

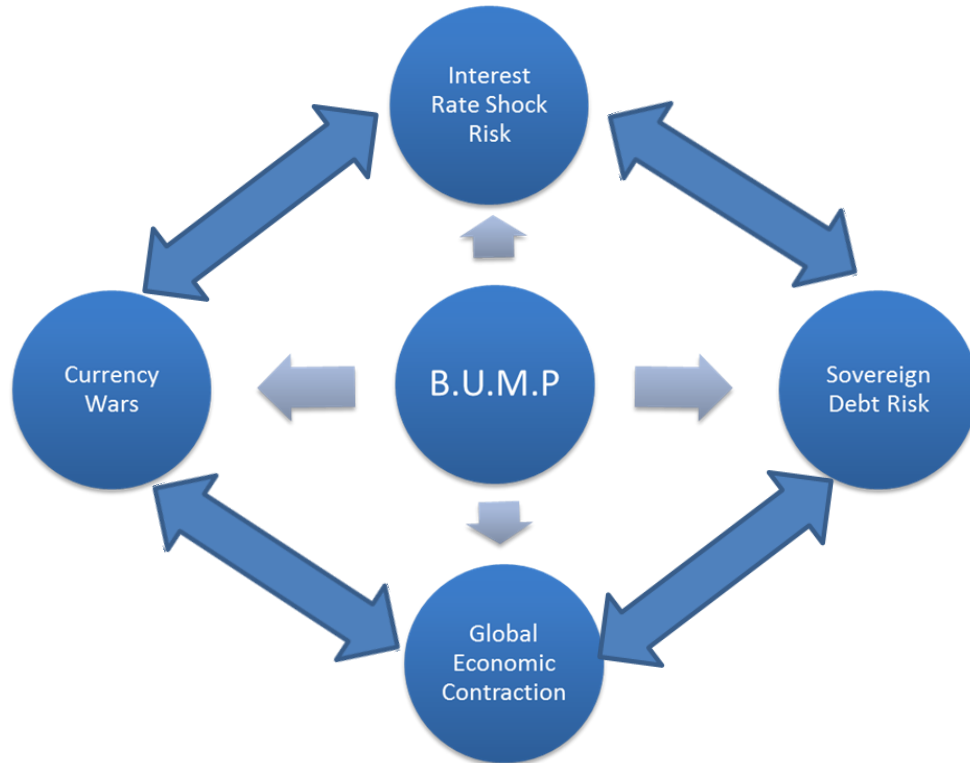


CheckRisk



Simplifying the Complexity of Investment Risk

This is the risk ...



VIX MOVE and the S&P 2007 - 2014



Tail risks cluster and generate more risk



| # of Standard Deviations from the Mean | Daily Return Range | Normal Distribution | | ACTUAL Distribution | |
|--|--------------------|---------------------|------------|---------------------|------------|
| | | Predicted | Percentage | Observed | Percentage |
| +6 σ or more | Above +7.17% | 0 | 0.00% | 26 | 0.13% |
| +5 σ | 5.97% to +7.17% | 0 | 0.00% | 16 | 0.08% |
| +4 σ | +4.78% to +5.97% | 1 | 0.00% | 32 | 0.15% |
| +3 σ | +3.58% to + 4.78% | 27 | 0.13% | 99 | 0.48% |
| +2 σ | +2.39% to + 3.58% | 445 | 2.14% | 297 | 1.43% |
| +1 σ | +1.19% to +2.39% | 2825 | 13.59% | 1502 | 7.23% |
| 0 σ | -1.19% to +1.19% | 14192 | 68.27% | 16907 | 81.33% |
| -1 σ | -1.19% to -2.39% | 2825 | 13.59% | 1394 | 6.71% |
| -2 σ | -2.39 % to -3.58% | 445 | 2.14% | 331 | 1.59% |
| -3 σ | -3.58% to -4.78% | 27 | 0.13% | 101 | 0.49% |
| -4 σ | -4.78% to -5.97% | 1 | 0.00% | 43 | 0.21% |
| -5 σ | - 5.97% to - 7.17% | 0 | 0.00% | 18 | 0.09% |
| -6 σ or more | Below -7.17% | 0 | 0.00% | 22 | 0.11% |
| Total | ~ | 20,788 | 100% | 20,788 | 100 |

Tail risks cluster and generate more risk

