ABSTRAK

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Judul   **: Kombinasi Indikator *Moving Average Convergence Divergence* (MACD) dan *William Percent Range* Terhadap Analisa *Trading* Di Komoditi Emas**

Salah satu disiplin ilmu yang dapat memprediksikan kondisi *di masa* depan adalah *forecasting*. Metode *forecasting* yang bisa diterapkan untuk prediksi jangka pendek adalah *Single Moving Average* (SMA) dan *Exponential Moving Average* (EMA). Kedua metode ini merupakan metode *time series* yang bisa digunakan untuk prediksi jangka pendek secara harian maupun bulanan. Adapun pengembangan dari kedua metode *forecasting* tersebut yaitu indikator *Moving Average Convergence Divergence* (MACD) dan *William Percent Range*. Sejalan dengan masalah yang dihadapi, yaitu bagaimana meminimalkan resiko dari berinvestasi di komoditi emas maka diperlukan suatu analisa yang akan menampilkan informasi berupa kapan komoditi tersebut sebaiknya dibeli dan dijual. Salah satu caranya adalah dengan mengombinasikan kedua indikator yaitu *Moving Average Convergence Divergence* (MACD) dan indikator *William Percent Range*. Keputusan antara jual atau beli diputuskan setiap hari, artinya investor dapat *trading* setiap hari dengan menggunakan kedua indikator ini. Keputusan *confirm* dan *wait & see* diputuskan setiap harinya berdasarkan nilai MACD dan nilai *William Percent Range* yang didapat pada hari tersebut. Dalam kurun waktu 130 hari kerja dihasilkan keputusan *wait and see* lebih banyak daripada keputusan *confirm* di setiap harinya Adapun pengujian validitas dari kombinasi kedua indikator ini yaitu menggunakan metode *Backtesting* dengan hasil *profit* sebesar 58%.

Kata Kunci : Peramalan, *Simple Moving Average* (SMA), *Exponential Moving Average* (EMA), *Moving Average Convergence Divergence* (MACD), *William Percent Range*.

ABSTRACT

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Title   **:** *Combination of Moving Average Convergence Divergence (MACD) and William Percent Range Indicators Against Trading Analysis in Gold Commodities*

One of the disciplines that can predict future conditions is forecasting. Forecasting methods that can be applied for short-term predictions are Single Moving Average (SMA) and Exponential Moving Average (EMA). Both of these methods are time series methods that can be used for short-term predictions on a daily or monthly basis. The development of the two forecasting methods is the Moving Average Convergence Divergence (MACD) and William Percent Range indicator. In line with the problems faced, namely how to minimize the risk of investing in gold commodities. Where is the need for an analysis that will display information in the form of when the commodity should be bought and sold. One way is to combine the two indicators, namely the Moving Average Convergence Divergence (MACD) and the William Percent Range indicator. The decision between buying or selling is made daily, meaning investors can trade every day using these two indicators. Confirm and wait & see decisions are made every day based on the MACD value and the William Percent Range value obtained on that day. Within 130 working days, more wait and see decisions are produced than confirm decisions every day. The validity test of the combination of these two indicators is using the Backtesting method with a profit result of 58%.

Keywords : Forecasting, Simple Moving Average (SMA). Exponential Moving Average (EMA), Moving Average Convergence Divergence (MACD), William Percent Range