

# The Impact of a Spot Bitcoin ETF on a Tanzania Portfolio



The Coinsolation Project  
A spot Bitcoin ETF for Africa

## Research Paper

### Country Overview—Tanzania (United Republic of)



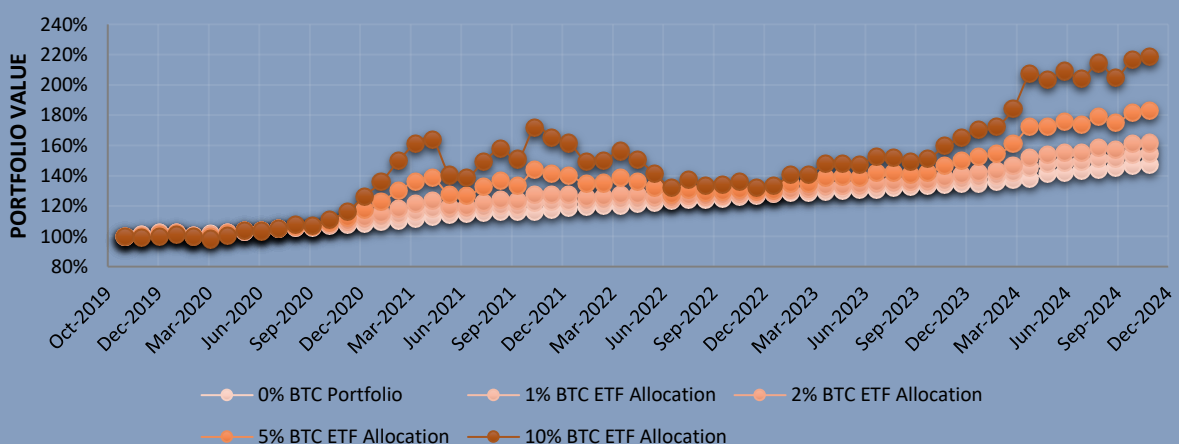
- **Equity Index Used:** Tanzania All Share Index (DSEI), the primary index of the Dar es Salaam Stock Exchange. It includes companies from various sectors such as banking, agriculture, manufacturing, and mining.
- **Fixed Income Used:** 10-Year Bond
- **Analysis Period:** Five years—Nov-2019 to Oct-2024
- **Portfolio Allocation:** 20/80 Equity/Fixed Income over the analysis period. See *Notes* for this unusual allocation.

### Portfolios Performance vs. BTC Allocation

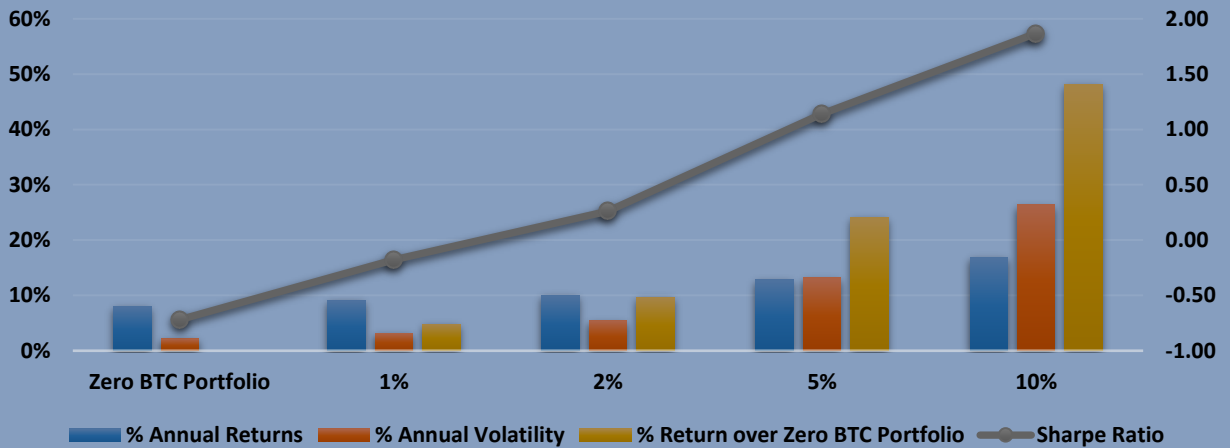
BTC ETF Allocation	0%	1%	2%	5%	10%
Annual Returns (%)	8%	9%	10%	13%	17%
Volatility (%)	2%	3%	5%	13%	26%
Sharpe Ratio	-0.72	-0.18	0.26	1.14	1.87

- **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 ETF Allocation on a Tanzania Portfolio



## Portfolios Performance vs. BTC Allocation



### Impact Highlights

	<p><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.</p>
	<p><b>Risk-Adjusted Returns:</b> The Sharpe Ratio increases markedly with BTC allocation, from -0.72 (with no BTC) to 1.87 (with 10% BTC). This indicates that the portfolio is more efficient in compensating for the risk taken.</p> <p>See Notes for negative Sharpe Ratio.</p>
	<p><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.</p>

### Key Insights

- **Significant Return Enhancement:** Allocating even a small percentage to a BTC ETF dramatically increases annual returns, showcasing the potential of BTC as a strong return booster.
  - 1% BTC returned an additional 5%
  - 2% BTC returned an additional 10%

- 5% BTC returned an additional 24%
- 10% BTC returned an additional 48%
- **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:** 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 data was sourced from [Investing.com](https://www.investing.com). Bond data was sourced from Bank of Tanzania. 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.
- No trading or management costs were considered.
- *Continues on the next page.*



## About The Coinsolation Project

The Coinsolation Project is set to launch Africa's first spot Bitcoin ETF, providing investors across the continent with seamless access to this globally recognized asset class.

By offering protection against currency erosion and unlocking the potential for significant returns, the ETF empowers African investors to diversify their portfolios in alignment with the expanding global adoption of Bitcoin ETFs.

Web:

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

X (Twitter):

<https://x.com/coinsolation>



### Notes (continued)

- Between Q4 2019 and Q4 2024, the DSEI exhibited notable fluctuations. In March 2020, the index experienced a steep decline. Following this downturn, the DSEI remained relatively flat until June 2024, when it saw a significant rise. The overall performance was relatively flat over the five-year period under consideration. Due to this, our Tanzania portfolio was allocated 20% equity and 80% fixed income.
- The negative Sharpe Ratio of the Zero BTC Portfolio indicates that the investment underperformed a risk-free investment, due to its 20% equity exposure.

