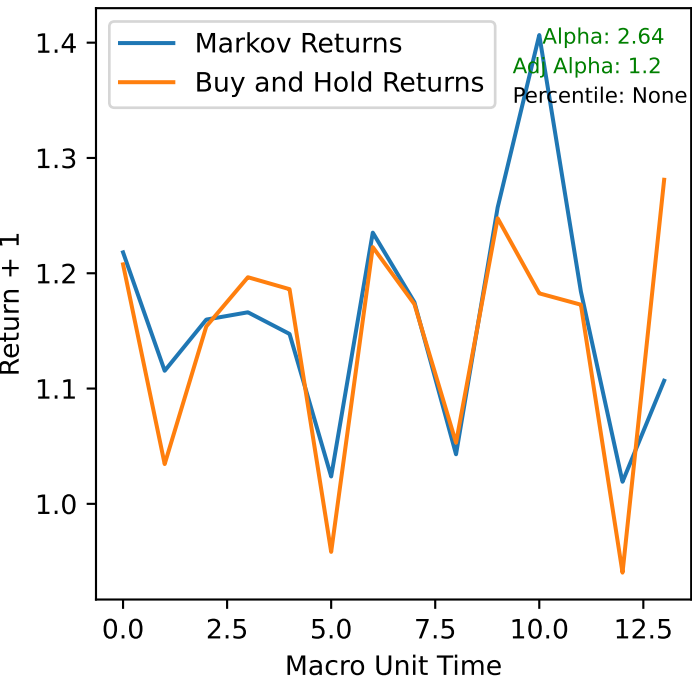
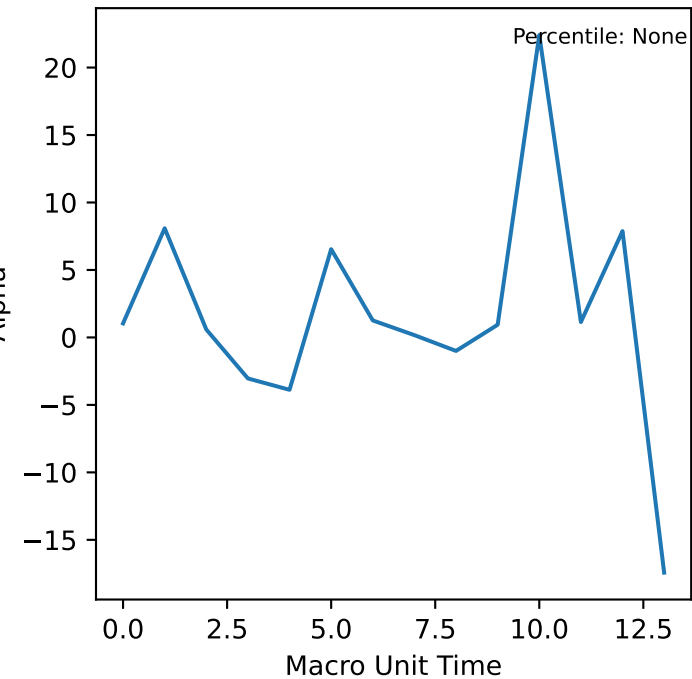


SPY Return per Macro Unit Time



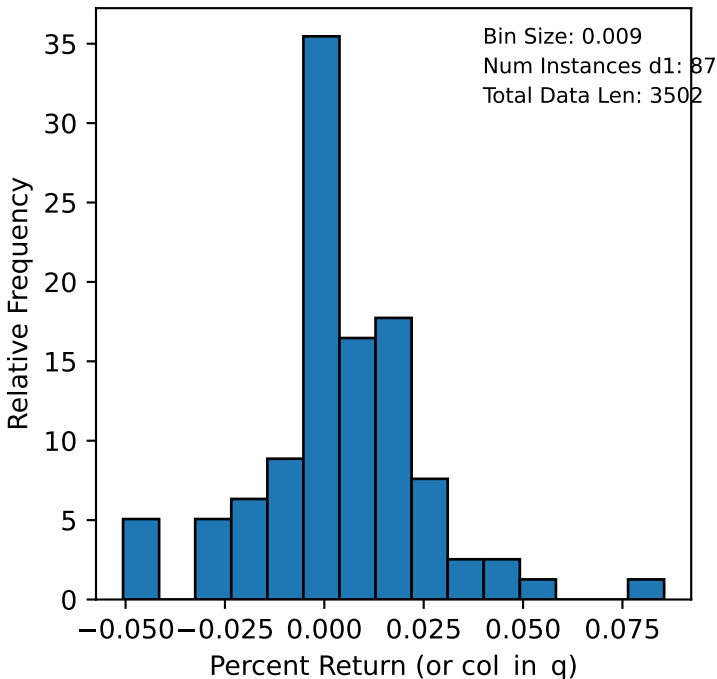
SPY Alpha per Macro Unit Time



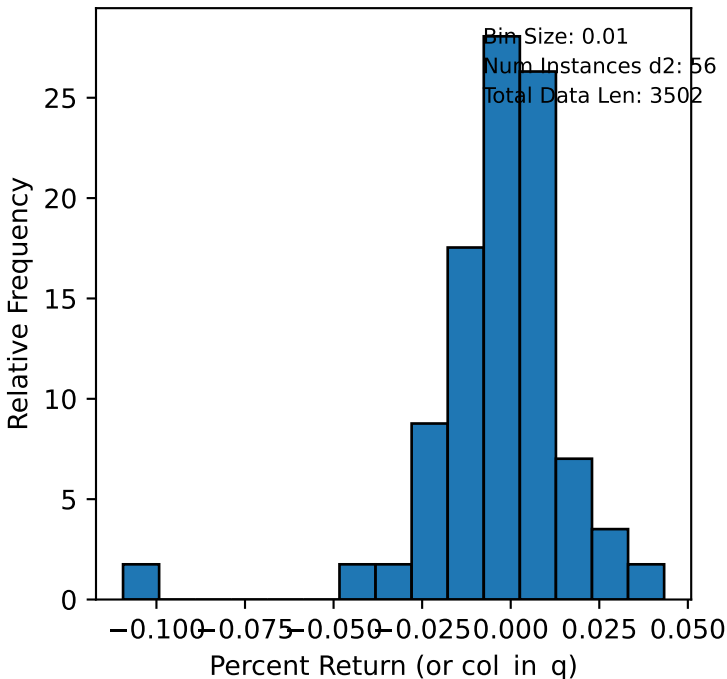
SPY Transition Probability Matrix

| | d1 | d2 | d3 | d4 | g1 | g2 | g3 | g4 |
|----|------|------|------|------|------|------|------|------|
| d1 | 19.5 | 26.8 | 11.1 | 3.1 | 8.9 | 3.6 | 1.9 | 0.1 |
| d2 | 11.5 | 12.5 | 7.9 | 2.5 | 3.7 | 3.6 | 1.9 | 0.1 |
| d3 | 10.3 | 14.3 | 12.7 | 3.2 | 2.2 | 2.7 | 1.9 | 0.1 |
| d4 | 23.0 | 28.6 | 41.3 | 78.1 | 15.6 | 11.8 | 20.4 | 4.2 |
| g1 | 12.6 | 7.1 | 14.3 | 2.6 | 11.1 | 12.7 | 0.0 | 2.8 |
| g2 | 9.2 | 5.4 | 3.2 | 1.5 | 7.4 | 8.2 | 0.0 | 3.0 |
| g3 | 1.1 | 0.0 | 3.2 | 2.5 | 3.0 | 1.8 | 27.8 | 0.4 |
| g4 | 12.6 | 5.4 | 6.3 | 6.6 | 48.1 | 55.5 | 46.3 | 89.2 |

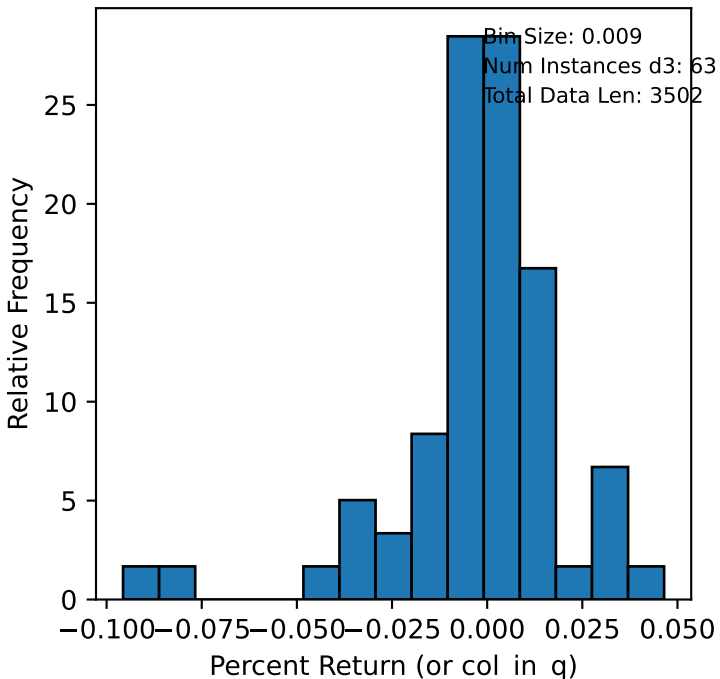
State Return Distribution for State d1



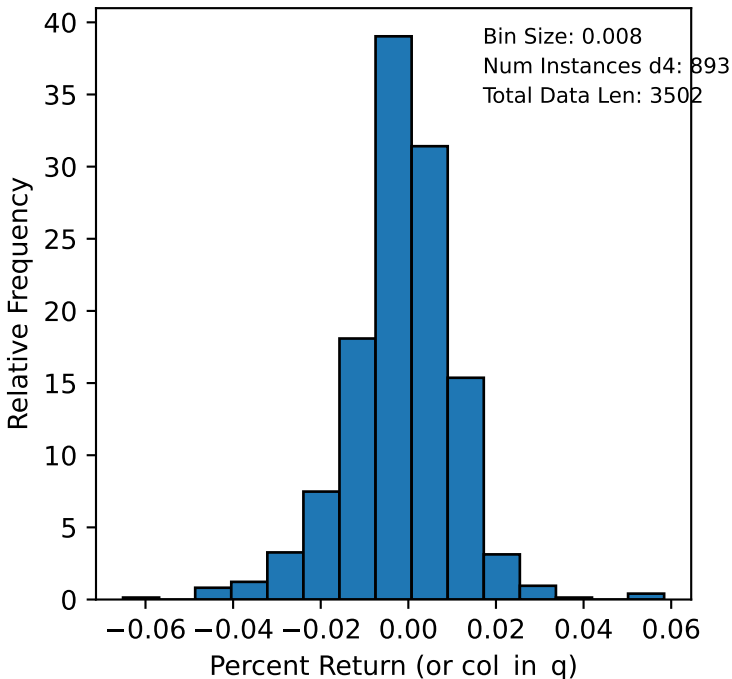
State Return Distribution for State d2



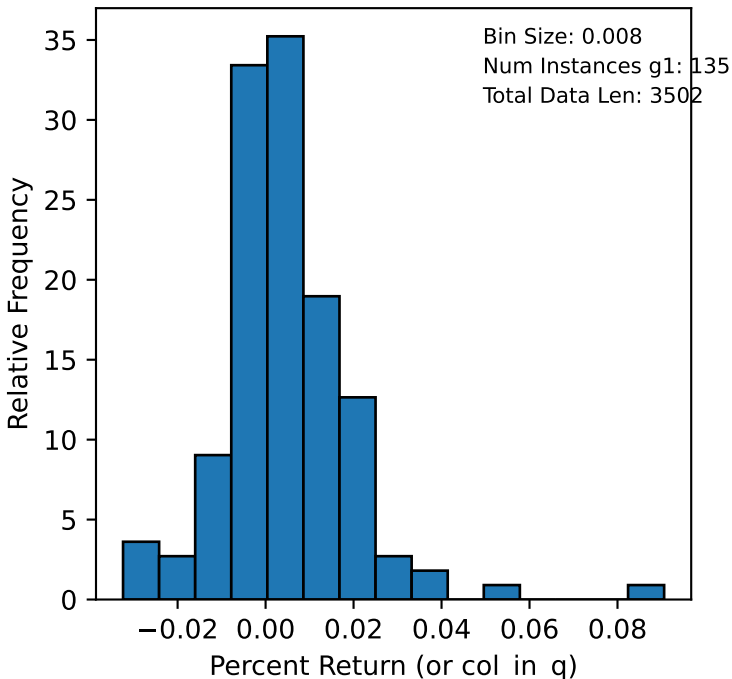
State Return Distribution for State d3



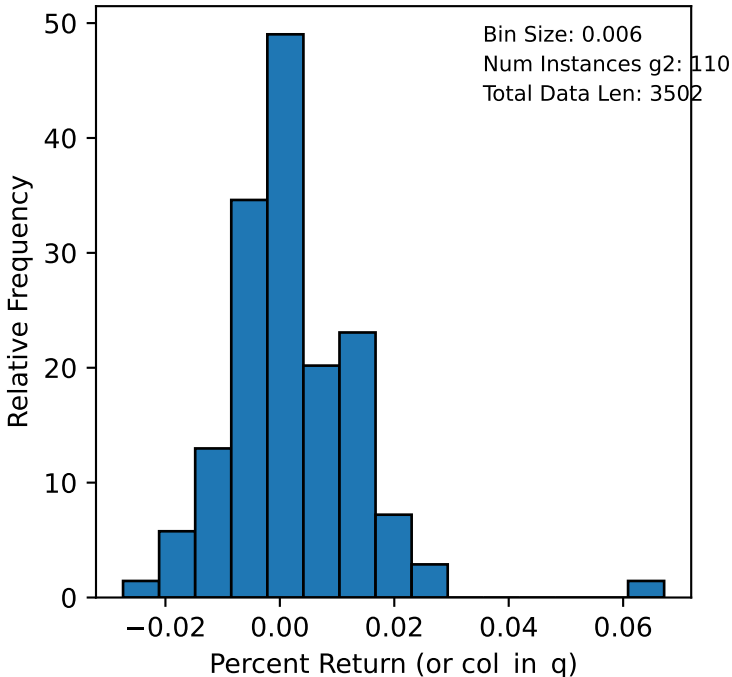
State Return Distribution for State d4



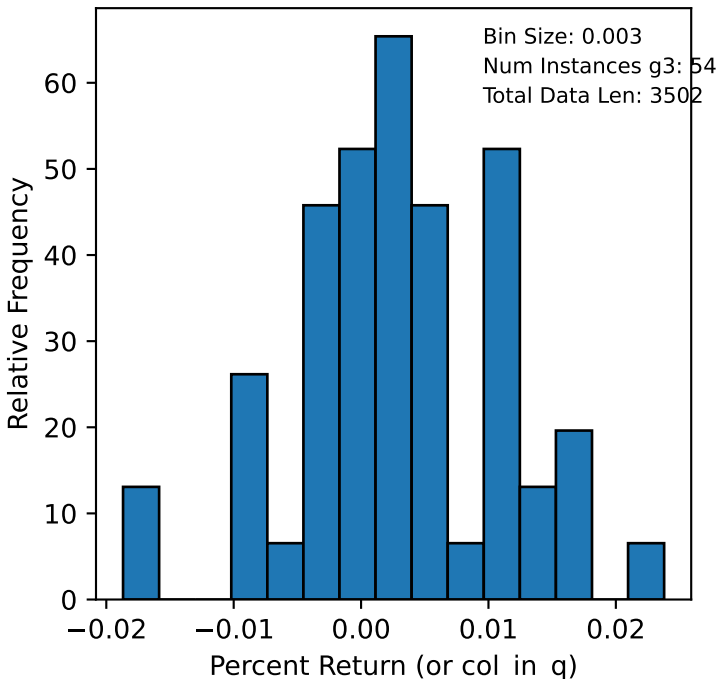
State Return Distribution for State g1



State Return Distribution for State g2



State Return Distribution for State g3



State Return Distribution for State g4

