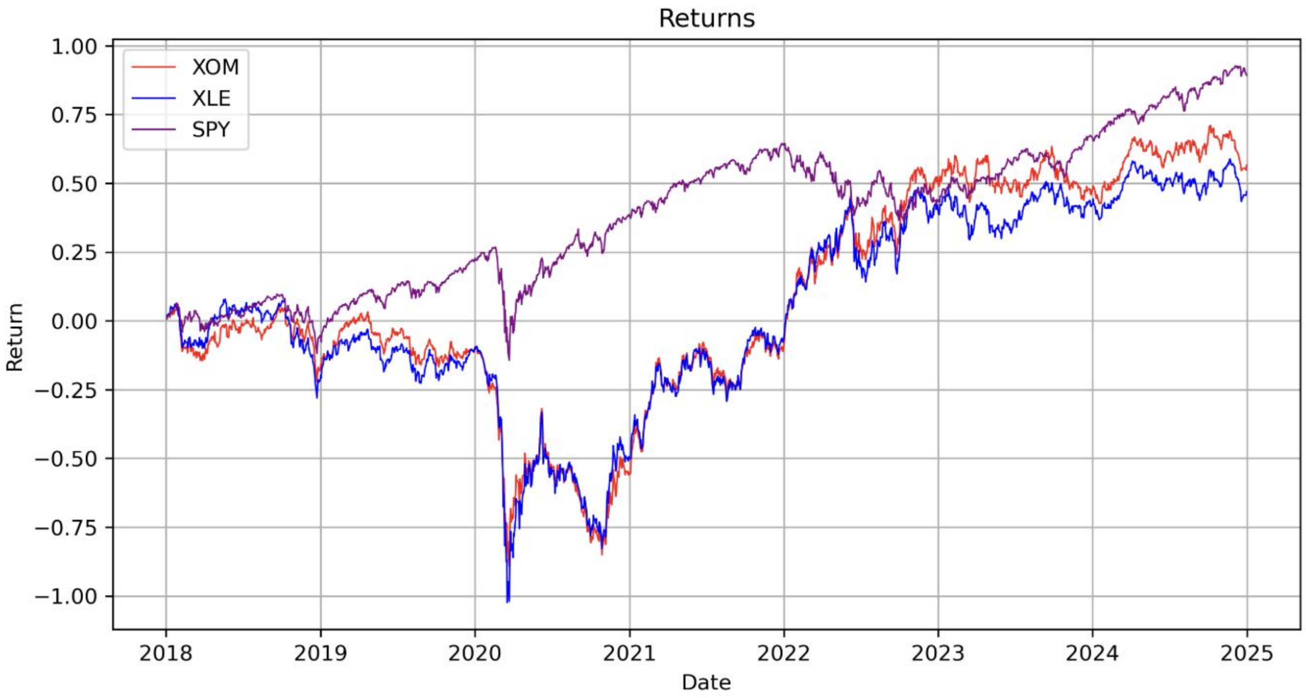
ETF Based Pairs Trading Strategy with XOM and XLM

Cointegration Strategy

Pragathi Arunkumar

Strategy Overview



When **XOM** outperforms relative to **XLE**, we go short

When **XOM** underperforms relative to **XLE**, we go long

SPY is used to hedge the strategy

Regression

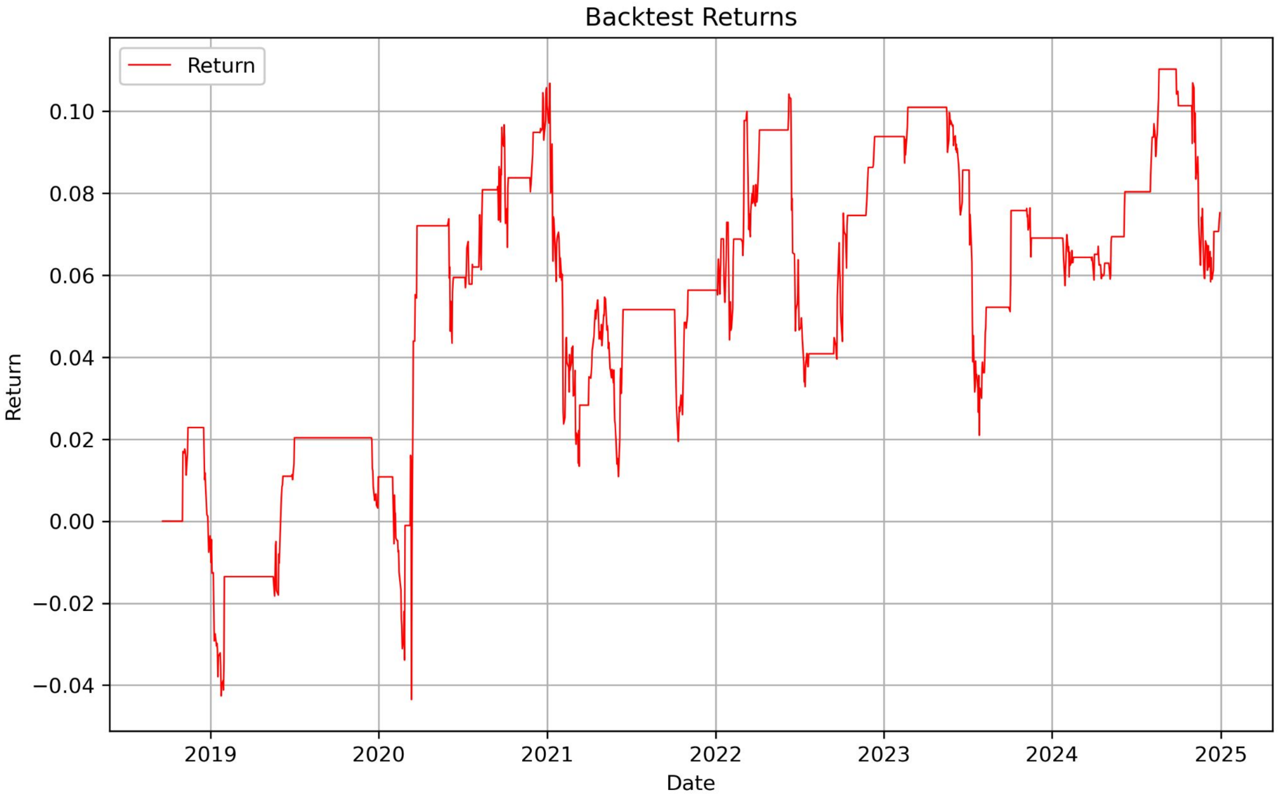
XOM = 0.9068XLE – 0.0875SPY

	coef	std err	t	P>|t|	[0.025	0.975]
Intercept	0.0001	0.000	0.719	0.472	-0.000	0.000
XLE	0.9068	0.011	86.055	0.000	0.886	0.928
SPY	-0.0875	0.018	-4.927	0.000	-0.122	-0.053

OLS Regression Results

Dep. Variable:	XOM	**R-squared:**	0.864
Model:	OLS	**Adj. R-squared:**	0.864
Method:	Least Squares	**F-statistic:**	5598.
Date:	Tue, 23 Sep 2025	**Prob (F-statistic):**	0.00
Time:	23:44:45	**Log-Likelihood:**	6187.9
No. Observations:	1760	**AIC:**	-1.237e+04
Df Residuals:	1757	**BIC:**	-1.235e+04
Df Model:	2		
Covariance Type:	nonrobust		

Results



Cumulative Returns: 7.52%

Sharpe Ratio: 0.17

Max Drawdown: 0.136