ABSTRAK

Fanhas Abdul Rahman, NIM 7223250002. Implementasi Sistem Trading Otomatis Menggunakan *Order Block Detection* pada Pasangan Mata Uang XAU/USD *Micro* Melalui Akun Demo Broker MIFX di Platform MetaTrader 5.

Penelitian ini bertujuan untuk merancang dan mengimplementasikan sistem trading otomatis berbasis *Order Block Detection* pada pasangan mata uang XAU/USD *Micro* menggunakan platform MetaTrader 5 melalui akun demo broker PT Monex Investindo Futures (MIFX), serta mengevaluasi kelayakan dan konsistensi performa sistem melalui dua fase pengujian yaitu *backtesting* dan *forward testing*. Sistem dikembangkan menggunakan bahasa pemrograman MQL5 dalam bentuk *Expert Advisor* (*EA*) yang mengacu pada konsep *Smart Money Concept*, di mana algoritma secara otomatis mengidentifikasi zona *Bullish* dan Bearish *Order Block* sebagai area akumulasi dan distribusi institusional, kemudian memasang *pending order* di zona tersebut dengan manajemen risiko berbasis lot adaptif sebesar 2% per transaksi dan *Risk:Reward Ratio* 1:2. Pengembangan sistem mengikuti model *Prototyping* dengan lima tahapan utama. *Backtesting* dilakukan pada *timeframe* H6 selama periode 12 November 2024 hingga 25 Desember 2025 menggunakan data tick berkualitas 100%, sementara *forward testing* dilakukan secara *real-time* pada *timeframe* H2 selama periode 1 Mei 2026 hingga 1 Juni 2026. Hasil *backtesting* menunjukkan bahwa sistem menghasilkan total net profit sebesar $5.324,72 dari modal awal $10.000 dengan ROI sebesar 53,25% (49,15% per tahun), *Profit Factor* 1,32, *Maximum Drawdow*n 22,92%, *Win Rate* 41,35% dari 104 transaksi, dan *Calmar Ratio* 2,14, di mana seluruh angka tersebut telah memenuhi kriteria keberhasilan yang ditetapkan. Hasil *forward testing* menunjukkan net profit sebesar $198,51 dengan *ROI* 1,99%, *Profit Factor* 1,04, *Maximum Drawdow*n 13,84%, *Win Rate* 35,14% dari 37 transaksi, dan Calmar Ratio 1,72. Secara keseluruhan, sistem berhasil memenuhi empat dari lima kriteria keberhasilan pada kedua fase pengujian. Penelitian ini menyimpulkan bahwa implementasi sistem *trading* otomatis berbasis *Order Block Detection* pada instrumen XAU/USD *Micro* adalah layak dan memiliki potensi *profitabilitas* yang nyata, serta memberikan kontribusi empiris bagi pengembangan ilmu pengetahuan di bidang *trading algoritmik* berbasis *Smart Money Concept.*

Kata Kunci: Sistem Trading Otomatis, *Order Block Detectio*n, *Smart Money Concept*, XAU/USD, *Expert Advisor*, MetaTrader 5.

ABSTRACT

Fanhas Abdul Rahman, 7223250002. Implementation of an Automated Trading System Using Order Block Detection on XAU/USD Micro Currency Pair Through MIFX Broker Demo Account on MetaTrader 5 Platform.

This study aims to design and implement an automated trading system based on Order Block Detection on the XAU/USD Micro currency pair using the MetaTrader 5 platform through a demo account of PT Monex Investindo Futures (MIFX) broker, as well as to evaluate the feasibility and performance consistency of the system through two testing phases, namely backtesting and forward testing. The system was developed using the MQL5 programming language in the form of an Expert Advisor (EA) based on the Smart Money Concept, in which the algorithm automatically identifies Bullish and Bearish Order Block zones as areas of institutional accumulation and distribution, then places pending orders in those zones with adaptive lot-based risk management of 2% per transaction and a Risk:Reward Ratio of 1:2. System development followed the Prototyping model with five main stages. Backtesting was conducted on the H6 timeframe during the period from November 12, 2024 to December 25, 2025 using 100% quality tick data, while forward testing was conducted in real-time on the H2 timeframe during the period from May 1, 2026 to June 1, 2026. Backtesting results showed that the system generated a total net profit of $5,324.72 from an initial capital of $10,000 with an ROI of 53.25% (49.15% per year), Profit Factor of 1.32, Maximum Drawdown of 22.92%, Win Rate of 41.35% from 104 trades, and Calmar Ratio of 2.14, all of which met the established success criteria. Forward testing results showed a net profit of $198.51 with a monthly ROI of 1.99%, Profit Factor of 1.04, Maximum Drawdown of 13.84%, Win Rate of 35.14% from 37 trades, and Calmar Ratio of 1.72. Overall, the system successfully met four out of five success criteria in both testing phases. This study concludes that the implementation of an automated trading system based on Order Block Detection on the XAU/USD Micro instrument is feasible and has genuine profitability potential, and provides an empirical contribution to the development of knowledge in the field of algorithmic trading based on Smart Money Concept.

Keywords: *Automated Trading System, Order Block Detection, Smart Money Concept, XAU/USD, Expert Advisor, MetaTrader 5.*