

## Tear Sheet

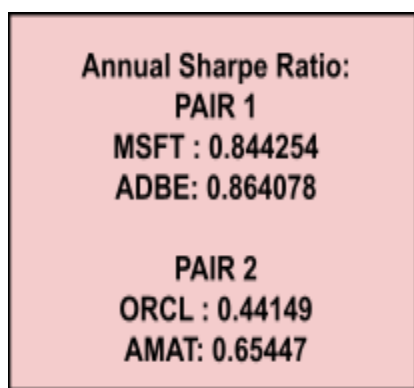
### Cointegrated pairs trading with Statistical Arbitrage

#### Overview:

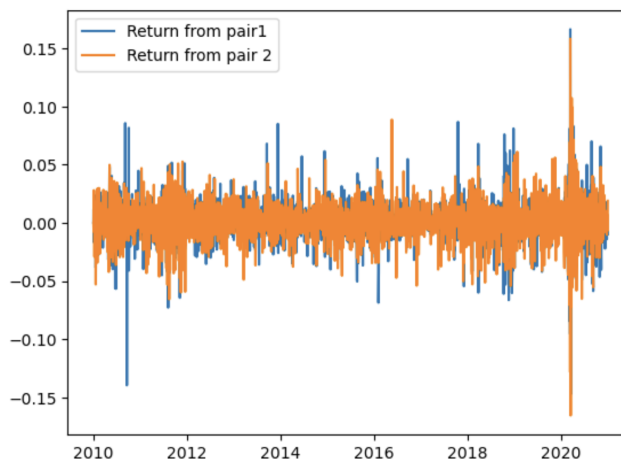
- To use a pairs trading strategy of cointegrated pairs using statistical techniques.
- Using their behavior to mean revert, and earn profit.
- When the spread of the pairs (Asset A - head ratio \* Asset B) is above the upper constraint and the mean, then we will move into the short position and when the spread is below the lower constraint and the mean, we will move into the long position. On the spread returning or close to the mean, we will exit. We take two cointegrated pairs and see their results.



#### Pair 1: Strategy design for “MSFT” and “ADBE”



#### Pair 2: Strategy design for “ORCL” and “AMAT”



#### Potential improvements:

1. Choosing pairs that could portray cointegration, with the help of statistics and analysis.
2. Including risk management techniques.
3. Taking into account costs such as transaction costs into the ambit of calculating returns and Sharpe Ratio.
4. Backtesting the strategy to omit overfitting.
5. One size doesn't fit all, so incorporating market adaptive strategies for changing conditions.