

Elicitable Risk Measures and Expectiles

A statistical functional is said to be elicitable if it can be defined as the minimizer of a suitable expected loss function (see Gneiting (2011), Ziegel (2014) and the references therein). With financial applications in view, we suggest a slightly more restrictive definition than Gneiting (2011), and we derive several necessary conditions. For monetary risk measures, using the characterization results of Weber (2006), we show that elicibility leads to a subclass of the shortfall risk measures introduced by Föllmer and Schied (2002). In the coherent case the only examples are the expectiles, that are becoming increasingly popular in the mathematical finance literature. We discuss some of their properties, with a particular emphasis on their tail asymptotic behaviour.