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The origins of the mean-variance approach in finance: revisiting de Finetti 65 years later

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Abstract

In a recent critical review of de Finetti's paper "Il problema dei pieni'', the Nobel Prize winner Harry Markowitz recognized the primacy of de Finetti in applying the mean-variance approach to finance, but pointed out that de Finetti did not solve the problem for the general case of correlated risks. We argue in this paper that a more fair sentence would be: de Finetti did solve the general problem but under an implicit hypothesis of regularity which is not always satisfied. Moreover, a natural extension of de Finetti's procedure to non-regular cases offers a general

solution for the correlation case and shows that de Finetti anticipated a modern mathematical programming approach to mean-variance problems.

Mathematics Subject Classification (2000): 91B30, 90C20

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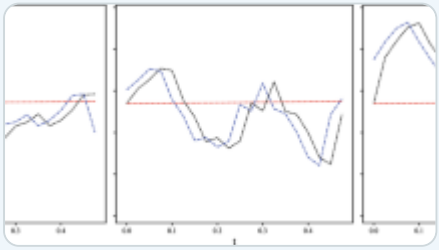

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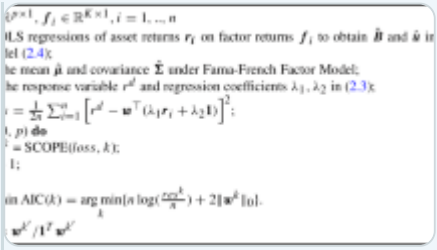

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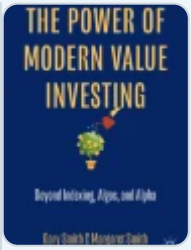

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