Cryptocurrency Portfolio Analysis Report

1. Introduction

This report presents an analysis of a cryptocurrency portfolio consisting of **Bitcoin (BTC), Ethereum (ETH), and Solana (SOL)**. The study evaluates the **performance and risk** of these cryptocurrencies using historical price data obtained through Google Sheets. The objective is to understand return trends, volatility, and provide investment recommendations.

2. Portfolio Composition

The portfolio includes three popular cryptocurrencies with the following allocation:

Cryptocurrency	Symbol	Allocation
Bitcoin	BTC	40%
Ethereum	ETH	35%
Solana	SOL	25%

This allocation is designed to balance stability and growth potential.

3. Performance Analysis

$$\text{Total Return} = \frac{\text{Ending Price} - \text{Beginning Price}}{\text{Beginning Price}}$$

Cryptocurrency	Total Return
Bitcoin (BTC)	-2.78%
Ethereum (ETH)	-7.47%
Solana (SOL)	-26.30%

Observation

- Bitcoin showed the **least decline**, indicating relative stability.
- Ethereum experienced **moderate losses**.
- Solana showed **significant decline**, reflecting higher risk.

4. Risk Analysis

Risk is measured using **standard deviation of daily returns**, which indicates price volatility.

Cryptocurrency	Volatility
Bitcoin (BTC)	0.0225
Ethereum (ETH)	0.0391
Solana (SOL)	0.0465

Interpretation

- Bitcoin is the **least risky** asset.
- Ethereum has **moderate risk**.
- Solana is the **most volatile and risky**.

5. Visual Analysis

The Google Sheet includes:

- A **line chart** showing price trends of BTC, ETH, and SOL
- Charts clearly indicate that Solana experiences larger price fluctuations compared to Bitcoin and Ethereum.

6. Key Insights

- Diversification helps reduce overall portfolio risk
- Bitcoin provides stability during volatile market conditions
- Ethereum offers balanced risk and return
- Solana suits investors with higher risk tolerance

7. Recommendations

- Suitable for **moderate-risk investors**
- Long-term investment strategy is advised
- Portfolio rebalancing should be done periodically
- Lower allocation to high-risk assets can reduce volatility

8. Conclusion

The analysis highlights that diversification across cryptocurrencies is essential to manage risk. While short-term returns were negative during the analyzed period, Bitcoin remained relatively stable compared to Ethereum and Solana. A diversified and long-term approach can help investors manage the inherent volatility of cryptocurrency markets.