

## Scope of Work

A trade strategy can be designed using pairs of cointegrated securities. Using the cointegration technique we identified some security pairs for the client for her pair trading strategy.

## Project Details and Methodology

### Concept and Definition

Cointegration suggests a long run equilibrium relationship between two series. Series so related cannot drift far away from each other in the long run. There exists an equilibrating mechanism to keep the two series together. For a trader, any violation of this historical cointegrating relationship represents an opportunity. This can be used to establish a long-short position in the two cointegrated stocks in anticipation of the relationship being re-established.

### Methodology

The Client provided us with a set of securities (option adjusted spreads data), and also suggested some probable pairs which they believed to be related. Our task was to validate their initial hypotheses and also suggest any such pairs using which a trading strategy could be devised. We used Johansen procedure for identifying cointegrated pairs.

