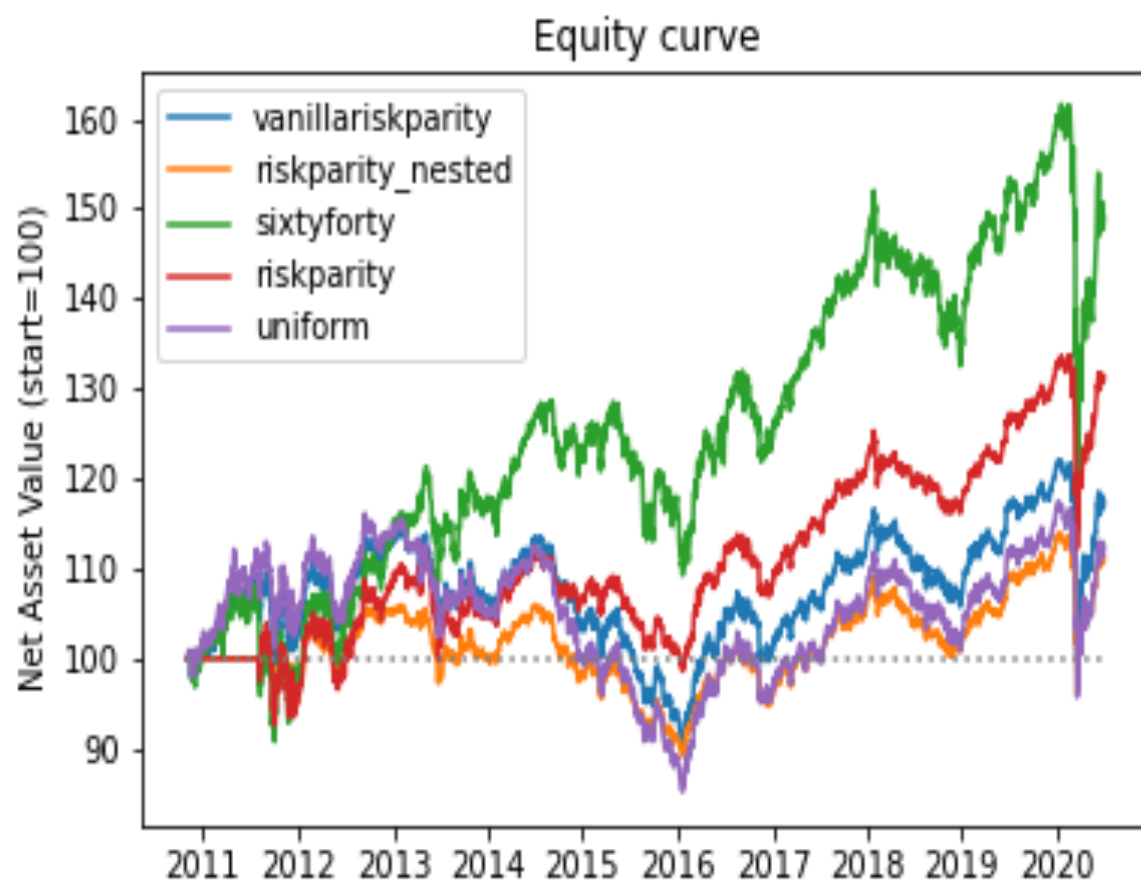


Multiple Strategies Report

| Strategy | |
|----------|---|
| name | ['vanillariskparity', 'riskparity_nested', 'sixtyforty', 'riskparity', 'uniform'] |
| Datafeed | |
| start | 2010-11-01 |
| end | 2020-06-30 |
| User | |
| name | Fabio & Federico |
| test at | 2020-07-19 |
| memo | Testing - Report comparing different strategies |



Performance

| | vanillariskparity | riskparity_nested | sixtyforty | riskparity | uniform |
|---------------------|-------------------|-------------------|------------|------------|-----------|
| backtrader | | | | | |
| start_cash | 100000.00 | 100000.00 | 100000.00 | 100000.00 | 100000.00 |
| end_value | 117378.33 | 111139.01 | 148991.93 | 131244.14 | 112330.89 |
| total_return | 17.4% | 11.1% | 49.0% | 31.2% | 12.3% |
| annual_return | 0.8% | 0.6% | 2.1% | 1.4% | 0.6% |
| annual_return_asset | 1.7% | 1.1% | 4.2% | 2.9% | 1.2% |
| max_money_drawdown | 24.08 | 17.69 | 40.72 | 21.47 | 30.92 |
| max_pct_drawdown | 21.1% | 15.8% | 25.2% | 16.1% | 26.6% |
| vwr | 0.8% | 0.5% | 1.6% | 1.3% | 0.6% |

| | vanilla | riskparity | riskparity_nestedsixtyforty | riskparityuniform | |
|---------------------|---------|------------|-----------------------------|-------------------|--------|
| sharpe_ratio | 0.00 | -0.08 | 0.17 | 0.11 | -0.03 |
| pyfolio | | | | | |
| Annual return | 0.8% | 0.6% | 2.1% | 1.4% | 0.6% |
| Cumulative returns | 17.4% | 11.1% | 49.0% | 31.2% | 12.3% |
| Annual volatility | 5.6% | 4.4% | 8.3% | 5.3% | 6.2% |
| Sharpe ratio | 0.18 | 0.15 | 0.29 | 0.30 | 0.13 |
| Calmar ratio | 0.04 | 0.04 | 0.08 | 0.09 | 0.02 |
| Stability | 0.47 | 0.12 | 0.77 | 0.66 | 0.16 |
| Max drawdown | -21.1% | -15.8% | -25.2% | -16.1% | -26.6% |
| Omega ratio | 1.05 | 1.04 | 1.08 | 1.09 | 1.03 |
| Sortino ratio | 0.24 | 0.20 | 0.39 | 0.41 | 0.18 |
| Skew | -1.78 | -1.82 | -1.80 | -1.51 | -1.31 |
| Kurtosis | 30.68 | 39.33 | 34.70 | 32.81 | 20.69 |
| Tail ratio | 1.00 | 1.04 | 1.01 | 1.09 | 1.00 |
| Daily value at risk | -0.7% | -0.5% | -1.0% | -0.7% | -0.8% |

Notes on the performance metrics

- The pyfolio metrics are to be interpreted as net of contributions (not fund-like)

Target weights

| | vanilla | riskparity | riskparity_nestedsixtyforty | riskparityuniform | |
|------|---------|------------|-----------------------------|-------------------|-------|
| VTI | 4.0% | 1.6% | 12.0% | 4.1% | 4.0% |
| VEU | 4.0% | 1.5% | 12.0% | 3.7% | 4.0% |
| VWO | 4.0% | 1.4% | 12.0% | 3.5% | 4.0% |
| VNQ | 4.0% | 1.1% | 12.0% | 2.7% | 4.0% |
| VNQI | 4.0% | 1.5% | 12.0% | 3.2% | 4.0% |
| BND | 20.0% | 37.8% | 10.0% | 38.6% | 10.0% |
| EMLC | 20.0% | 8.6% | 10.0% | 5.9% | 10.0% |
| BWX | 15.0% | 26.4% | 20.0% | 23.1% | 20.0% |
| DBC | 13.0% | 8.0% | 0.0% | 5.0% | 20.0% |
| IAU | 12.0% | 12.0% | 0.0% | 10.1% | 20.0% |

Effective weights

| | vanilla | riskparity | riskparity_nestedsixtyforty | riskparityuniform | |
|------|---------|------------|-----------------------------|-------------------|-------|
| VTI | 3.9% | 1.5% | 12.0% | 3.9% | 3.9% |
| VEU | 3.9% | 1.5% | 12.0% | 3.6% | 3.9% |
| VWO | 3.9% | 1.4% | 12.1% | 3.5% | 3.9% |
| VNQ | 3.8% | 1.0% | 11.6% | 2.6% | 3.8% |
| VNQI | 3.8% | 1.4% | 11.6% | 3.1% | 3.8% |
| BND | 20.1% | 37.7% | 10.2% | 38.6% | 10.0% |
| EMLC | 19.3% | 8.3% | 9.8% | 5.7% | 9.6% |
| BWX | 15.1% | 26.5% | 20.5% | 23.2% | 20.0% |
| DBC | 13.3% | 8.1% | 0.0% | 5.1% | 20.3% |
| IAU | 12.5% | 12.4% | 0.0% | 10.5% | 20.7% |