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

Open access | Published: May 2007

Volume 30, pages 19–49, (2007) Cite this article

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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

Journal of Economic Literature Classification: G11, C61, B23, D81, G22

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Cite this article

Pressacco, F., Serafini, P. The origins of the mean-variance approach in finance: revisiting de Finetti 65 years later. *Decisions Econ Finan* **30**, 19–49 (2007). https://doi.org/10.1007/s10203-007-0067-7

Received Accepted Issue Date 28 November 2006 23 January 2007 May 2007

DOI

https://doi.org/10.1007/s10203-007-0067-7

Keywords

<u>Optimum Path</u> <u>Portfolio Selection</u> <u>Corner Point</u> <u>Golden Rule</u>

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