Accepted Manuscript

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PII: S0022-0531(16)30105-3
DOI: http://dx.doi.org/10.1016/j.jet.2016.11.004
Reference: YJETH 4611

To appear in: *Journal of Economic Theory*

Received date: 28 March 2014
Revised date: 25 October 2016
Accepted date: 15 November 2016

Please cite this article in press as: Schoch, D. Generalised mean-risk preferences. *J. Econ. Theory* (2016), http://dx.doi.org/10.1016/j.jet.2016.11.004

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November 18, 2016

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I owe thanks to Peter Wakker, Andreas Löffler, and to two anonymous referees for their very valuable comments which improved the paper greatly. Further thanks go to Andreas Hackethal and the House of Finance of Frankfurt University for their warm reception during my stay updating the paper.

Abstract

We extend the classical mean-variance preference model underlying modern portfolio theory to include deviation measures [Rockafellar et al. 2006]. Deviation measures have characteristics similar to a norm, save that they are not symmetric.

The significance of this study is given by the fact that the class of agents following a CAPM-like investment strategy with a certain deviation measure - which is tantamount to always selecting a certain personal master portfolio - can be described by having generalized mean-risk preferences with certain constraints on the utility function [Rockafellar et al. 2007].

We provide two axiomatic characterisations of this class of preferences, one for the case where the deviation measure is given, and one for preferences from which a deviation measure can be extracted.

1 Motivation

Mean-Variance Preference have been at the very foundation of classical modern portfolio theory. The assumption that the investor's preference depends