Time consistent multi-period robust risk measures and portfolio selection models with regime-switching

Jia Liu, Zhiping Chen

PII: S0377-2217(18)30009-2
DOI: 10.1016/j.ejor.2018.01.009
Reference: EOR 14910

To appear in: *European Journal of Operational Research*

Received date: 6 April 2017
Revised date: 26 December 2017
Accepted date: 3 January 2018

Highlights

- We propose two multi-period robust risk measures under regime switching frame- work
- Regime-dependent dynamic uncertainty sets reflect the ambiguity of random process
- Time varying uncertainty sets with moments uncertainty are considered
- Proposed multi-period robust portfolio selection problems can be efficiently solved
- Empirical results show the superiority and practicality of regime-dependent models