Satisficing Measures for Analysis of Risky Positions

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Published Online: 7 Oct 2008 | https://doi.org/10.1287/mnsc.1080.0929

Abstract

In this work we introduce a class of measures for evaluating the quality of financial positions based on their ability to achieve desired financial goals. In the spirit of Simon (Simon, H. A. 1959. Theories of decision-making in economics and behavioral science. *Amer. Econom. Rev.* **49**(3) 253–283), we call these measures *satisficing measures* and show that they are dual to classes of risk measures. This approach has the advantage that aspiration levels, either competing benchmarks or fixed targets, are often much more natural to specify than risk tolerance parameters. In addition, we propose a class of satisficing measures that reward diversification. Finding optimal portfolios for such satisficing measures is computationally tractable. Moreover, this class of satisficing measures has an ambiguity interpretation in terms of robust guarantees on the expected performance because the underlying distribution deviates from the investor's reference distribution. Finally, we show some promising results for our approach compared to traditional methods in a real-world portfolio problem against a competing benchmark.

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Volume 55, Issue 1

January 2009

Pages iv-163

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Information

Received: July 12, 2007
Published Online: October 07, 2008

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Cite as

David B. Brown, Melvyn Sim, (2008) Satisficing Measures for Analysis of Risky Positions. Management Science 55(1):71-84.
https://doi.org/10.1287/mnsc.1080.0929

Keywords

satisficing | aspiration levels | targets | risk measures | coherent risk measures | convex risk measures | portfolio optimization

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