INTISARI

PERBANDINGAN PORTOFOLIO *ROBUST: MEAN-VARIANCE (MV)* DAN *MEAN-VARIANCE-SKEWNESS (MVS)*

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Portofolio *Mean-Variance (MV)* memiliki beberapa kelemahan, diantaranya tidak mengakomodasi ketidakpastian parameter, sensitif terhadap perubahan input parameter, *unreliabel* pada pengamatan yang ekstrem, serta perubahan preferensi investor terkait adanya banyak bukti tentang distribusi *return* aset yang tidak normal dan asimetris (mengandung *skewness*). Untuk mengatasi kelemahan pertama, kedua, dan ketiga, ditawarkan portofolio *robust MV* yang dasarnya adalah ketidakpastian parameter. Akan tetapi, pada portofolio *robust MV* belum memasukkan unsur *skewness* dalam optimisasinya. Oleh karena itu diperkenalkan portofolio *robust Mean-Variance-Skewness (MVS)* yang dapat digunakan untuk kondisi dimana data *return* memuat nilai-nilai ekstrem (*outlier*) dan mengandung *skewness*. Dilakukan studi kasus perbandingan portofolio *robust mean-variance* dan *robust mean-variance-skewness* dengan menggunakan empat saham di Indonesia yaitu BDMN.JK, UNTR.JK, SMGR.JK, dan ASRI.JK.

Kata Kunci : Portofolio, *Robust*, *Mean*, *Variance*, *Skewness*

ABSTRACT

THE COMPARISON OF ROBUST PORTFOLIO: MEAN VARIANCE (MV) AND MEAN VARIANCE SKEWNESS (MVS)

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The Mean-Variance (MV) portfolio has several weaknesses. It does not accommodate the uncertainty of parameter, tends to be sensitive to the changes of parameter input, and tends to be unreliabel on extreme observations. Moreover, it can not accommodate the changes in investor preferences regarding the evidence of abnormal and asymmetric asset return distribution. To overcome the first three weaknesses, we can use the robust MV portfolio that based on uncertainty of parameter. However, the robust MV portfolio has not included the skewness in its optimization. Therefore, we introduce the robust Mean-Variance-Skewness (MVS) portfolio that include skewness in its optimization. So it can be used for the condition where the data return is skew (asymmetric/contains skewness) and contains extreme values (outliers). An empirical study of robust mean-variance and robust mean-variance-skewness portfolio had been conducted on four stocks in Indonesia, ie BDMN.JK, UNTR.JK, SMGR.JK, and ASRI.JK.

Keywords: Portfolio, Robust, Mean, Variance, Skewness