Portfolio Diversification: VBTLX+VFIAX vs. AAPL Stock

Comparing the Power of Diversification (2012–2015)
by Chotchuang

Why Diversify?

- Diversification reduces portfolio risk by combining assets with different risk profiles.
- A well-mixed portfolio can achieve more stable long-term returns.
- Mixed asset for optimization to reduce volatility and max drawdown

Portfolio Composition

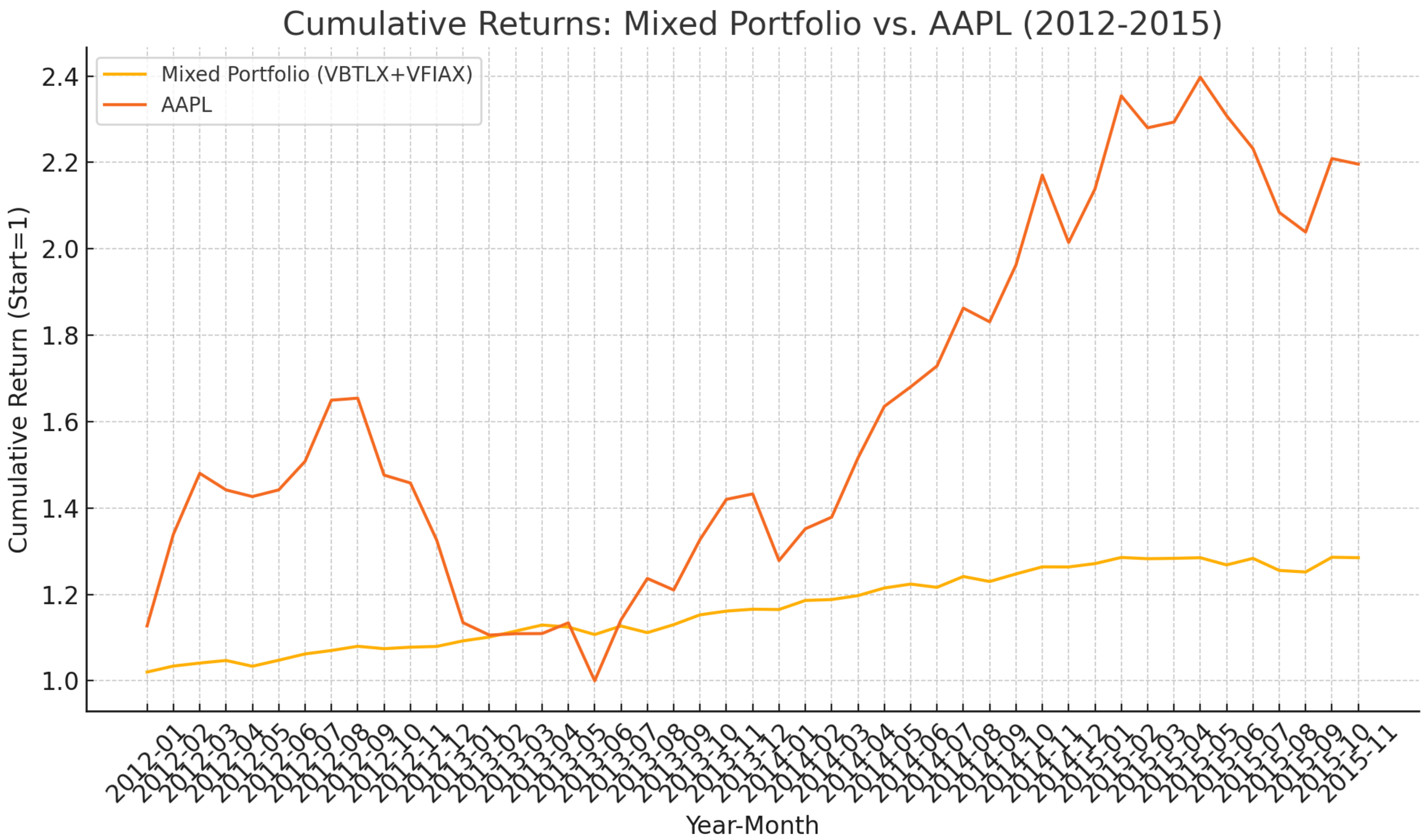
Mixed Asset Portfolio (Optimal Risky Portfolio):

- 67.85% VBTLX (Bond Index Fund)
- 32.15% VFIAX (S&P 500 Index Fund)

Single Asset:

- 100% AAPL

Performance Comparison: Cumulative Return



Risk & Return Comparison (2012–2015)

Portfolio	Avg Return (Monthly)	Volatility (Monthly)	Max Drawdown
Mixed (VBTLX+VFIAX)	0.54%	1.08%	-2.61%
AAPL	1.95%	7.32%	-39.54%

Mixed assets are better for long-term performance with average return 0.54% while max drawdown was -2.61% comparing to 100% on AAPL -39.54% on max drawdown

Key Takeaways

- The mixed asset portfolio had lower volatility and smoother performance.
- Single stock (AAPL) can have higher returns but much greater risk.
- Diversification helps investors achieve consistent long-term growth.