HEURISTICALLY GUIDED INVESTMENT PORTFOLIO SELECTION

By

Amitava Ghosh

Indian Institute of Management Calcutta, 2016

Thesis Supervisor: Professor Ambuj Mahanti, MIS Group, IIM Calcutta

ABSTRACT

Investment portfolio selection is a problem of great interest to researchers across disciplines. An investor has a certain amount of wealth and wishes to invest in assets. He faces a problem to decide:
(i) How to apportion his wealth- how should he invest in various assets: common equity, real estate, foreign equity, fixed income securities, etc. (ii) Also, suppose the investor decides to invest only in common equity or stocks: what should be the proportion of allocation of his wealth to different stocks? His main concern during all these issues is to maximize his expected return from the portfolio held by him subject to a certain risk.

Mean-risk models are the most popular models used to solve the problem of investment portfolio selection. It all started with the Markowitz (1952, 1959) mean-variance model: a very popular approach to maximize expected returns subject to a certain risk. Adding various real life constraints like cardinality constraints, quantity constraints, minimum transaction lots, etc. makes the problem a mixed integer non-linear programming formulation. This thesis looks at the portfolio problem from a holistic approach. Investors can have different attitudes to take risk which may also be influenced by the capacity to take risk. Knowing
complex financial products to him. The risk appetite of an investor can result in different stocks being allocated to different investors. SEBI (2013) came out with the regulatory guidelines to govern these for the first time. They mandated a clear separation of the roles and responsibilities of the advisory division and the execution division in a firm.

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