Perbandingan peramalan harga emas antara model Generalized Autoregressive Conditional Heteroscedasticity dan Exponential Weighted Moving Average = Gold price forecasting comparison between Generalized Autoregressive Conditional Heteroscedasticity Model and Exponential Weighted Moving Average / Eka Setia Sukma

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Abstrak

ABSTRAK
Penelitian bertujuan memperoleh model peramalan harga emas terbaik antara model GARCH dan EWMA. Variabel dependen adalah harga emas Antam sedangkan variabel independen terdiri dari harga emas dunia, IHSG dan JIBOR. Penelitian menggunakan data harian periode Agustus 2010 - September 2012. Variabel independen berpengaruh signifikan terhadap harga emas Antam dan secara simultan diperoleh R-Square sebesar 97,7375%. Model dalam pendekatan pola adalah GARCH (2,1) sedangkan pada pendekatan kausal GARCH (1,1). Nilai MAPE peramalan harga emas Antam bulan Oktober 2012 menggunakan pendekatan kausal sebesar 1,9114%, pendekatan pola 4,4379% dan EWMA 10,618824%. Dengan demikian, dalam penelitian ini model GARCH lebih akurat dibandingkan EWMA.
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ABSTRACT
The study aimed at obtaining the best gold price forecasting model between GARCH and EWMA models. The dependent variable is the price of Antam's gold while the independent variables consist of world gold prices, IHSG and JIBOR. The study uses daily data in August 2010 until September 2012. Independent variables significantly influence the Antam’s gold price and simultaneously acquired R-Square of 97.7375%. Models in the pattern approach is GARCH (2.1) whereas the causal approach GARCH (1,1). MAPE values of Antam's gold price forecasting in October 2012 using the causal approach 1.9114%, the pattern approach 4.4379% and EWMA 10.618824%. Thus, in this study GARCH models are more accurate than EWMA.