

Professor Gautam Mitra

Professor Gautam Mitra is an internationally renowned research scientist in the field of Operational Research in general and computational optimisation and modelling in particular. He has developed a world class research group in his area of specialisation with researchers from Europe, UK & USA. He has published three books and over hundred refereed research articles. He was Head of the Department of Mathematical Sciences, Brunel University between 1990 and 2001. In 2001 he established CARISMA: The Centre for the Analysis of Risk and Optimisation Modelling Applications. CARISMA specialises in the research of Risk and Optimisation and their combined paradigm in decision modelling. Professor Mitra is a Director of OptiRisk Systems UK and OptiRisk India. Many of the research results of CARISMA are exploited through these companies. Professor Mitra also acts as a hands on Angel investor and is a shareholder and director of UNICOM Learning systems and Excellence in People.

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Talk 2: Classical portfolio theory: a critique and new directions

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Abstract:

Modern portfolio theory as postulated by Markowitz has gained universal acceptance and constitutes the back bone of many asset allocation decision models used by the fund management industry and the regulators. In this talk after summarizing this approach known as classical/modern portfolio theory we critically examine its strengths and short comings.

In particular we propose new thinking whereby down-side risks are explicitly considered in the asset allocation models: an approach originally proposed by Sortino and labelled post modern portfolio theory. Our approach uses alternative down-side risk measures plus a novel computational framework which exploits the criterion of Second order stochastic dominance.

We present empirical results of extensive testing which demonstrate the advantage of this family of analytic models.