The Impact of a Spot Bitcoin ETF on a South Africa Portfolio

The Coinsolation Project
A spot Bitcoin ETF for Africa
Research Paper

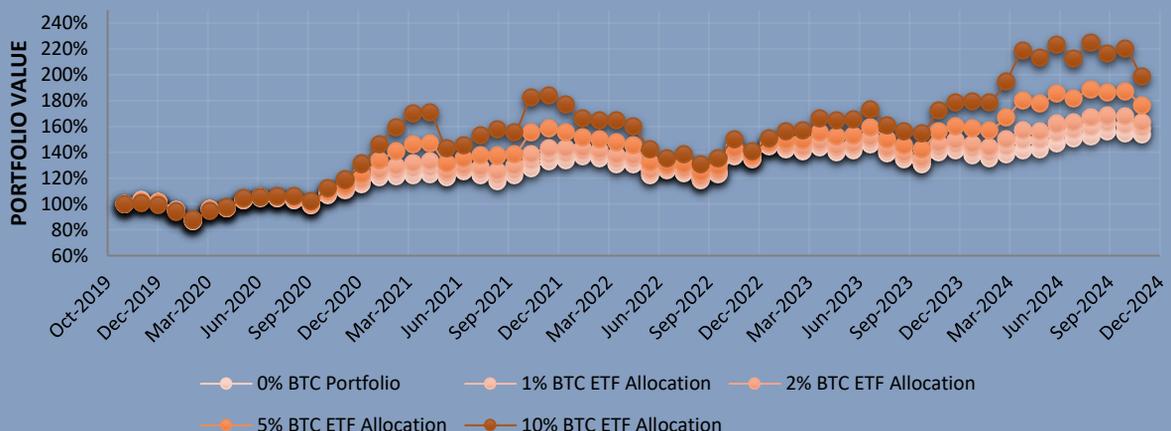## Country Overview—South Africa (Republic of)

- **Equity Index Used:** South Africa Top 40 (JTOPI), also known as the FTSE/JSE Top 40 Index, tracks the performance of the 40 largest companies listed on the Johannesburg Stock Exchange (JSE). These companies reflect the diverse economic landscape of South Africa.
- **Fixed Income Used:** 10-Year Bond
- **Analysis Period:** Five years—Nov-2019 to Oct-2024
- **Portfolio Allocation:** 80/20 Equity/Fixed Income over the analysis period
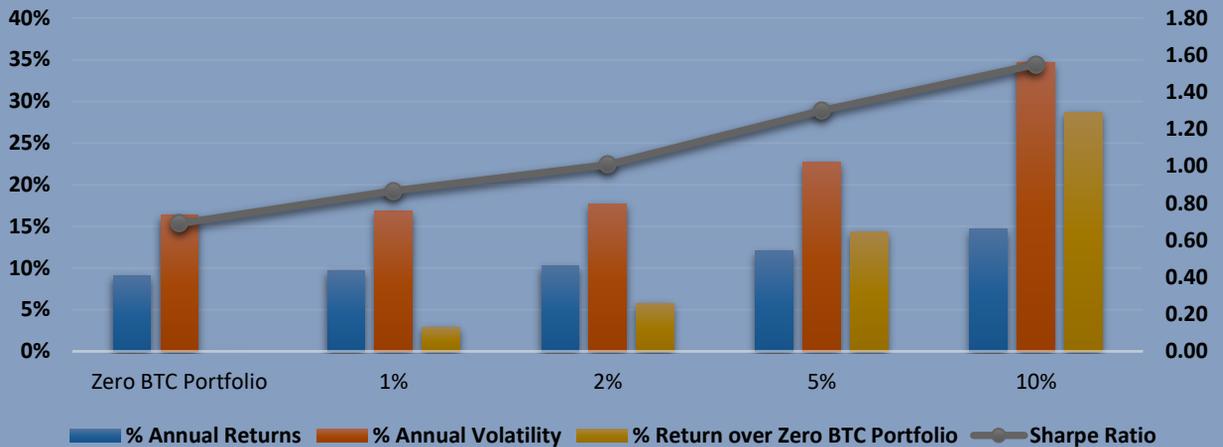
Portfolios Performance vs. BTC Allocation

BTC ETF Allocation	0%	1%	2%	5%	10%
Annual Returns (%)	9%	10%	10%	12%	15%
Volatility (%)	16%	17%	18%	23%	35%
Sharpe Ratio	0.69	0.87	1.01	1.30	1.55

- **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 South Africa Portfolio

- 0% BTC Portfolio
- 1% BTC ETF Allocation
- 2% BTC ETF Allocation
- 5% BTC ETF Allocation
- 10% BTC ETF Allocation

Portfolios Performance vs. BTC Allocation

Legend: ■ % Annual Returns ■ % Annual Volatility ■ % Return over Zero BTC Portfolio ●— Sharpe Ratio

Categories: Zero BTC Portfolio, 1%, 2%, 5%, 10%

Impact Highlights

Diversification Benefit: 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.

Risk-Adjusted Returns: The Sharpe Ratio increases markedly with BTC allocation, from 0.69 (with no BTC) to 1.55 (with 10% BTC). This indicates that the risk-adjusted returns improve substantially, making the portfolio more efficient in compensating for the risk taken.

Protection Against Currency Depreciation: 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 a BTC ETF 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 14%
  - 10% BTC returned an additional 29%

- **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 & 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.
- No trading or management costs were considered.

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/

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