Abstract

Abstract: A fundamental problem in financial mathematics is to quantify the risk of a financial position. The so-called “Value at Risk” (VaR) is a widely used risk measure that serves this role. In the early 1990s this measure was the common choice for reporting firmwide risk. In 1994, J. P. Morgan, published their methodology and for the first time VaR had been exposed beyond a relatively small group of quants. Since then, VaR was always controversial among academics and practitioners. For instance, it is believed that VaR played a crucial role in the financial crisis of 2007-2008. A common criticism about VaR is that it is not a sub-additive measure. This motivated academics to develop the theory of coherent risk measures, where by default the sub-additivity property is satisfied. This theory has significant industrial impact. In particular, many firms are currently using coherent alternatives to VaR. This talk is a gentle introduction to the theory of coherent risk measures and the current research on this area.