

Accepted Manuscript

Optimal selection of project portfolios using reinvestment strategy within a flexible time horizon

M. Jafarzadeh, H.R. Tareghian, F. Rahbarnia, R. Ghanbari

PII: S0377-2217(14)01014-5
DOI: [10.1016/j.ejor.2014.12.013](https://doi.org/10.1016/j.ejor.2014.12.013)
Reference: EOR 12672



To appear in: *European Journal of Operational Research*

Received date: 31 August 2013
Revised date: 27 June 2014
Accepted date: 9 December 2014

Please cite this article as: M. Jafarzadeh, H.R. Tareghian, F. Rahbarnia, R. Ghanbari, Optimal selection of project portfolios using reinvestment strategy within a flexible time horizon, *European Journal of Operational Research* (2014), doi: [10.1016/j.ejor.2014.12.013](https://doi.org/10.1016/j.ejor.2014.12.013)

This is a PDF file of an unedited manuscript that has been accepted for publication. As a service to our customers we are providing this early version of the manuscript. The manuscript will undergo copyediting, typesetting, and review of the resulting proof before it is published in its final form. Please note that during the production process errors may be discovered which could affect the content, and all legal disclaimers that apply to the journal pertain.

Optimal selection of project portfolios using reinvestment strategy within a flexible time horizon

M. Jafarzadeh*, H. R. Tareghian, F. Rahbarnia, R. Ghanbari

Faculty of Mathematical Sciences, Ferdowsi University of Mashhad, Mashhad, Iran

Abstract

In this paper, we address the issue of optimal selection of portfolio of projects using reinvestment strategy within a flexible time horizon. We assume that an investor intends to invest his/her initial capital on the implementation of some projects in a flexible time horizon. The investor's motivation for considering a flexible time horizon is to maximize his/her gain by determining the optimal time horizon for investing on the selected portfolio of projects. Projects have different durations and their potential rates of return are also different. The Profit yielded by the completed projects can be reinvested in the implementation of other projects. The implementation costs of projects can be allocated at equally spaced intervals with equal amounts during their life cycles or can be assigned to each project according to its estimated *s-curve*. We assume that the profit yielded by each project is accrued after the investment for the project ends. Therefore, in order to maximize gains, the investor needs to optimize three issues: combination of projects, schedule of

*Corresponding author.

Email addresses: m.jafarzadeh@hsu.ac.ir (M. Jafarzadeh), taregian@um.ac.ir (H. R. Tareghian), rahbarnia@um.ac.ir (F. Rahbarnia), rghanbari@um.ac.ir (R. Ghanbari)

Download English Version:

<https://daneshyari.com/en/article/6896839>

Download Persian Version:

<https://daneshyari.com/article/6896839>

[Daneshyari.com](https://daneshyari.com)