



**ESTIMATION RISK MODELING FOR PORTFOLIO SELECTION USING  
GIBBS SAMPLING: EVIDENCE FROM SET50**

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**ABSTRACT**

This paper study the Bayesian framework portfolio optimization incorporate prior belief in CAPM model as return generating process and prior belief in mispricing on CAPM model compare to the tradition Mean-Variance portfolio optimization. This study finds that within the limitation of this research, Bayesian portfolio incorporate prior belief in CAPM and misprice CAPM outperform the Mean-Variance portfolio in the period of downtrend period in both no short sell and allow short sell constraint.

*Keywords:* Bayesian, Portfolio optimization, estimation risk, Gibbs sampling, CAPM