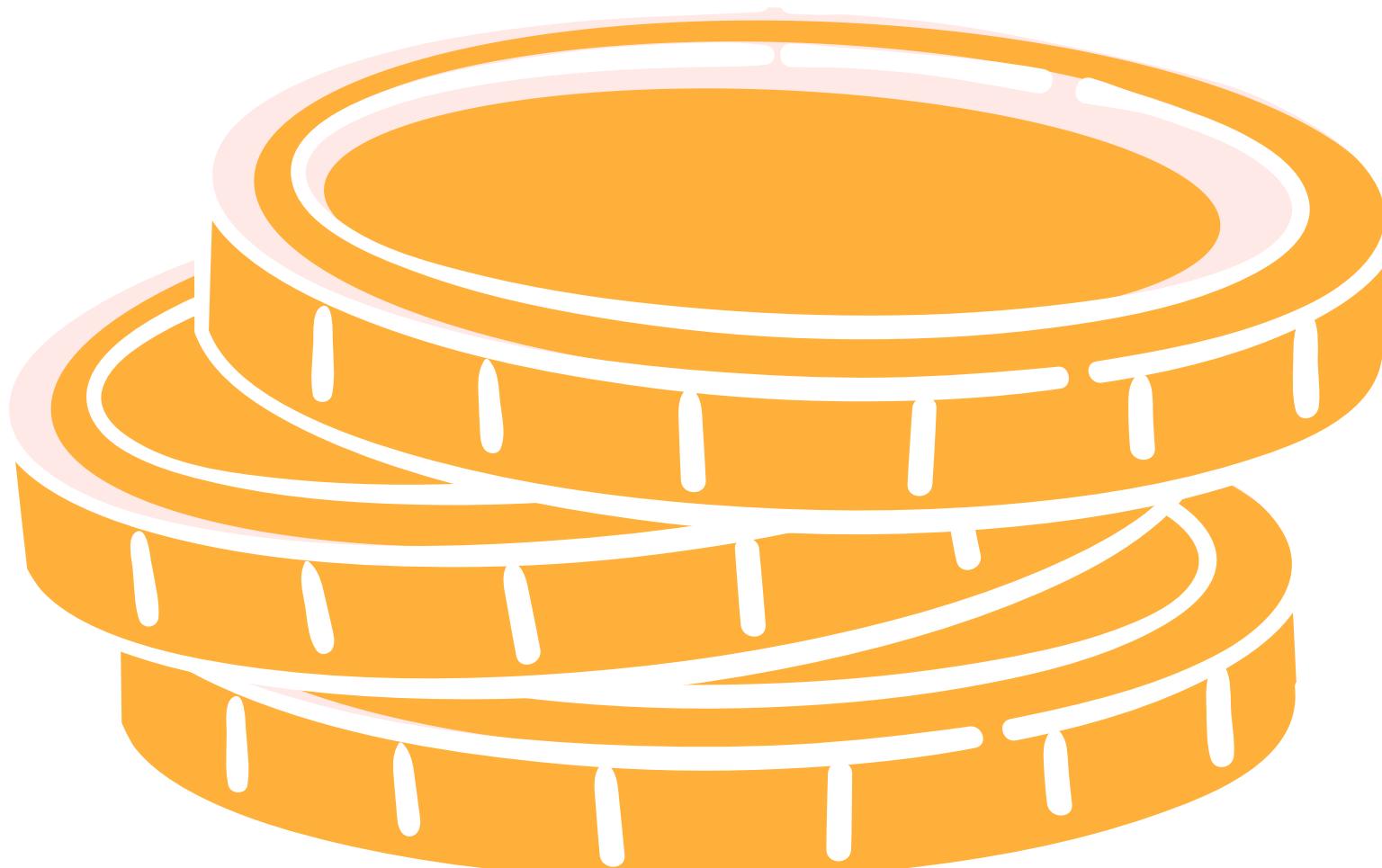
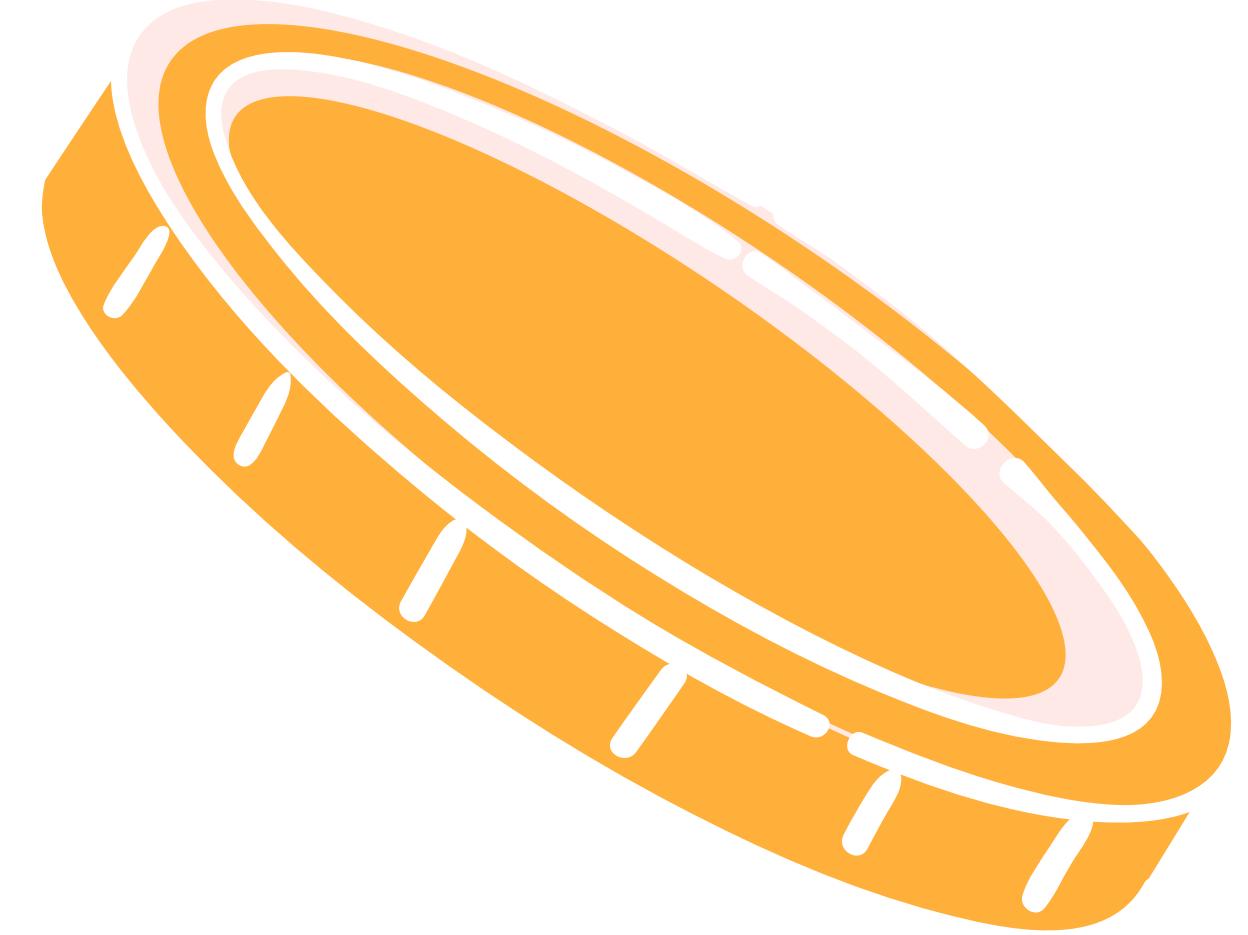
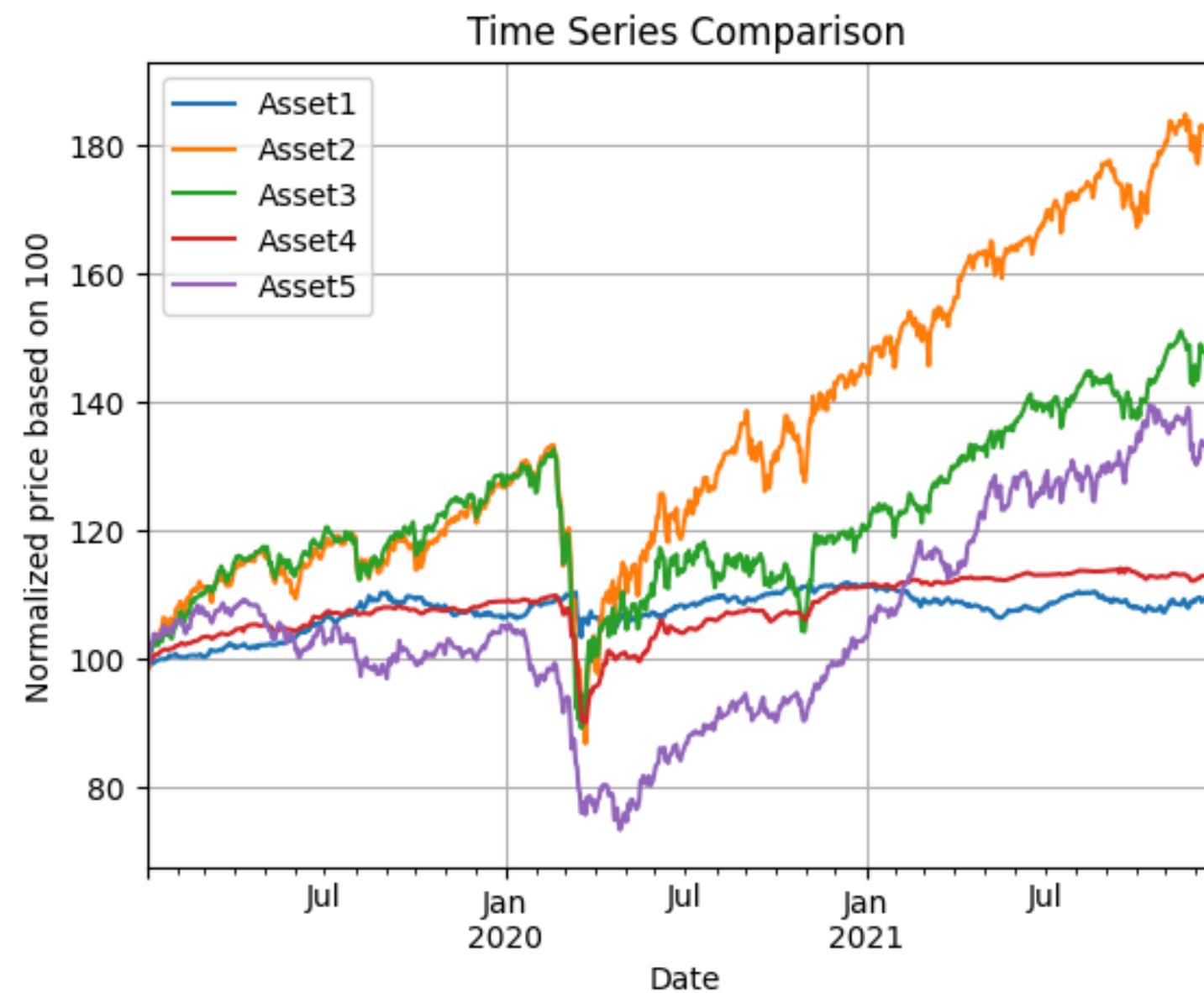


Portfolio Analysis

The goal of this analysis is to understand how different assets contribute to portfolio performance and risk, and why portfolio management and diversification are essential for long-term investing.



Normalized asset performance (2019-22)



Holding a single asset exposes investors to large drawdowns. Portfolio management helps balance growth and stability by combining assets with different risk and return characteristics

Asset2 & Asset5 vs Asset1 & Asset4:

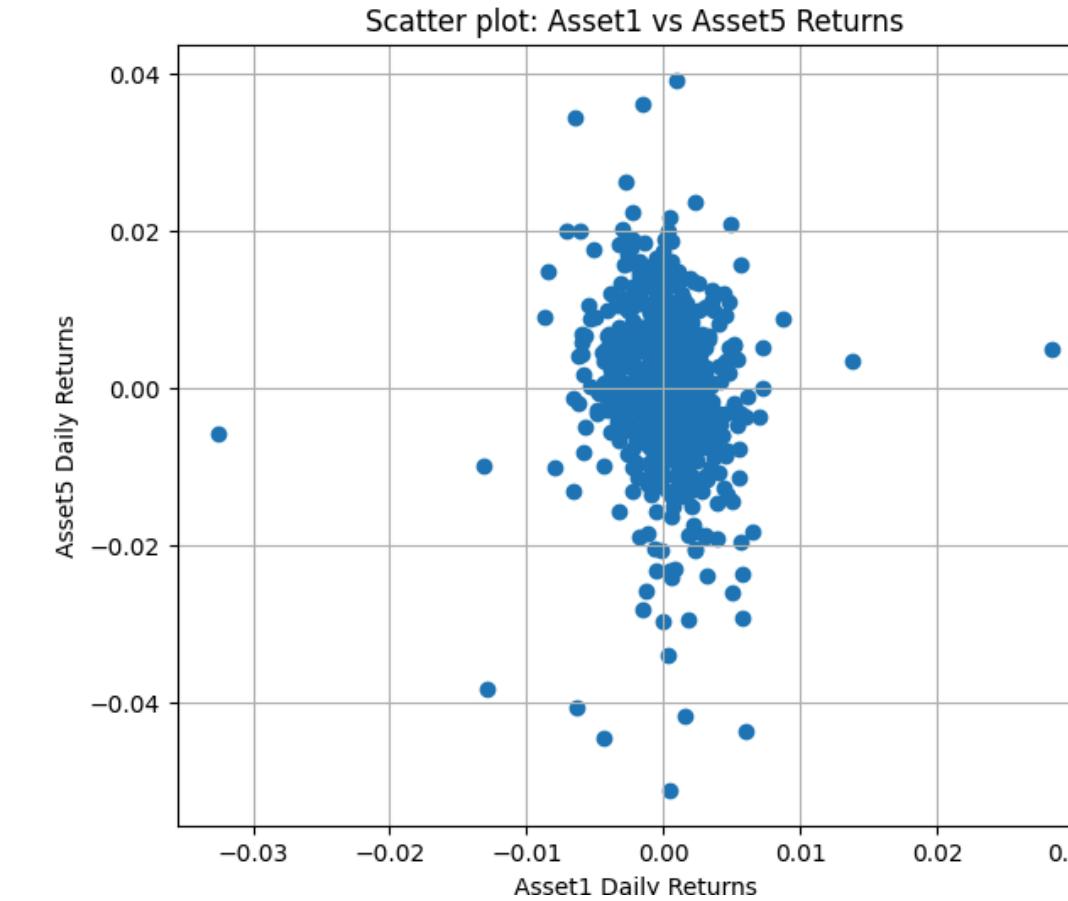
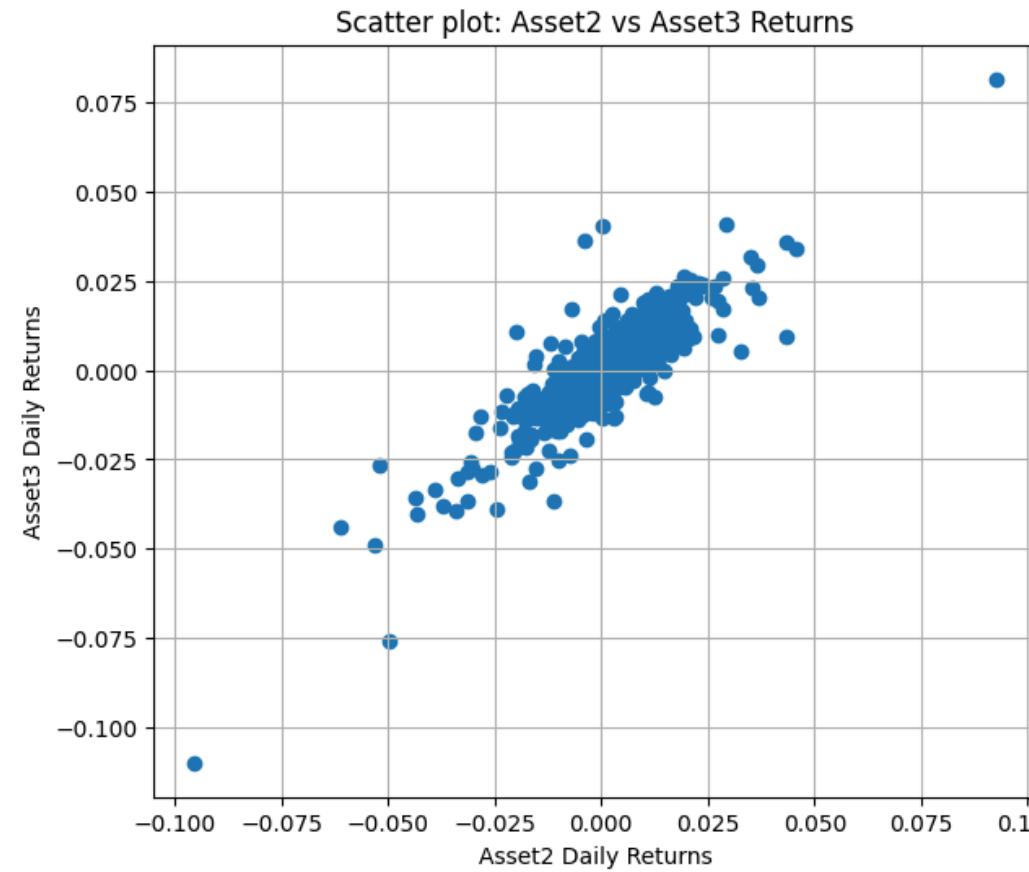
- Higher long-term returns are associated with higher volatility and deeper drawdowns.

Market stress

- in 2020 there was a market stress(e.g:Covid), the risky assets dropped sharply, while defensive assets were impacted marginally

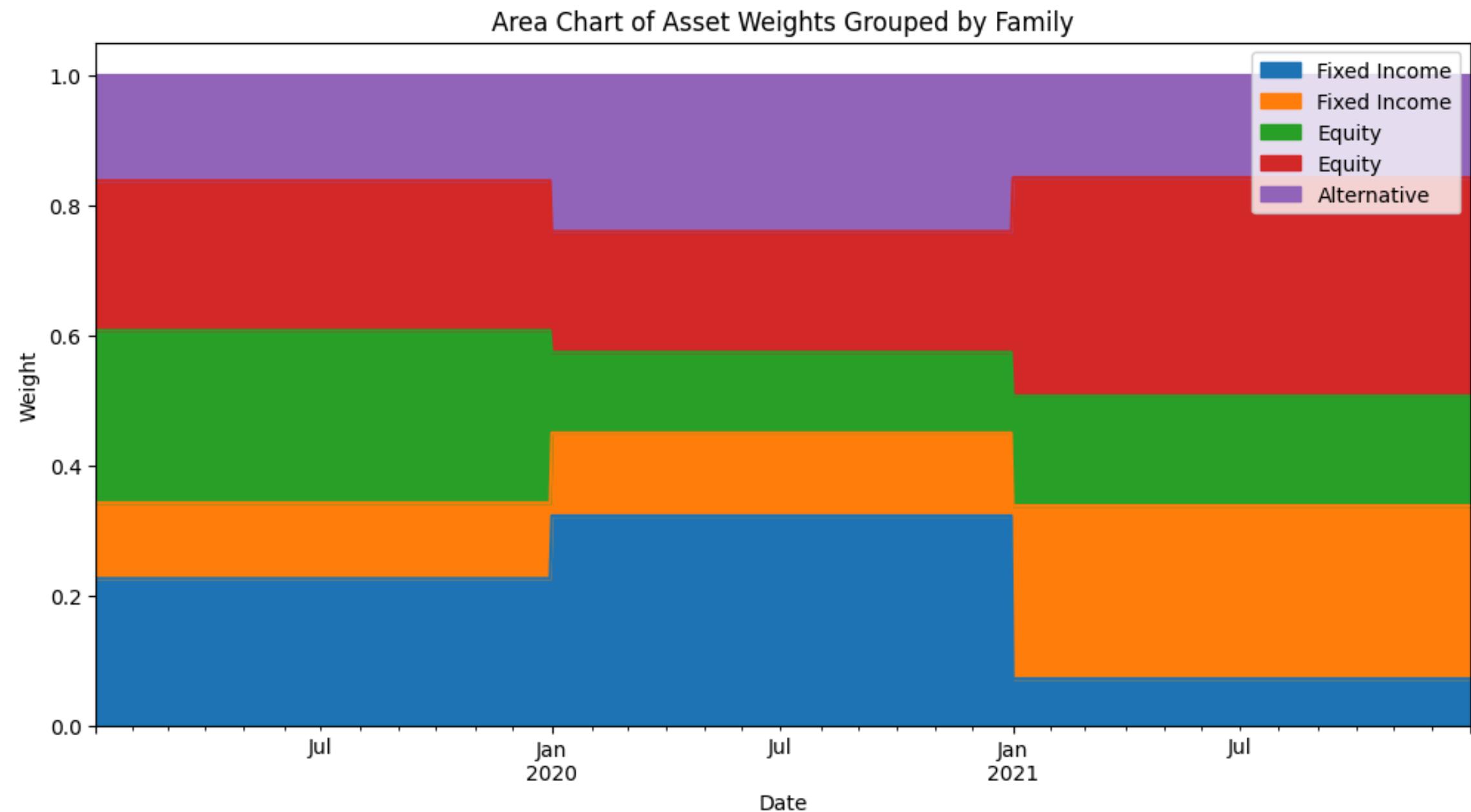
Correlation & Diversification:

This scatter plot compares **daily returns**



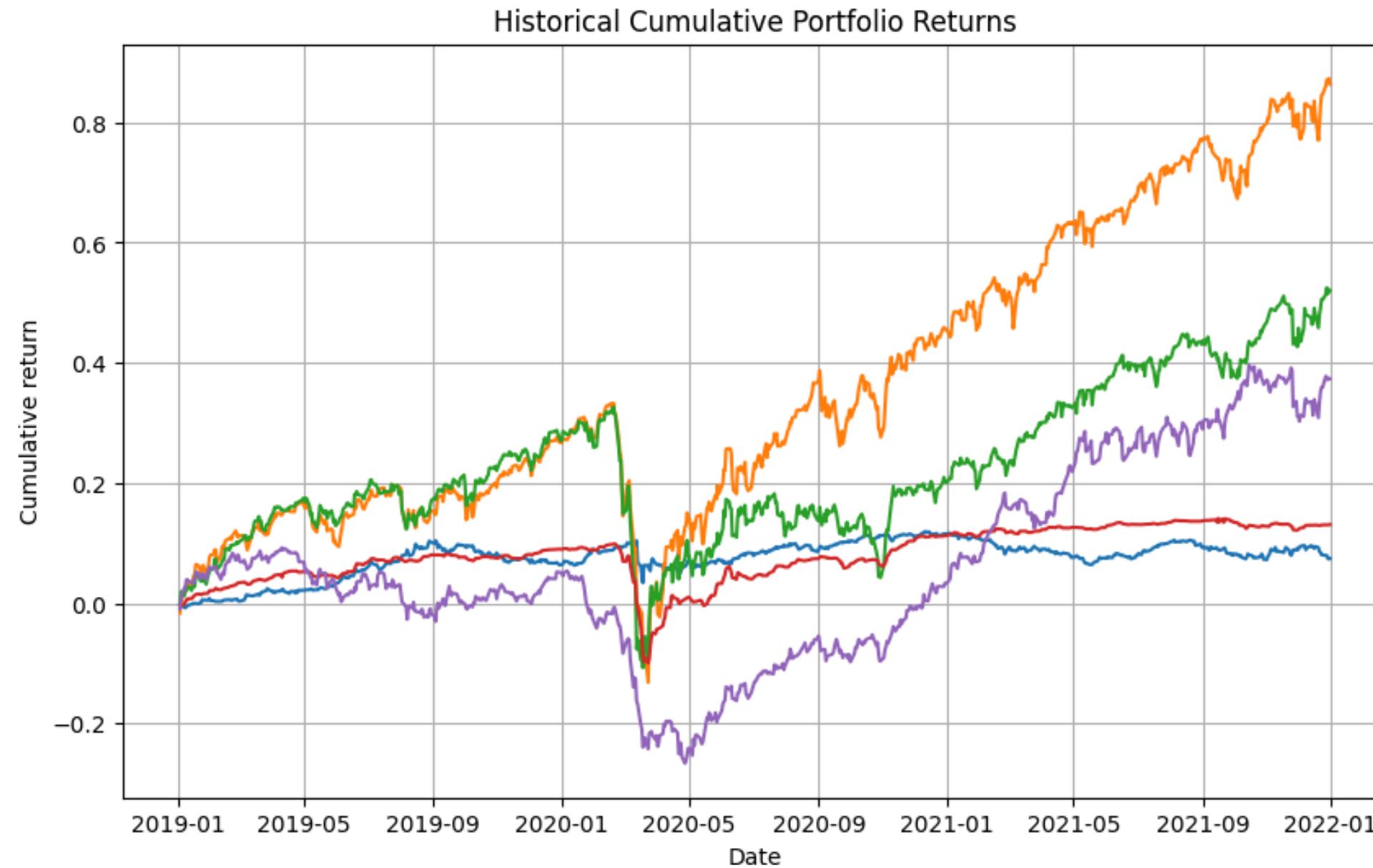
- Asset2 and Asset3 exhibit **strong positive correlation** (~0.85) → **low diversification benefit**
- Asset1 gives flat returns, while Asset5 moves faster and independently --> **low correlation / good diversification**

Asset allocation by family



- **2019** portfolio well balanced and diversified
- **2020** portfolio rebalancing down: --> distressed market → more conservative approach
- **2021** portfolio rebalancing up: active portfolio management

Asset Performance Overview



- **Fixed income and equities** delivered highest long term return (e.g: + 85%). **Annualized return** 15%-23%
- **Alternative assets** showed higher volatility and large drops . **Annualized return** 11%.

Risky analysis

Annualized volatility

how much does my portfolio move
over a whole year?

~5%
Fixed
Income

~15%
Alternative

~19%
Equity

Conclusion & learning

The portfolio demonstrates a thoughtful **diversification strategy**, combining stable income assets, growth-oriented equities, and alternative investments to balance risk and high return over time.

No asset is predominant and alternatives are well controlled → **balanced portfolio**

Income assets : 34%. → focus on stability, low volatility, low risks

Equity: 50% → focus on growth, higher volatility, higher risks, higher

Alternative: 16% → diversification benefits, high risky and high recover