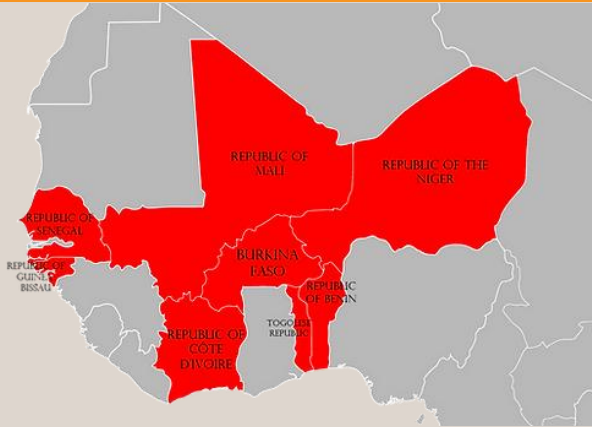


# Bitcoin Allocation in a CFA Zone Portfolio: A Performance Analysis



Coinsoflation  
Research Paper

## Region Overview—CFA Zone



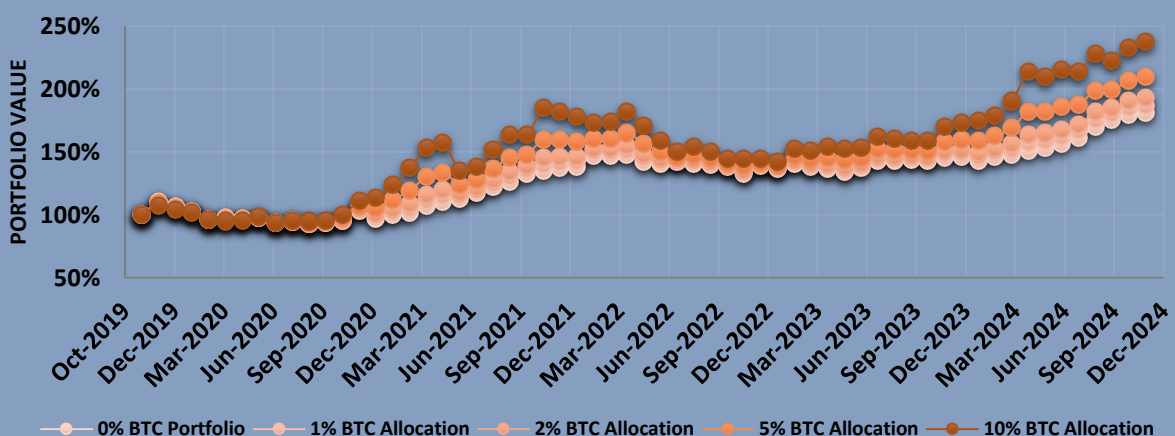
- **Countries:** Using the West African CFA franc (XOF) are Benin, Burkina Faso, Guinea-Bissau, Cote d'Ivoire, Mali, Niger, Senegal, and Togo.
- **Equity Index Used:** Bourse Régionale des Valeurs Mobilières BRVM Composite (BRVMCI), comprising all the companies listed on the bourse.
- **Fixed Income Used:** Cote d'Ivoire 10-Year Bond
- **Analysis Period:** Five years—Nov-2019 to Oct-2024
- **Portfolio Allocation:** 80/20 Equity/Fixed Income over the analysis period

## Portfolio Performance vs. BTC Allocation

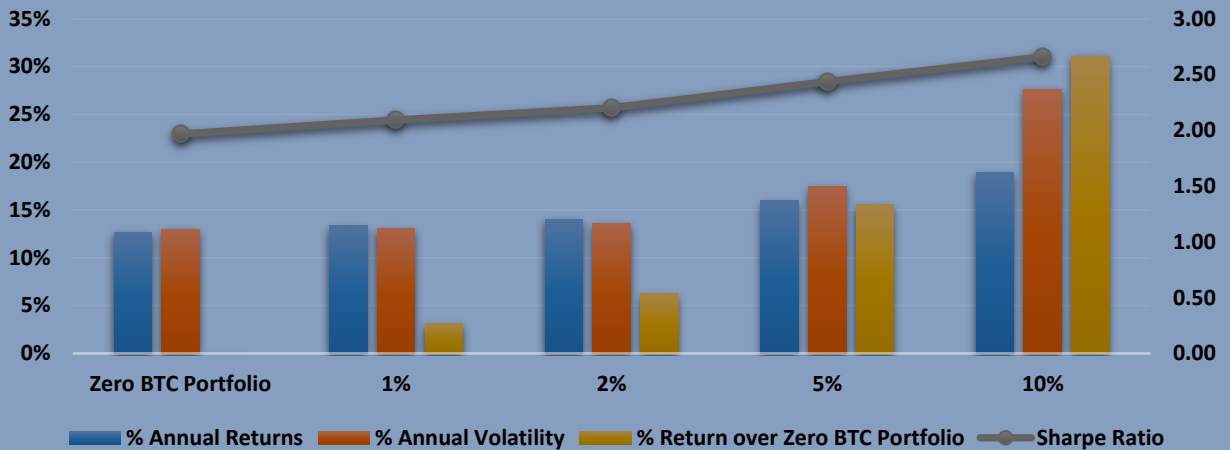
BTC ETF Allocation	0%	1%	2%	5%	10%
Annual Returns (%)	13%	13%	14%	16%	19%
Volatility (%)	13%	13%	14%	17%	28%
Sharpe Ratio	1.97	2.09	2.20	2.44	2.66

- **Annual Returns (%)** - average percentage increase or decrease in the value of an investment over one year. A measure of what an investment might earn or lose annually.
- **Volatility (%)** - degree of variation in the price of an investment over time. Higher volatility means the investment's price fluctuates more, indicating greater risk.
- **Sharpe Ratio** - ratio of the investment's excess return and its volatility. A higher Sharpe Ratio indicates better returns for the level of risk taken.




## Impact of Bitcoin Allocation on a CFA Zone Portfolio



## Portfolio Performance vs. BTC Allocation



### Impact Highlights

	<b>Diversification Benefit:</b> Adding a BTC allocation significantly increases annual returns, demonstrating strong diversification benefits. As BTC allocation rises, the portfolio's overall performance improves, especially at higher allocations.
	<b>Risk-Adjusted Returns:</b> The Sharpe Ratio increases markedly with BTC allocation, from 1.97 (with no BTC) to 2.66 (with 10% BTC). This indicates that the risk-adjusted returns improve substantially, making the portfolio more efficient in compensating for the risk taken.
	<b>Protection Against Currency Depreciation:</b> Higher returns from BTC allocation strengthen the portfolio, providing a buffer that helps preserve and grow value despite currency fluctuations.

### Key Insights

- **Significant Return Enhancement:**  
Allocating even a small percentage to BTC dramatically increases annual returns, showcasing the potential of BTC as a strong return booster.
  - 1% BTC returned an additional 3%
  - 2% BTC returned an additional 6%

- 5% BTC returned an additional 16%
- 10% BTC returned an additional 31%
- **Improved Risk-Adjusted Performance:**  
The Sharpe Ratio rises considerably with BTC allocation, indicating that the portfolio is more efficient, better compensating for the level of risk taken.
- **Protection Against Currency Depreciation**  
**Depreciation:** Higher returns from BTC allocation provide a buffer against potential currency depreciation, helping preserve and grow the portfolio's value in volatile currency environments.

### Notes

- Equity & bond data were sourced from Investing.com. Bitcoin data was sourced from Google.
- 0% BTC portfolio was optimized for the single best allocation over the analysis period, with equity allocation constrained to between 20% and 80%. No change in allocation occurred during the analysis period.
- Bond was purchased at the beginning of analysis period and held for duration of analysis or to maturity. If maturity occurred during the analysis period, a new bond was purchased. A coupon rate of 7% was assumed for the bond.
- No trading or management costs were considered.



## About Coinsolation

Coinsolation supports institutional access to Bitcoin as a long-term reserve asset, offering organizations across Africa a secure entry point into this globally recognized store of value.

By helping mitigate currency risk and strengthen portfolio resilience, Bitcoin can serve as a powerful diversification tool in line with evolving global asset allocation trends.

Web:

<http://www.coinsolation.com/>

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<https://x.com/coinsolation>

