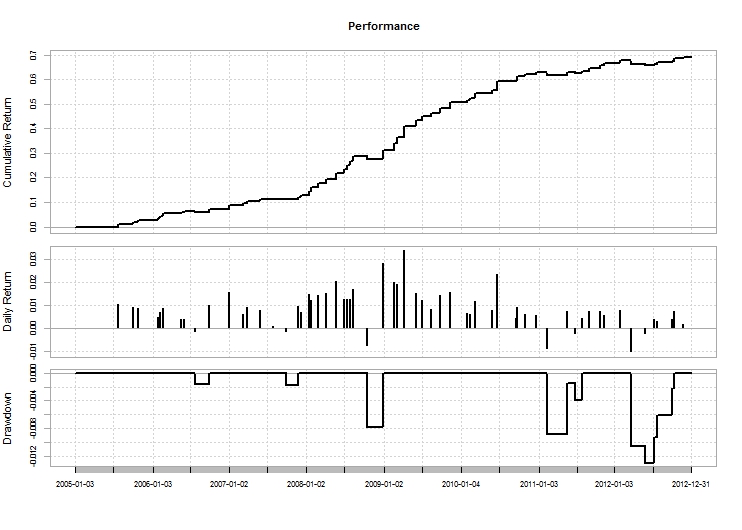
# Jacques Joubert Final Project Report

## Pure Arbitrage Strategies

## Investec in-sample test



In sample test: 2004-2013

Annual Returns: 6.85%

Annual Sharpe(no risk free rate deducted): 2.13

Top 5 Drawdowns: 1.3%, 0.89%, 0.78%, 0.17%, 0.16%

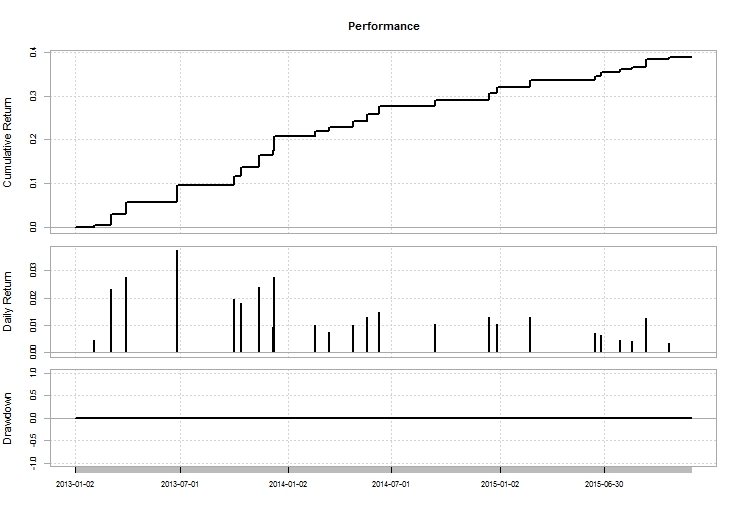
Success Rate: 88.7%

PnL Ratio: 2.022

Total Trades: 62

Note: This is a very stable pair with a high Sharpe ratio but it isn’t enough returns to justify running it, however, because if the very low maximum drawdown – I would be comfortable using 4 times leverage

## Investec out-of-sample test with 4 times leverage



Out-of-sample: 2013 - 2015/11/23

Annual Returns: 12.1%

Annual Sharpe(no risk free rate deducted): 2.6

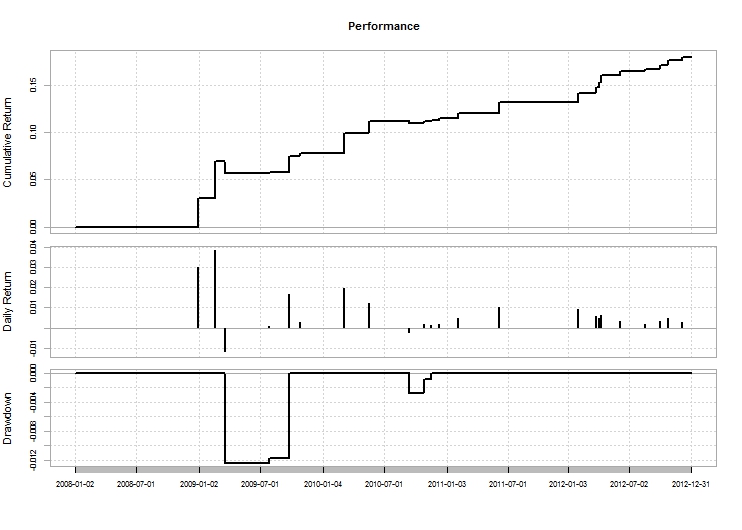
Top 5 Drawdowns: None for out of sample tests

Success Rate: 100%

PnL Ratio: Cant calculate because no losses were generated

Total Trades: 24

## Mondi in-sample test



In-sample: 2008-2013

Annual Returns: 3.33%

Annual Sharpe(no risk free rate deducted): 1.23

Top 5 Drawdowns: 1.24%, 0.28%

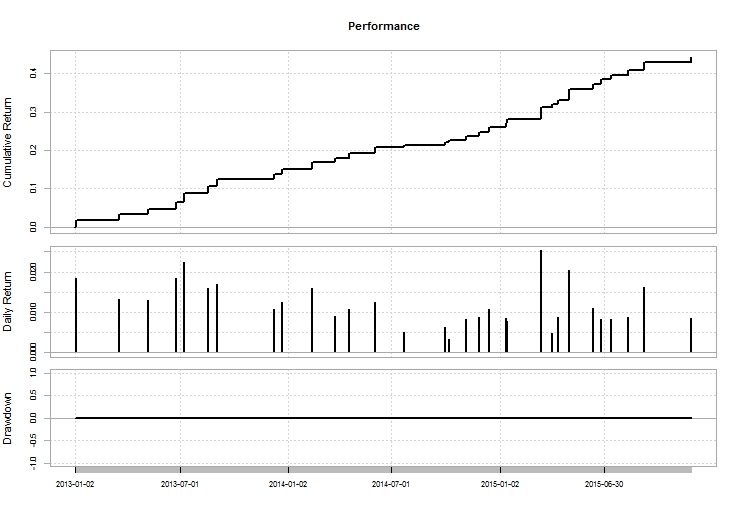
Success Rate: 91.3%

PnL Ratio: 1.14

Total Trades: 23

Note: This is a very stable pair with an acceptable Sharpe ratio but it isn’t enough returns to justify running it, however, because if the very low maximum drawdown – I would be comfortable using 4 times leverage

## Mondi out-of-sample test with 4 times leverage



Out-of-sample: 2013 - 2015/11/23

Annual Returns: 13.59%

Annual Sharpe(no risk free rate deducted): 3.23

Top 5 Drawdowns: None

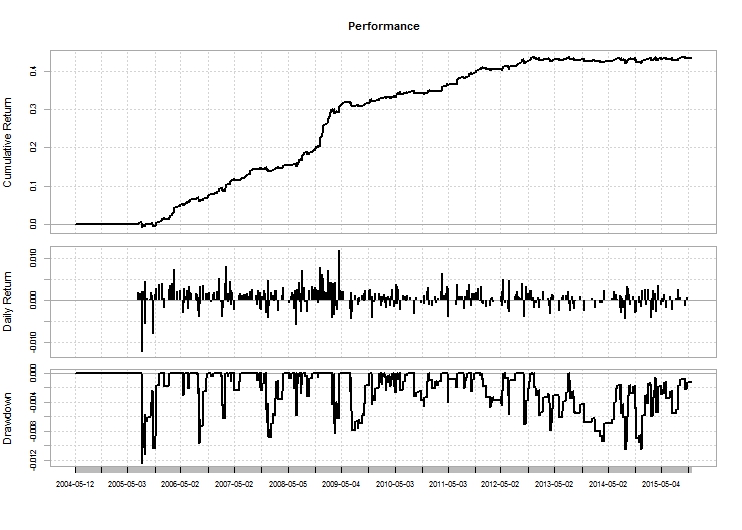
Success Rate: 100%

PnL Ratio: Cant Calculate with no drawdowns

Total Trades: 31

## Pair Trading Strategies

## Banking Portfolio with and without ADF

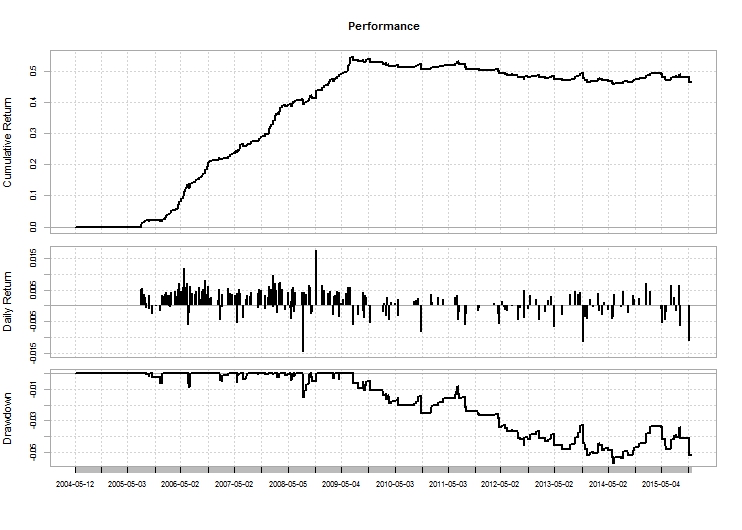


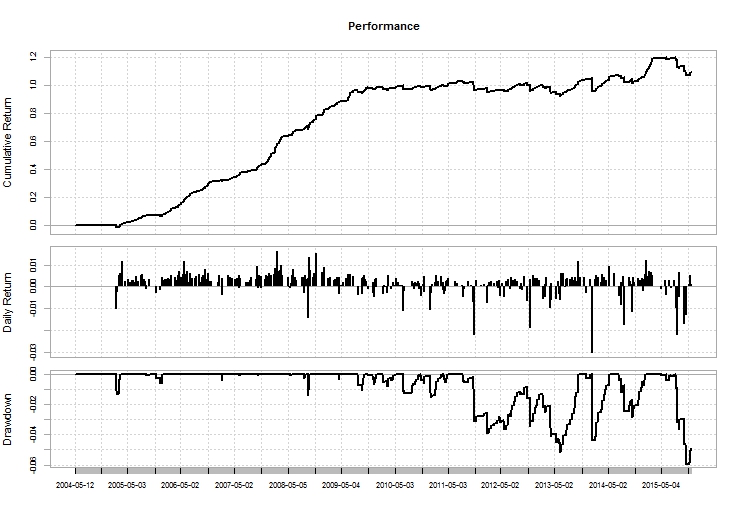
The strategy worked really well in the past but in the last 3 years it has very poor returns.

## C:\Users\Administrator\Desktop\QUantInsti Project\database\FullList\banking no adf.jpeg

As soon as I remove the ADF completely then performance improves

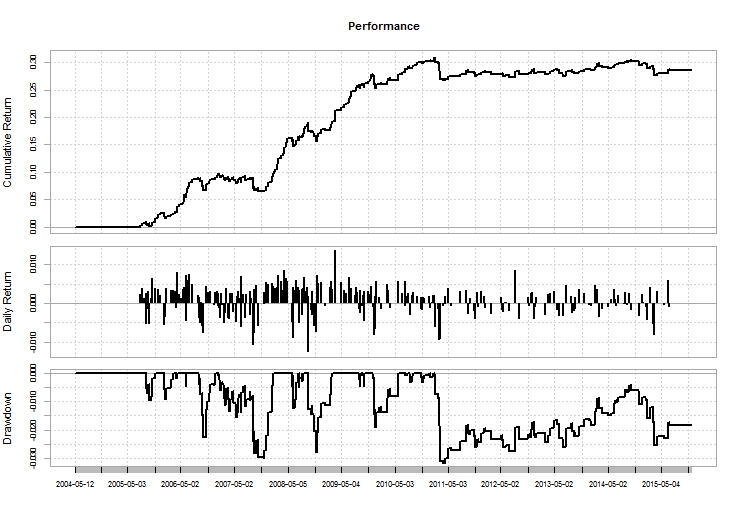
## General Retail Portfolio with and without ADF

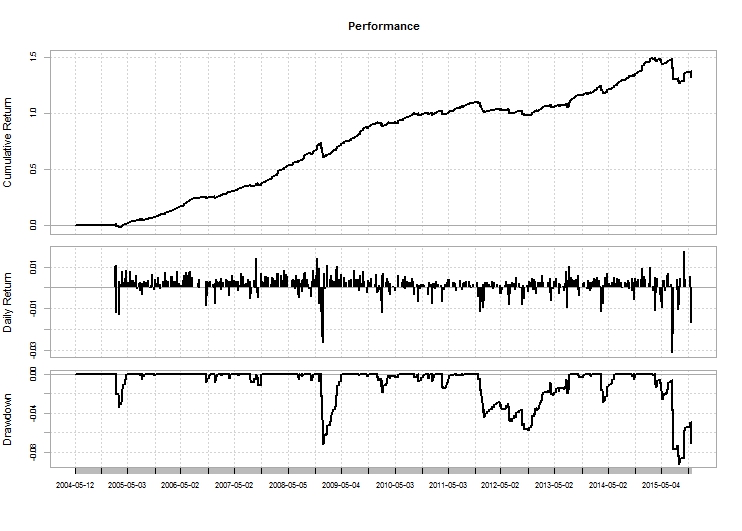




Again we see that performance improves without the ADF test

## Construction Portfolio with and without ADF





The case has a dramatic improvement without the ADF test

Note:

I am actively looking to find how I can improve the system and am very open to ideas.

Kind regards

Jacques Joubert