



**UNIVERSITÀ DEGLI STUDI DI BERGAMO**

**Dipartimento di Scienze aziendali, economiche e metodi quantitativi**  
*Department of Management, Economics and Quantitative Methods*

## **SEMINARIO**

**Giovedì 17 Aprile 2014, ore 12.00-14.00**

Bergamo, Via dei Caniana 2 – Aula 22

### **“Understanding Robust Portfolios”**

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#### **Abstract**

Robust portfolio optimization has been developed to resolve the high sensitivity to inputs of the Markowitz mean-variance model. The main idea is to introduce an uncertainty set for the model parameters, and to obtain the portfolio with worst-case optimization approach. Although much effort has been put into forming robust portfolios, there have not been many attempts to analyze the characteristics of portfolios formed from robust optimization. In this presentation, we discuss the recent finding on the qualitative characteristics of the robust portfolios. More specifically, there are three main questions to be addressed:

- 1) Is robust portfolio really robust?
- 2) Robust portfolio is different from traditional mean-variance portfolio. Is there any consistent pattern in regard to this qualitative difference in two portfolios?
- 3) If robust portfolio is consistently different from traditional mean-variance portfolio, is it possible



to reduce the difference without losing the robustness?

### References

- [1] Kim, Woo Chang, Jang Ho Kim, and Frank J. Fabozzi (2014) "Deciphering Robust Portfolios", Journal of Banking and Finance, under minor revision
- [2] Kim, Woo Chang, Frank J. Fabozzi, Patrick Cheridito, and Charles Fox (2014) "Controlling Portfolio Skewness and Kurtosis without Directly Optimizing Third and Fourth Moments", Economics Letters, 122, 154-158
- [3] Kim, Woo Chang, Min Jeong Kim, Jang Ho Kim, and Frank J. Fabozzi (2014) "Robust Portfolios That Do Not Tilt Factor Exposure", European Journal of Operational Research, Available Online, DOI: 10.1016/j.ejor.2013.03.029
- [4] Kim, Jang Ho, Woo Chang Kim, and Frank J. Fabozzi (2013) "Composition of Robust Equity Portfolios", Finance Research Letters, 10, 72-81
- [5] Kim, Woo Chang, Jang Ho Kim, So Hyung Ahn, and Frank J. Fabozzi (2013) "What Do Robust Models Really Do?", Annals of Operations Research, 205, 141-168

Il seminario è aperto a tutti gli interessati

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