

Bitcoin & Macro-Financial Portfolio Analysis (2015-2024)

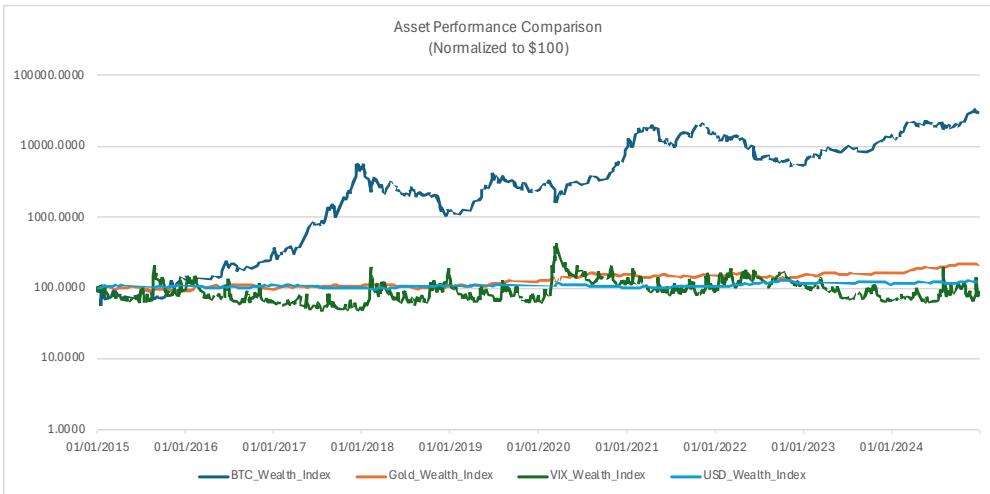
Key Takeaways

- Bitcoin dominated in absolute returns but with extreme volatility and drawdowns (>80%).
- Diversification into Gold and USD significantly reduced portfolio risk and drawdowns.
- The Aggressive (60% BTC) portfolio captured strong growth while the Balanced (30% BTC) portfolio offered a smoother ride.
- A simple momentum strategy reduced volatility but underperformed a pure Bitcoin Buy & Hold in this period.

Asset Correlation Matrix

	Bitcoin	Gold	VIX	USD
Bitcoin	1	0.10	-0.17	-0.07
Gold	0.10	1	0.00	-0.42
VIX	-0.17	0.00	1	0.04
USD	-0.07	-0.42	0.04	1

Correlation analysis shows that Bitcoin has historically moved independently of traditional macro assets like Gold and the US Dollar. This low correlation is the fundamental reason why combining them in a portfolio was so effective: while Bitcoin experienced sharp declines, Gold and USD often held their ground or even appreciated, thereby cushioning the portfolio from the full force of the drawdown.

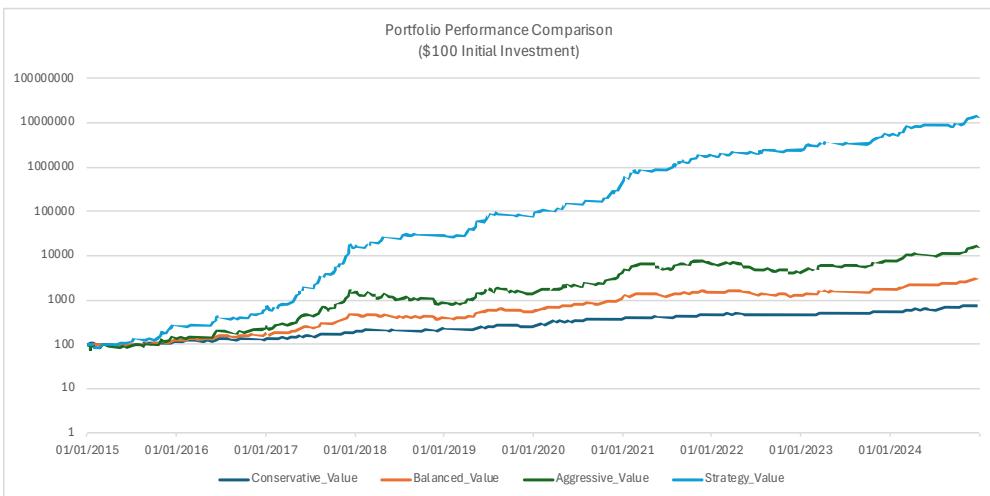


Portfolio Allocations

Portfolio	BTC	Gold	VIX	USD
Conservative	10%	50%	10%	30%
Balanced	30%	40%	10%	20%
Aggressive	60%	20%	10%	10%



We also simulate a strategy that buys only Bitcoin when momentum is strongly positive (base on "mom_14c" column) and sells when it's strongly



Portfolio Performance Snapshot

Portfolio	Total Return	Volatility	Sharpe Ratio
Conservative	650.06%	15.65%	142.69%
Balanced	2803.94%	23.33%	171.79%
Aggressive	15042.27%	40.83%	159.76%

Momentum Strategy vs. Buy & Hold

Strategy	Total Return	Max Drawdown
Buy & Hold (BTC)	29630.95%	-83.04%
Momentum Strategy	13329419.54%	-24.41%