Analysis of Assets Back tested over a 36-Month Horizon.

This backtest analysis of various asset tickers, spanning sectors, indices, fixed income, commodities, global geographies, currencies, and cryptocurrencies. It pulls historical data from Yahoo Finance, calculates returns using custom rolling window and weighted mean strategies, and generates buy/hold/sell signals. The script also appends current analysis to a historical record, enabling long-term tracking and comparison. This workflow aids in informed investment decision-making based on data-driven performance insights.

Percent of Correct Predictions for each Etf from October 27th 2021 till today

Category	Ticker	Roll	Alpha	Backtest Total Return
Sectors	XLE	33	9	75.23372399
Sectors	IAU	10	10	52.66725249
Sectors	GLD	10	10	52.00721068
Sectors	XLK	33	14	46.24974648
Sectors	DBP	33	14	45.18539092
Sectors	USCI	27	14	43.92031397
Sectors	SLV	6	14	38.6600224
Sectors	OIH	28	12	37.15512499
Sectors	XLI	29	10	36.00347612
Sectors	DBA	29	11	35.31548122
Sectors	SSO	34	14	35.11329111
Sectors	XLU	26	14	31.86247315
Sectors	SPY	34	14	31.76465147
Indices	IWF	33	14	31.19953163
Indices	QQQ	15	9	30.85243867
Indices	USO	16	8	29.88626662
Indices	EWI	8	14	28.84021077
Indices	EWZ	22	14	27.21997382
Indices	XLP	35	11	23.0955673
Fixed Income	XLF	19	10	22.45098615
Fixed Income	IWD	22	8	22.25988606
Fixed Income	EWT	20	12	21.77839259
Fixed Income	EWU	12	12	21.02884569
Fixed Income	INDA	12	9	19.38899571
Fixed Income	XLB	33	14	17.39948211
Fixed Income	XLC	34	1	16.49678212
Global Geography	XLV	26	14	16.38650862
Global Geography	EZA	11	11	15.84781826
Global Geography	DBC	29	13	12.76525486
Global Geography	EWA	6	13	12.43114715
Global Geography	DBE	16	8	11.71459096
Global Geography	BNB-USD	23	9	9.514214974

Global Geography	BTC-USD	10	10	8.681584438
Global Geography	EWQ	13	11	8.610991419
Global Geography	EZU	28	14	8.201881713
Global Geography	EWL	21	11	8.17393186
Global Geography	HYG	11	11	8.161805101
Global Geography	IYT	32	12	6.64591567
Global Geography	EWG	21	8	5.983844212
Global Geography	DBB	13	10	4.76634135
Global Geography	FXF	19	10	4.195307991
Commodities	EWJ	34	8	3.668974217
Commodities	SHY	20	10	3.271008159
Commodities	XLY	35	11	2.376284314
Commodities	XLRE	19	10	2.020615913
Commodities	FXB	5	2	-0.005510426
Commodities	BNDX	35	11	-1.969351068
Commodities	FXE	2	2	-4.131805144
Commodities	EEM	20	13	-4.797865426
Commodities	EWD	13	11	-5.812155128
Commodities	AGG	18	8	-5.964489963
Commodities	BND	21	3	-6.298489428
Commodities	LQD	6	13	-8.450677226
Commodities	BITO	16	9	-9.002512649
Currency Exchange Rates	FXA	15	11	-10.2841998
Currency Exchange Rates	IBB	19	10	-10.56374933
Currency Exchange Rates	SH	30	8	-16.26672184
Currency Exchange Rates	EWY	24	14	-18.42423613
Currency Exchange Rates	SOL-USD	27	7	-18.60682425
Currency Exchange Rates	FXY	7	4	-26.43705976
Cryptocurrencies	TLT	25	14	-31.69785241
Cryptocurrencies	WEAT	22	12	-32.13811433
Cryptocurrencies	ETH-USD	10	10	-43.19281902
Cryptocurrencies	XRP-USD	29	8	-54.91396295
Cryptocurrencies	UNG	12	9	-80.43066018
Cryptocurrencies	ADA-USD	30	14	-83.49070268

Market Movement and Consistency:

Specifically, the results from this back-test indicate that there was positive performance in most sectors such as energy (XLE) than for specific commodities, especially those with direct connections to energy (example oil assets like OIH). This in turn implies that there have been aspects such as supply disruptions, inflationary forces and fears of wars that have brought a change in the conditions of the sectors under consideration. Such changes suggest that energy has been resilient over time, which could also be the case now especially if bottlenecks exist but one should bear in mind that the nature of the energy sector is that it is always a boom and bust one in accordance with the dynamics of the overall economy.

Implications Of Alpha by Sectors:

For example, in equities and particularly in US tech (XLK), some routinely high values of alpha have been observed. For instance, a high rate of alpha in industrials – XLI - makes it quite inviting to invest in industrials on a risk-adjusted basis. Nevertheless, as there has been an increased use of interest rates in the recent past coupled with fears for an economic slowdown, it may be difficult to attain the same level of tech sector alpha as has been the norm.

Risk Signals Deriving from Fixed Income Concerns and Cryptocurrency:

Over the back test horizon, consistent negative returns can be observed in fixed income (TLT, AGG) and illiquid assets of cryptocurrency (e.g., ADA-USD, ETH-USD) retention. The reasons are attributed to increased inflation which generates high interest rates as well as pressures of controlling such inflation. Also, there is weak meaning that back tested performance of fixed income assets tends to contract as interest rates increase which makes such assets less appealing. Additionally, Cryptocurrencies show high variations in prices which might have been a trade-off towards the negative development of the asset.

Disclaimer:

Please bear in mind that this is an estimation based on previous analysis and it is not indicative of possible returns in the future. Moreover, market situations can change with lightning speed, let alone the probability of the continued existence of such patterns has a chance of being quite low. Investors are advised to ensure that prior to investment, they make heavy research and comprehend their own risk profile for the sake of clarity. Also, it is worth mentioning that this is purely an informative piece and shouldn't be taken as a financial consultation.