ABSTRACT

FORECASTING OF PT BUKIT ASAM TBK SHARE RETURN VOLATILITY USING GLOSTEN JAGANNATHAN RUNKLE GENERALIZED AUTOREGRESSIVE CONDITIONAL HETEROSCEDASTICITY (GJR-GARCH) MODEL

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Time series data are often random and varied, resulting in heteroscedasticity. In every research, there is always an asymmetry. The asymmetry usually occurs because of the difference between the price change and the volatility value. volatility is a measure of the rate of fluctuation in a security's price over time. It shows the level of risk associated with changes in the security's price.
So in this study the GJR-GARCH (Glosten-Jagannathan-Runkle-Generalized Autoregressive Conditional Heteroskedasticity) model was used to overcome the asymmetric response. The Glosten - Jagannathan - Runkle (GJR) model is one of the Conditional time series models of the Generalized Autoregressive Heteroskedasticity (GARCH) development model. The purpose of this research is to predict the closing return data for the PT Bukit Asam (PTBA) Tbk stock price. by using the GJR-GARCH model (1.0) to produce a stock price forecasting value that tends to be constant.

Key words : asymmetric,heteroscedasticity,garch,gjr-garch.

ABSTRAK

PERAMALAN VOLATILITAS *RETURN* SAHAM PT BUKIT ASAM TBK MENGGUNAKAN MODEL *GLOSTEN JAGANNATHAN RUNKLE GENERALIZED AUTOREGRESSIVE CONDITIONAL HETEROSCEDASTICITY* (*GJR-GARCH)*

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Data deret waktu seringkali bersifat acak dan bervariasi, sehingga terjadi heteroskedastisitas. Dalam setiap penelitian, selalu ada asimetri. Asimetri biasanya terjadi karena perbedaan antara perubahan harga dan nilai volatilitas. volatility adalah ukuran tingkat fluktuasi harga sekuritas dari waktu ke waktu. Ini menunjukkan tingkat risiko yang terkait dengan perubahan harga sekuritas. Sehingga pada penelitian ini digunakan model GJR - GARCH (Glosten - Jagannathan - Runkle- Generalized Autoregressive Conditional Heteroskedasticity) untuk mengatasi adanya respon asimetris. Model Glosten - Jagannathan - Runkle (GJR) merupakan salah satu model deret waktu Conditional dari model Generalized Autoregressive pengembangan Heteroskedasticity (GARCH). Tujuan dalam penelitian ini untuk meramalkan data return penutupan harga saham PT Bukit Asam (PTBA) Tbk. dengan menggunakan model GJR - GARCH (1,0) dengan menghasilkan nilai peramalan harga saham yang cenderung konstan.

Kata kunci : asimetris,heteroskedastisitas,garch,gjr-garch.