ABSTRACT

Bonds are an important investment instrument whose prices are sensitive to interest rate changes. There are two types of bonds based on their issuer: government bonds and corporate bonds. Exponential duration and convexity are important measures in estimating bond price changes due to interest rate fluctuations. Exponential duration is more accurate than Macaulay Duration, and convexity is often used to improve the accuracy of the approximation. This study aims to predict bond prices using corporate bond transaction data from 15 companies in Indonesia, issued in 2021 and maturing in 2026, considering an increase in interest rates from 3.50% to 5.75%. Accuracy is measured using the mean relative error. The results of this study show a mean relative error of 6.29%, which indicates very good accuracy. This model is proven effective in capturing most bond price movements, providing a strong foundation for investors in making investment decisions.

Kata Kunci: *Bond Price, Corporation Bond, Interest Rate, Macaulay Duration, Convexity, Exponential Duration, Relative Error.*

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