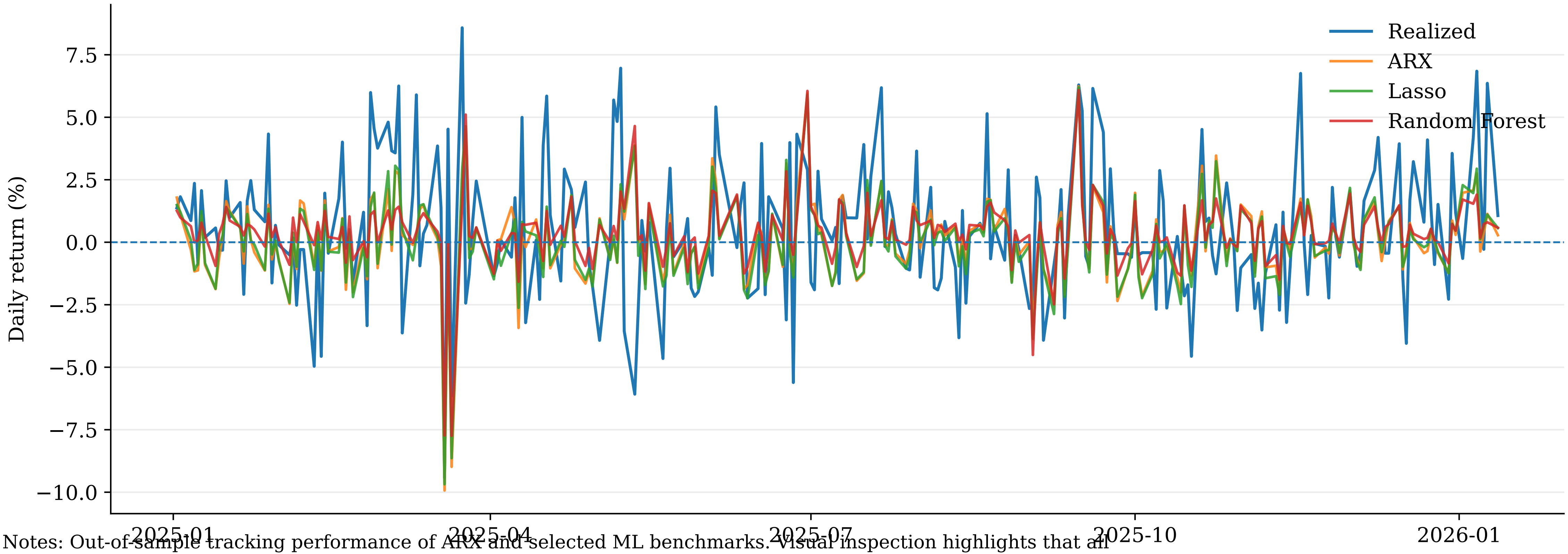
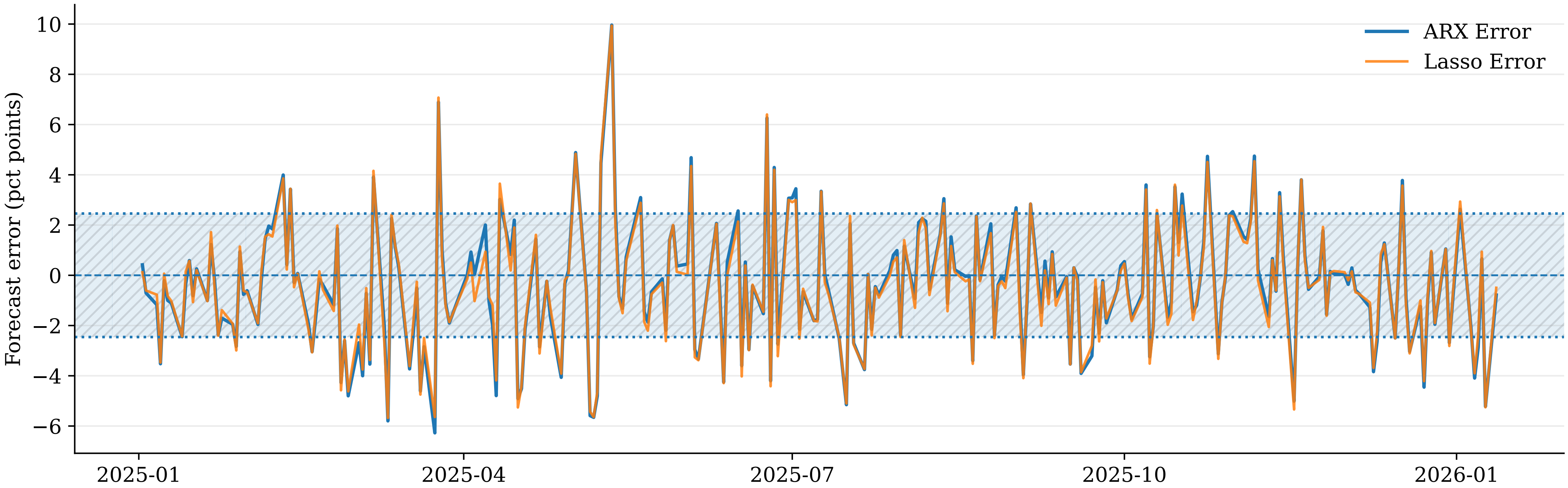
Figure D1. Out-of-Sample Forecast Comparison (2025–2026)



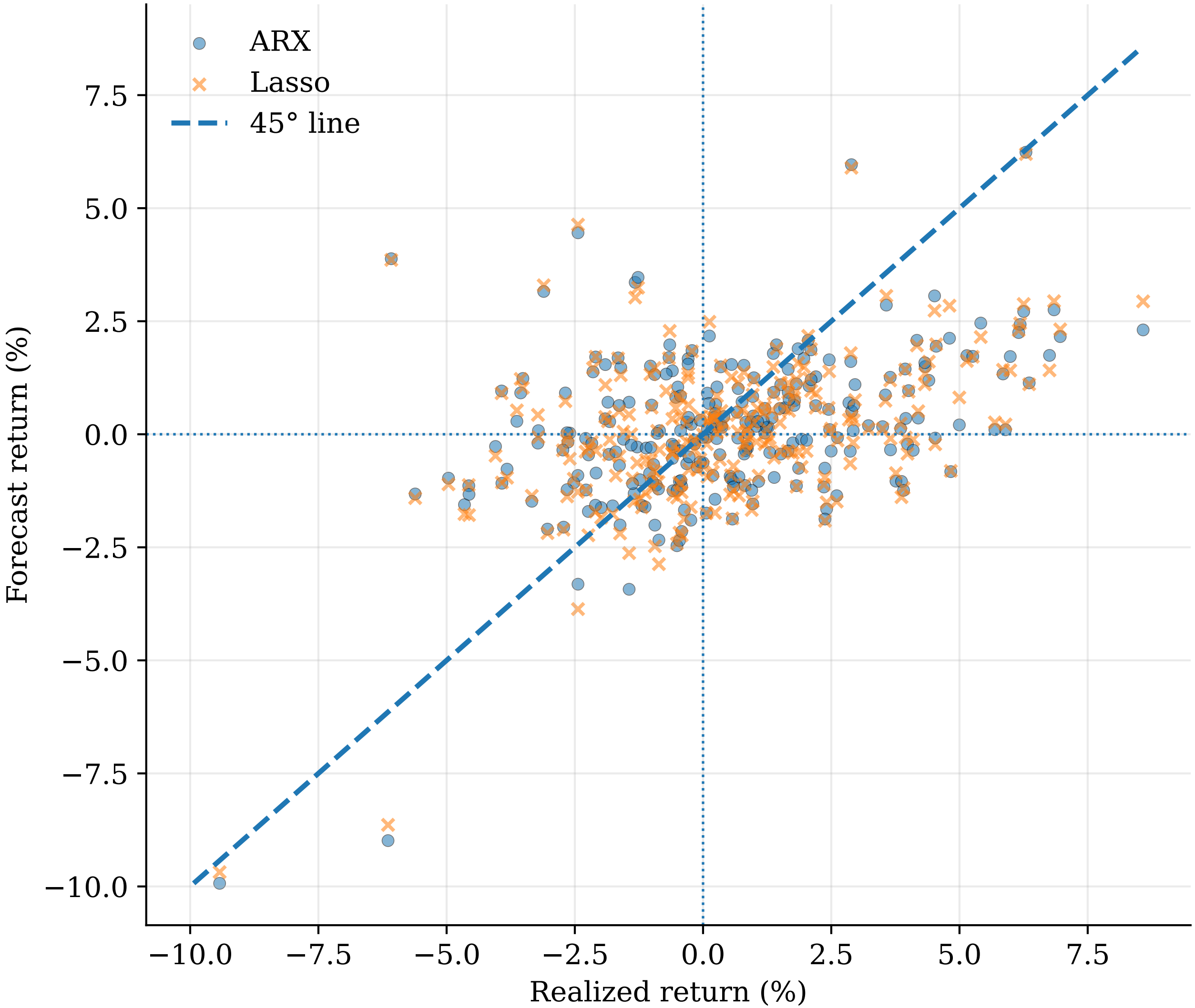
Notes: Out-of-sample tracking performance of ARX and selected ML benchmarks. Visual inspection highlights that all models struggle with large jumps, while Lasso and ARX exhibit similar smooth dynamics; Random Forest occasionally reacts more aggressively but without systematic accuracy gains.

Figure D2. Out-of-Sample Forecast Errors: ARX vs Lasso



Notes: Forecast errors from ARX and Lasso move very closely together, indicating that regularization does not materially alter the error dynamics. Shaded band denotes ±1σ of ARX forecast errors.

Figure D3. OOS Scatter: Realized vs Forecast



Notes: Both ARX and Lasso forecasts are strongly compressed toward zero, indicating systematic under-reaction to large return realizations — a well-known limitation of linear and regularized linear models in equity returns.