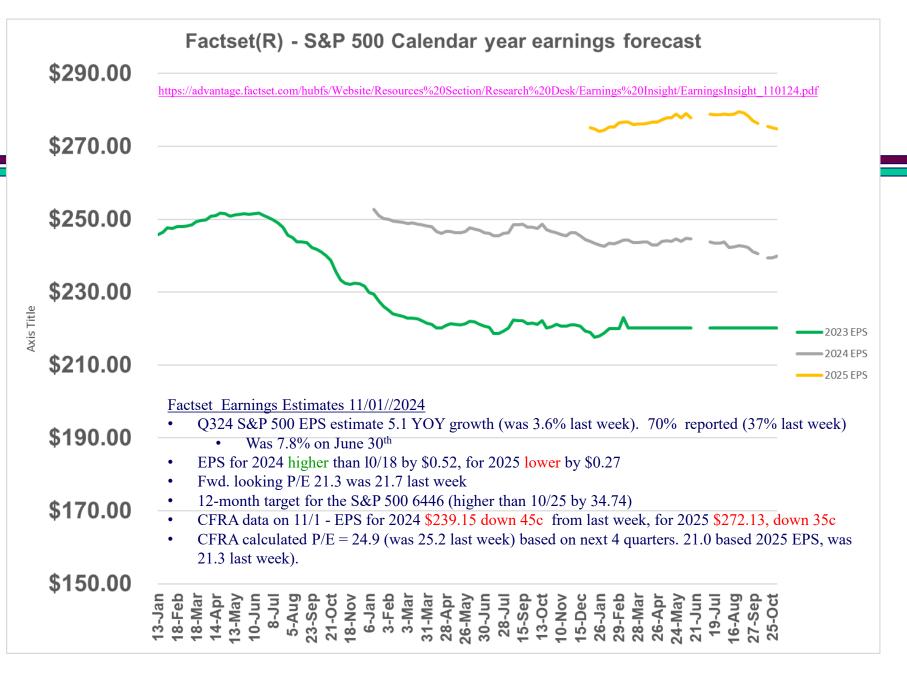


LEI weakness in September continued to be led by new orders and the yield spread

The US LEI signaled recession again in September, but the economy may only

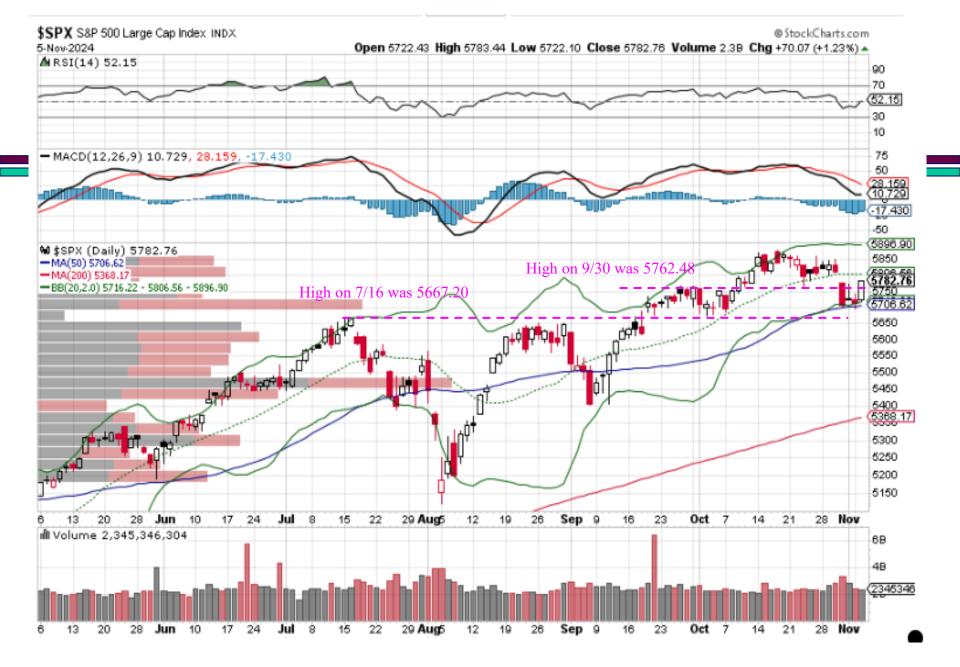
slow ahead





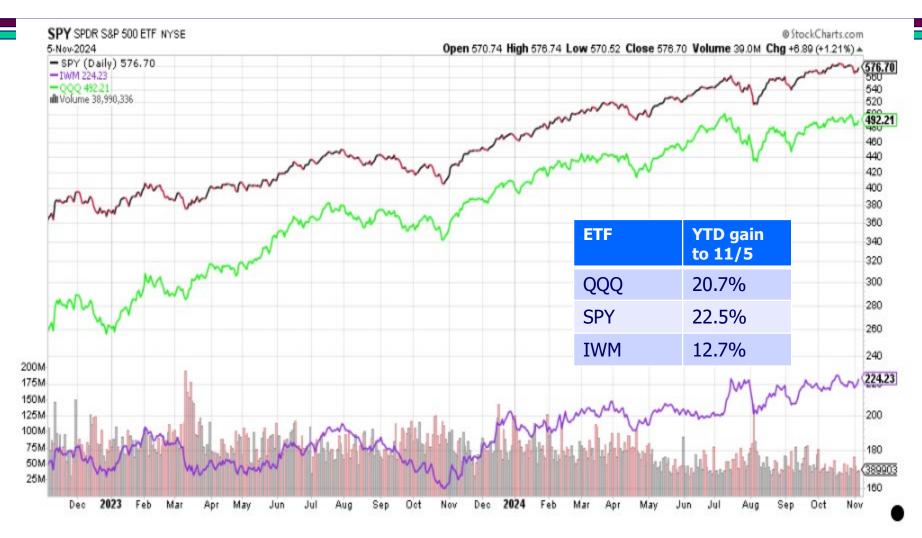


5 November 2024



5 November 2024

Market Breadth – another way





https://www.marketinout.com/chart/market.php?breadth=advance-decline-line







This is NOT investment advice

Weekly market direction

Prof. Guy Werner

Guy.werner@verizon.net

					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	10/19/24	FOR THE WEEK	1						49	0.84%					147	0.80%
SUN	10/20/24	YTD							1095	22.96%					3,478	23.17%
MON	10/21/24	CONFIRMED UP (80% -100%)	4	5	Р	Р	Р	5,853	-11	-0.19%	P	Р	P	18,540	51	0.28%
TUE	10/22/24	CONFIRMED UP (80% -100%)	3	5	Р	Р	P	5,851	-2	-0.03%	P	Р	Р	18,573	33	0.18%
WED	10/23/24	CONFIRMED UP (80% -100%)	3	5	Р	F	Р	5,797	-54	-0.92%	Р	F	Р	18,276	-297	-1.60%
THUR	10/24/24	CONFIRMED UP (80% -100%)	3	5	Р	F	P	5,809	12	0.21%	Р	F	P	18,415	139	0.76%
FRI	10/25/24	CONFIRMED UP (80% -100%)	3	4	Р	F	Р	5,808	-1	-0.02%	Р	F	Р	18,518	03	0.56%
SAT	10/26/24	FOR THE WEEK							-56	-0.95%				·	29	0.16%
SUN	10/27/24	YTD							1039	21.79%					3,507	23.36%
MON	10/28/24	CONFIRMED UP (80% -100%)	3	4	Р	F	Р	5,823	15	0.26%	Р	0	P	18,567	49	0.26%
TUE	10/29/24	CONFIRMED UP (80% -100%)	3	4	Р	F	Р	5,832	9	0.15%	P	Р	Р	18,712	145	0.78%
WED	10/30/24	CONFIRMED UP (80% -100%)	3	4	P	F	Р	5,813	-19	-0.33%	Р	0	P	18,607	-105	-0.56%
THUR	10/31/24	CONFIRMED UP (60% -80%)	4	4	Ρ	F	F	5,705	-108	-1.86%	P	F	F	18,095	-512	-2.75%
FRI	11/01/24	CONFIRMED UP (60% -80%)	4	4	0	F	F	5,728	23	0.40%	P	F	F	18,239	144	0.80%
SAT	11/02/24	FOR THE WEEK	1						-80	-1.38%					-279	-1.51%
SUN	11/03/24	YTD							959	20.11%					3,228	21.50%
MON	11/04/24	CONFIRMED UP (60% -80%)	4	4	F	F	F	5,712	-16	-0.28%	Р	F	F	18,179	-60 👃	<u>13</u>
TUE	11/05/24	CONFIRMED UP (60% -80%)	4	4	F	F	Р	5,782	70	1.23%	Р	F	Р	18,439	260	1.43%

https://drive.google.com/drive/folders/0B6Qc_gjpshXMclkzQ245d2R1eTQ?resourcekey=0-5pWglNqaJPJ12L2qYurMWg

TLT – 20 yr U.S. Treasury ETF



5 November 2024

U.S. Dollar



Class 10 – Nov. 6th

□ Market Update – Rajeev – 20 minutes

Precious Metals

- Precious as defined today
- Precious for green energy



Asset class returns

2009	-2023																
Ann.	Vol.	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023	YTD
Large Cap	Sm all Cap	EM Equity	REITs	REITs	REITS	Sm all Cap	REITS	REI Ts	Small Cap	EM Equity	Cash	Large Cap	Sm all Cap	REITs	Comdty.	Large Cap	Large Cap
14.0%	21.9%	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%	22.1%
Sm all Cap	REITS	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	EM Equity
11.3%	21.2%	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%	17.2%
REITS	EM Equity	DM Equity	EM Equity	High Yield	EM Equity	DM Equity	Fixed Income	Fixed Income	Large Cap	Large Cap	REITs	Sm all Cap	Large Cap	Com dty.	High Yield	Sm all Cap	REI Ts
10.9%	20.3%	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%	14.2%
High Yield	DM Equity	RETs	Comdty.	Large Cap	DM Equity	Asset	Asset	Cash	Comdty.	Small Cap	High Yield	DM Equity	Asset Alles.	Sm all Cap	Fixed Income	Asset Allec.	DM Equity
8.6%	18.4%	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%	13.5%
Asset	Com dty.	Small	Large	Cash	Sm all	High	Sm all	DM	EM	Asset	Large	Asset	DM	Asset	Asset	High	Asset
Alloc. 8.1%	16.6%	Cap 27.2%	Cap 15.1%	0.1%	Cap 16.3%	Yield 7.3%	Cap 4.9%	Equity -0.4%	Equity 11.6%	All e c. 14.6%	Cap -4.4%	All. 19.5%	Equity 8.3%	All ec. 13.5%	<mark>− All</mark> €c. -13.9%	Yie Id 14.0%	Alloc. 12.3%
						1.5 %	4.5 /0		11.0 /0			/				14.0 //	
DM Equity	Large Cap	Large Cap	High Yield	Asset Allec.	Large Cap	REITS	Cash	Asiset Allۍ.	RETs	/High Yield	Asset Allec.	EM Equity	Fixed Income	DM Equity	DM Equity	REITS	Sm all Cap
7.4%	16.1%	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%	11.2%
EM	High	Asset	Asset	Sm all	Asset		High	High	Aşset		Sm all	High	High	High	Large	EM	High
Equity	Yield	Allec.	Albc.	Cap	Allec.	Cash	Yield	Yield	Allec.	REITS	Cap	Yield	Yield	Yield	Сар	Equity	Yield
6.9%	11.5%	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%	9.6%
Fixe d Incom e	Asset Alloc.	Comdty.	DM Equity	DM Equity	Fixed Income	Fixed Income	EM Equity	Sm all Cap	Fixed Income	Fixed Income	Com dty.	Fixe d In com e	Cash	Cash	EM Equity	Fixed Income	Com dty.
2.7%	11.5%	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%	5.9%
Cash	Fixed Income	Fixed Income	Fixe d Incom e	Com dty.	Cash	EM Equity	DM Equity	EM Equity	DM Equity	Comdty.	DM Equity	Com dty.	Com dty.	Fixed Income	Small Cap	Cash	Fixed Income
0.8%	4.5%	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%	4.4%
Com dty.	Cash	Cash	Cash	EM Equity	Com dty.	Com dty.	Com dty.	Com dty.	Cash	Cash	EM Equity	Cash	REITs	EM Equity	RE Ts	Com dty.	Cash
-0.2%	0.7%	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%	4.1%

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 Commodity Index, Fixed Income: Used Bloomberg US Aggregate, 5% in the Bloomberg Commodity Index, 5% in the Bloomberg US Aggregate, 5% in the Bloombe returns.

J.P.Morgan ASSET MANAGEMENT

GTM

U.S.

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Guide to the Markets - U.S. Data are as of September 30, 2024.

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Investing Principles



Correlations and volatility

GTM U.S. 54

	U.S. Large Cap	EAFE	EME	Bonds	Corp. HY	Munis	Currcy.	EMD	Cmdty.	REITs	Hedge funds	Private equity	Gold	Ann. Volatility
U.S. Large Cap	1.00	0.89	0.80	0.32	0.86	0.42	-0.47	0.76	0.40	0.78	0.82	0.76	0.24	16%
EAFE		1.00	0.90	0.33	0.86	0.48	-0.62	0.81	0.42	0.67	0.79	0.77	0.31	16%
EME			1.00	0.31	0.83	0.41	-0.69	0.80	0.46	0.55	0.75	0.76	0.40	18%
Bonds				1.00	0.41	0.88	-0.42	0.68	-0.30	0.50	-0.04	0.16	0.60	5%
Corp. HY					1.00	0.48	-0.52	0.88	0.45	0.70	0.76	0.72	0.34	9%
Munis						1.00	-0.46	0.74	-0.26	0.61	0.09	0.28	0.46	5%
Currencies							1.00	-0.62	-0.35	-0.31	-0.28	-0.56	-0.61	5%
EMD								1.00	0.18	0.67	0.54	0.59	0.52	8%
Commodities									1.00	0.25	0.64	0.59	0.19	17%
REITs										1.00	0.56	0.63	0.24	17%
Hedge funds											1.00	0.74	0.09	5%
Private equity												1.00	0.10	7%
Gold													1.00	13%

Source: Bloomberg, Burgiss, Credit Suisse/Tremont, FactSet, Federal Reserve, MSCI, Standard & Poor's, J.P. Morgan Asset Management. Indices used – Large Cap: S&P 500 Index; Currencies: Federal Reserve Trade-Weighted Dollar; EAFE: MSCI EAFE; EME: MSCI Emerging Markets; Bonds: Bloomberg Aggregate; Corp HY: Bloomberg Corporate High Yield; EMD: Bloomberg Emerging Market; Cmdty.: Bloomberg Commodity Index; REITs: NAREIT All Equity Index; Hedge funds: CS/Tremont Hedge Fund Index; Private equity: Time weighted returns from Burgiss; Gold: Gold continuous contract (\$/c2). Private equity data are reported on a one- to two-quarter lag. All correlation coefficients and annualized volatility are calculated based on quarterly total return data for period from 9/30/2014 to 6/30/2024, except for Private equity, which is based on the period from 6/30/2014 to 3/31/2024. This chart is for illustrative purposes only.

Guide to the Markets - U.S. Data are as of September 30, 2024.

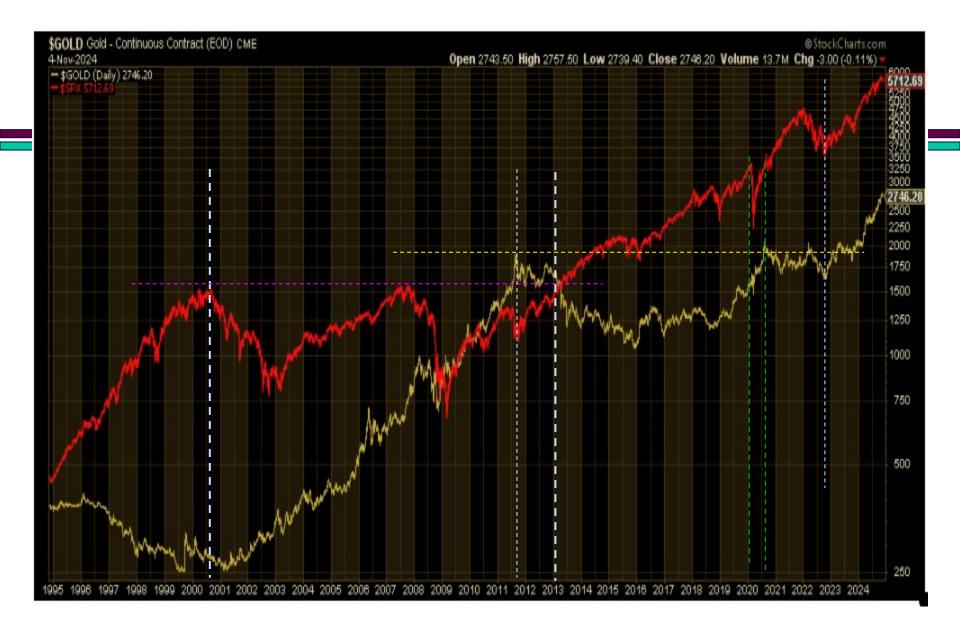
Alternatives

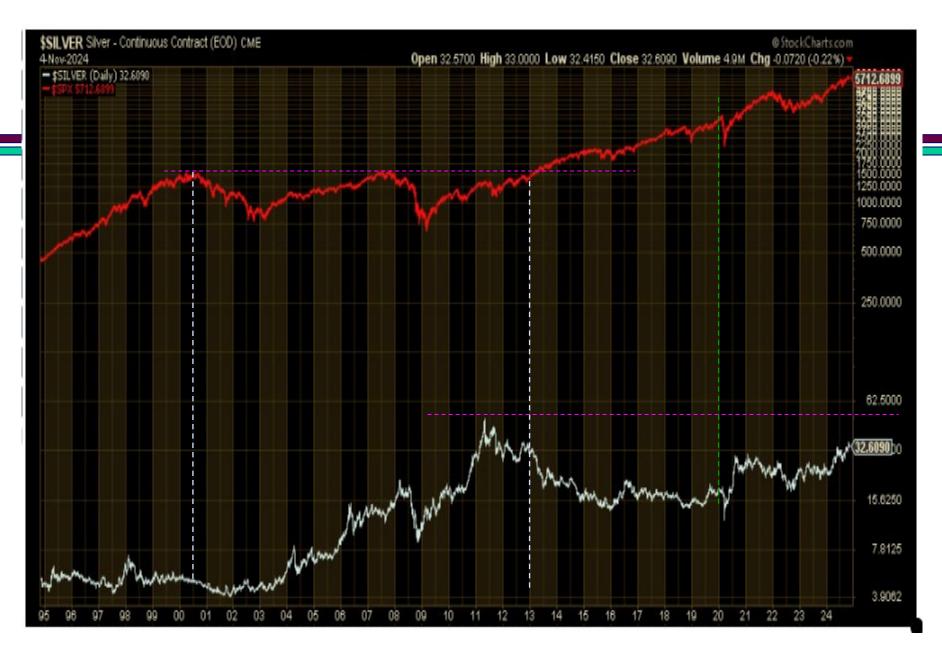
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Rajeev Vaidya

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ASSET MANAGEMENT





Precious Metals as a Hedge

Change in value from January 31, 1990 to January 31, 2020								
S&P 500	Gold	Silver	Platinum	Palladium				
880%	280%	244%	88%	1526%				

	First 10 years	Next 13 years	Last 7 Years
S&P 500	355%	1%	113%
Gold	-33%	493%	-5%
Silver	-4%	531%	-43%
Platinum	-5%	245%	-43%
Palladium	335%	28%	191%

Data from issue 9 of the newsletter inve\$ted

This is not investment advice

Gold as a **Hedge**

Date	Gold	Gold % Change	S&P 500	S&P 500 % Change	75% equity 25% gold portfolio	Portfolio % Change
January 31, 1990	417.80		329.08		351.26	
March 31, 2000	281.40	-33%	1498.58	355%	1194.29	240%
February 1, 2013	1667.50	493%	1513.17	1%	1551.75	30%
January 31, 2020	1587.90	-5%	3225.52	113%	2816.12	81%
November 4, 2024	2746.20	73%	5712.69	77%	4971.07	77%
	557%		1636%		1315%	

This is an illustration of how a hedge works. It is NOT a portfolio allocation recommendation.

Gold

This is not investment advice

- Has done better than Silver over time
- □ Has not done better than the S&P 500 over the last 35 years
 - Has performed better when the equity market is not growing
- Has performed reasonably well has a hedge in market downturns.
 - Silver, Platinum and Palladium have more industrial uses.
- □ Is inversely correlated to
 - The US Dollar
 - Interest Rates

Investing in Gold

□ How? The physical metal Coins Gold funds Gold Mining Companies Individual companies or Funds □ Gold Trading companies

This is not investment advice

Precious Metals ETFs

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

Green Energy metals

- Electricity demand is rising
- □ The wind does not blow every day
- □ The sun does not shine everyday

My green energy bets have been

- Uranium Cameco (CCJ)
- Copper Freeport McMoran (FCX)
- □ Lithium (ALB and SQM), ETFs LIT, BATT





November 24



Current Lithium Reserves and Production

- Reserves: The world currently has around 22 million tonnes of lithium reserves, which could theoretically support the production of approximately 2.8 billion electric vehicles (EVs), assuming each vehicle requires about 8 kilograms of lithium
 This suggests that, in terms of raw materials, there is enough lithium available for a significant number of EVs.
- Production Capacity: Despite the ample reserves, the current production rate is a critical issue. As of now, global lithium production is around 100,000 tonnes per year, but projections indicate that by 2030, this figure needs to increase to between 240,000 and 450,000 tonnes annually to keep pace with demand 2 3. This gap indicates a potential bottleneck in the supply chain as demand for EV batteries continues to rise sharply.

Source Perplexity.ai



November 24

Class 11 – Nov. 13th

- □ Market Update Rajeev 20 minutes
- Disciplined selling
- □ Class 12 November 20th
 - □ Market update + 1 chart on REITs
 - Open Mike class ask any questions you want

Thanks !!

□ Happy Investing !!

My EMail divinvst@udel.edu Class website http://udel.edu/~divinvst