Abstract

This paper studies a multi-armed bandit problem where the decision-maker is loss averse, in particular she is risk averse in the domain of gains and risk loving in the domain of losses. The focus is on large horizons. Consequences of loss aversion for asymptotic (large horizon) properties are derived in a number of analytical results. The analysis is based on a new central limit theorem for a set of measures under which conditional variances can vary in a largely unstructured history-dependent way subject only to the restriction that they lie in a fixed interval.