

Pairs Strategy

“Adopt the pace of nature: her secret is patience.”

Ralph Waldo Emerson



Quant Analyst
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Overview

We perform a co-integration analysis on the top 60 shares (by market capitalization), and total return indices over a 3-year period with the aim of identifying co-integrated pairs. Daily closing price data is used.

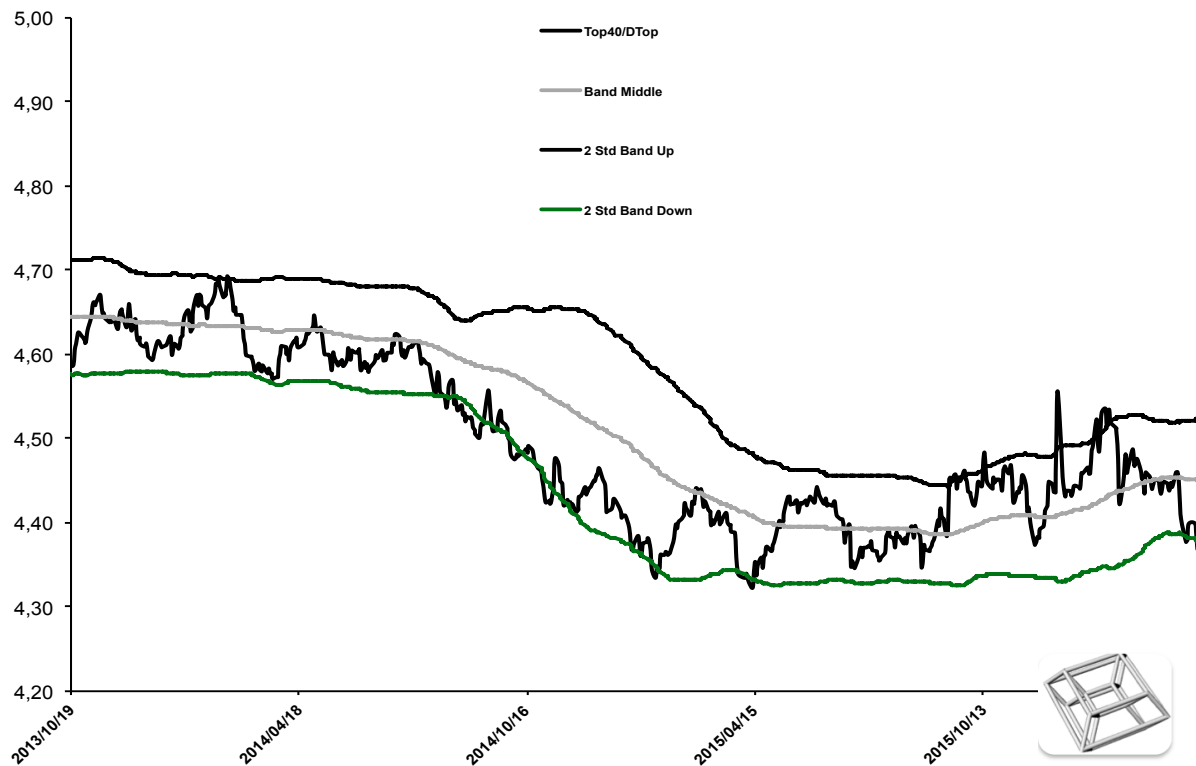
For each pair the level of co-integration is measured using a simple linear regression.

The ratio of the pair variances are used to infer a signal to noise ratio.



Trade for the week

The Top40/DTop pair is co-integrated and has a good signal to noise ratio. A Bollinger band strategy on the Top40/DTop indicates that the Top40 is cheap relative to the DTop. Trade of the week: Long Top40 Short DTop.



Best Pairs

Best 3 Index Pairs

| Rating | Dependent Stock | Independent Stock | Beta | Criteria 1 | | | Criteria 2 |
|--------|-----------------|-------------------|------|------------|-------------|----------|--------------|
| | | | | t-Stat | VarSpecific | VarError | Signal/Noise |
| 1 | Dtop | Top40 | 0,83 | -2,87 | 1,7% | 0,02% | 80,8 |
| 2 | Fini15 | Dtop | 0,74 | -2,15 | 2,3% | 0,11% | 21,5 |
| 2 | JMNG | Resi20 | 1,05 | -3,95 | 12,1% | 0,10% | 126,0 |

Best 3 Financial Pairs

| Rating | Dependent Stock | Independent Stock | Beta | Criteria 1 | | | Criteria 2 |
|--------|-----------------|-------------------|------|------------|-------------|----------|--------------|
| | | | | t-Stat | VarSpecific | VarError | Signal/Noise |
| 1 | JSE | OML | 0,54 | -4,24 | 3,1% | 0,32% | 9,7 |
| 2 | NED | SBK | 1,04 | -3,85 | 3,3% | 0,22% | 15,0 |
| 2 | SLM | FSR | 1,21 | -3,09 | 8,28% | 0,69% | 12,0 |

Best 3 Industrial Pairs

| Rating | Dependent Stock | Independent Stock | Beta | Criteria 1 | | | Criteria 2 |
|--------|-----------------|-------------------|-------|------------|-------------|----------|--------------|
| | | | | t-Stat | VarSpecific | VarError | Signal/Noise |
| 2 | TKG | NPN | 0,62 | -2,96 | 23,7% | 1,7% | 13,6 |
| 2 | CSB | SAB | -0,22 | -3,17 | 7,7% | 0,6% | 13,0 |
| 2 | MDC | BVT | 0,41 | -4,66 | 2,8% | 0,2% | 11,6 |

Best 3 Resources Pairs

| Rating | Dependent Stock | Independent Stock | Beta | Criteria 1 | | | Criteria 2 |
|--------|-----------------|-------------------|------|------------|-------------|----------|--------------|
| | | | | t-Stat | VarSpecific | VarError | Signal/Noise |
| 2 | EXX | ARI | 1,25 | -4,15 | 48,1% | 0,9% | 52,2 |
| 2 | AGL | BIL | 0,56 | -3,13 | 10,1% | 0,5% | 18,8 |
| 2 | IMP | BIL | 0,44 | -2,67 | 9,5% | 1,1% | 8,6 |

The long stock position is denoted in green, the short stock position is denoted in red



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Best Pairs

Best 3 Retail Pairs

| Rating | Dependent Stock | Independent Stock | Beta | Criteria 1 | | | Criteria 2 |
|--------|-----------------|-------------------|------|------------|-------------|----------|--------------|
| | | | | t-Stat | VarSpecific | VarError | Signal/Noise |
| 1 | SPP | WHL | 0,63 | -4,26 | 3,95% | 0,39% | 10,0 |
| 1 | PIK | WHL | 0,68 | -2,85 | 3,46% | 0,88% | 3,9 |
| 2 | MPC | SPP | 0,64 | -2,86 | 6,88% | 1,96% | 3,5 |

Best 3 Cross Sector Pairs

| Rating | Dependent Stock | Independent Stock | Beta | Criteria 1 | | | Criteria 2 |
|--------|-----------------|-------------------|------|------------|-------------|----------|--------------|
| | | | | t-Stat | VarSpecific | VarError | Signal/Noise |
| 1 | WHL | JSE | 1,26 | -3,58 | 8,1% | 1,21% | 6,7 |
| 1 | REM | SPP | 1,31 | -3,05 | 7,7% | 1,12% | 6,9 |
| 2 | FSR | MIDCAP | 0,43 | -3,94 | 1,7% | 0,10% | 17,3 |

Best 3 Total Return Index Pairs

| Rating | Dependent Stock | Independent Stock | Beta | Criteria 1 | | | Criteria 2 |
|--------|-----------------|-------------------|------|------------|-------------|----------|--------------|
| | | | | t-Stat | VarSpecific | VarError | Signal/Noise |
| 2 | SAPI | ALBI | 0,35 | -4,56 | 0,6% | 0,03% | 23,0 |
| 2 | SAPI | Govi | 0,34 | -4,56 | 0,6% | 0,02% | 24,6 |
| 2 | JLFEA | FINI15 | 1,05 | -4,08 | 5,8% | 0,04% | 131,6 |

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