Generalized Systematic Risk[1]

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Abstract

We generalize the concept of "systematic risk" to a broad class of risk measures potentially accounting for high distribution moments, downside risk, rare disasters, as well as other risk attributes. We offer two different approaches. First is an equilibrium framework generalizing the Capital Asset Pricing Model, two-fund separation, and the security market line. Second is an axiomatic approach resulting in a systematic risk measure as the unique solution to a risk allocation problem. Both approaches lead to similar results extending the traditional beta to capture multiple dimensions of risk. The results lend themselves naturally to empirical investigation.