Incomplete Cost and Budget Information in
Robust Portfolio Modeling

Juuso Liesiö, Pekka Mild and Ahti Salo
Systems Analysis Laboratory
Helsinki University of Technology
P.O. Box 1100, 02015 HUT, Finland
juuso.liesio@tkk.fi, pekka.mild@tkk.fi, ahti.salo@tkk.fi

Abstract: Robust Portfolio Modeling (RPM) supports project portfolio selection in view of scarce resources, multiple criteria and incomplete preference information. We extend this methodology to account for interval-valued information about budgets and projects' costs. Specifically, we analyze efficient portfolios and determine at what budget levels (i) individual project should be surely selected and (ii) stated cost-benefit requirements on the optimal portfolio can be met.

Keywords: Robust project portfolio selection, incomplete information.