

MIDAS MODEL EVALUATION

Best Model: MIDAS_AR1_lag3_m2

RMSE: 13.492

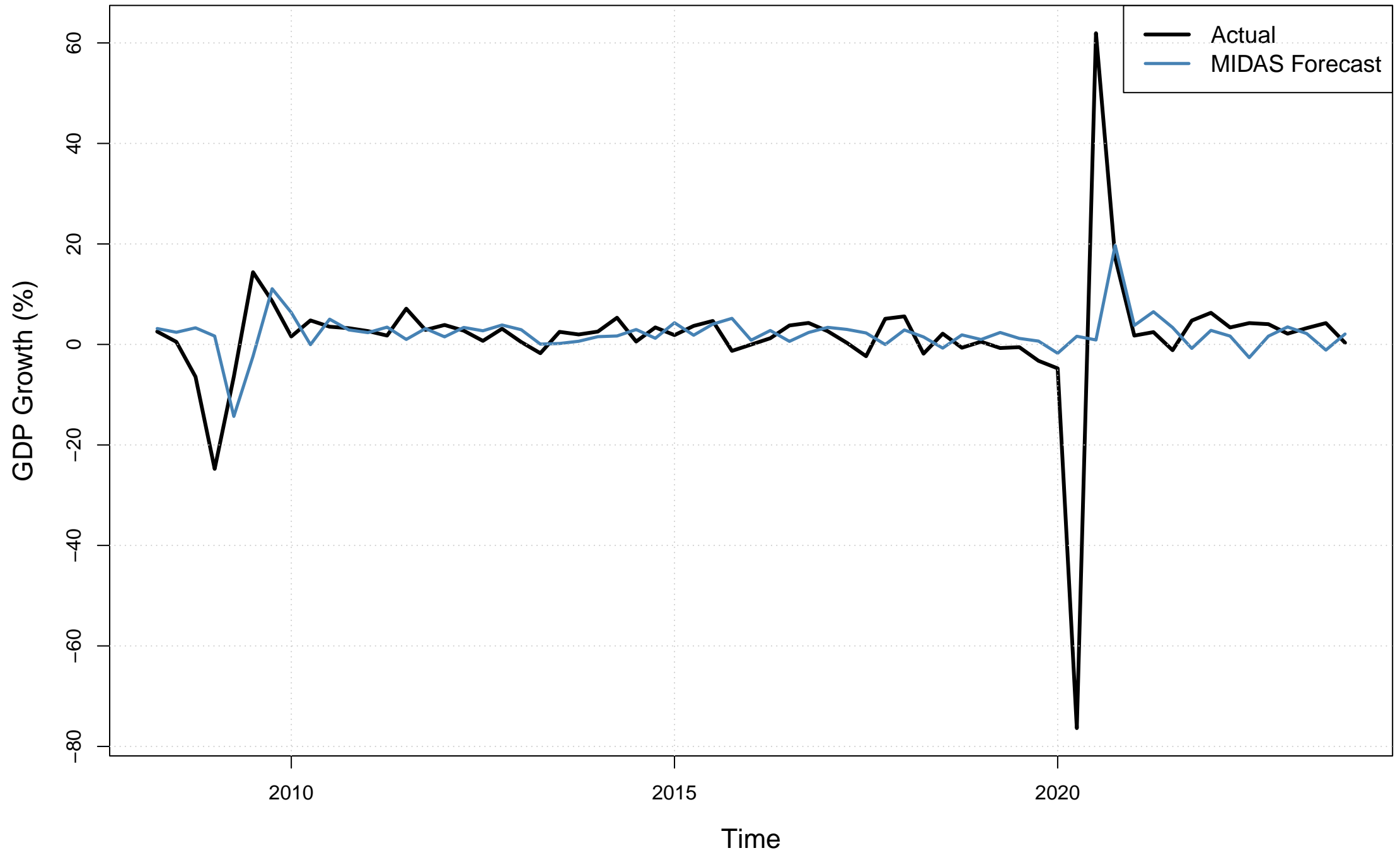
MAE: 5.490

Mean Error: -0.574

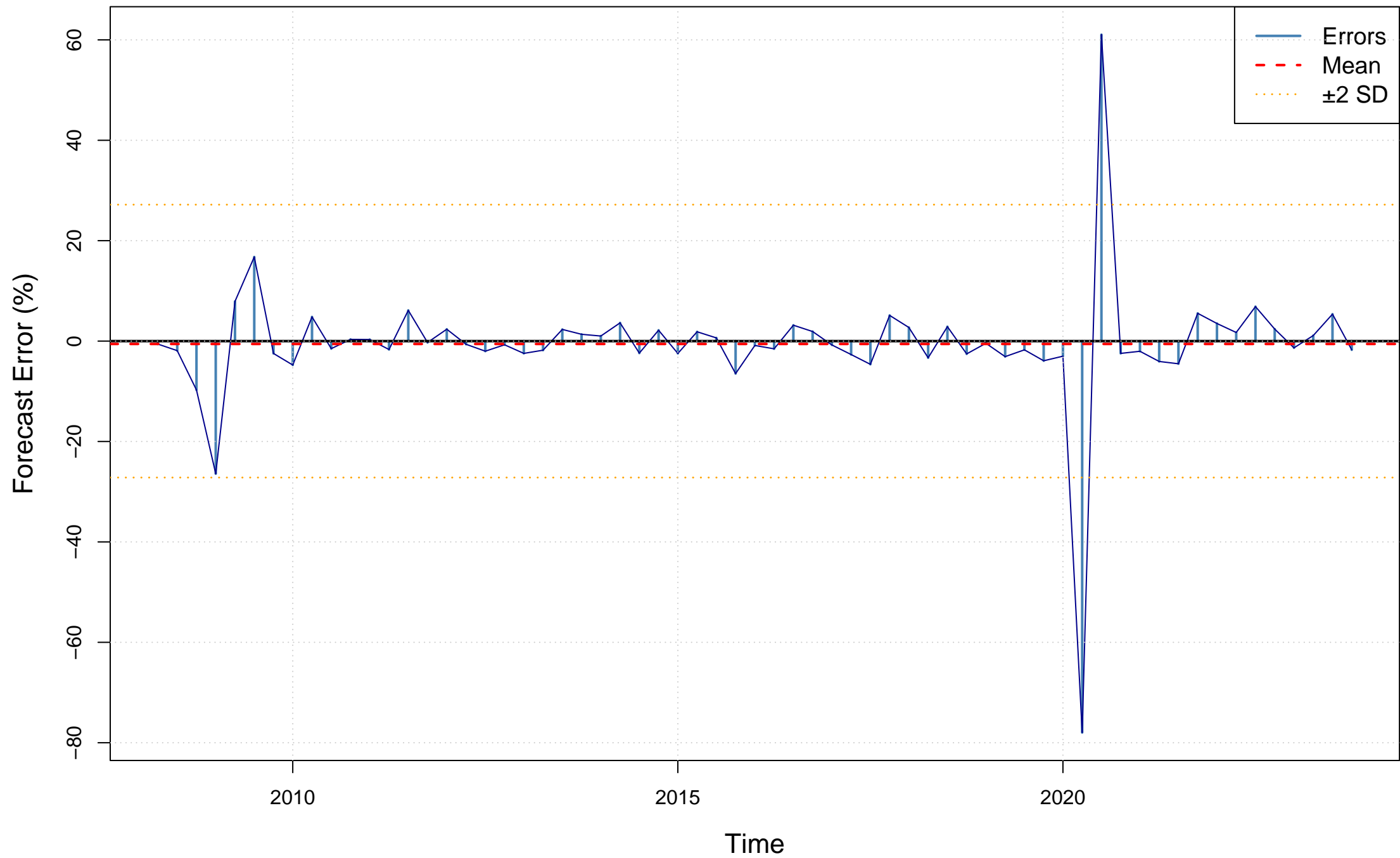
Number of forecasts: 63

Method: Single Indicator (Economic Activity Index)

MIDAS: Forecast vs Actual – MIDAS_AR1_lag3_m2

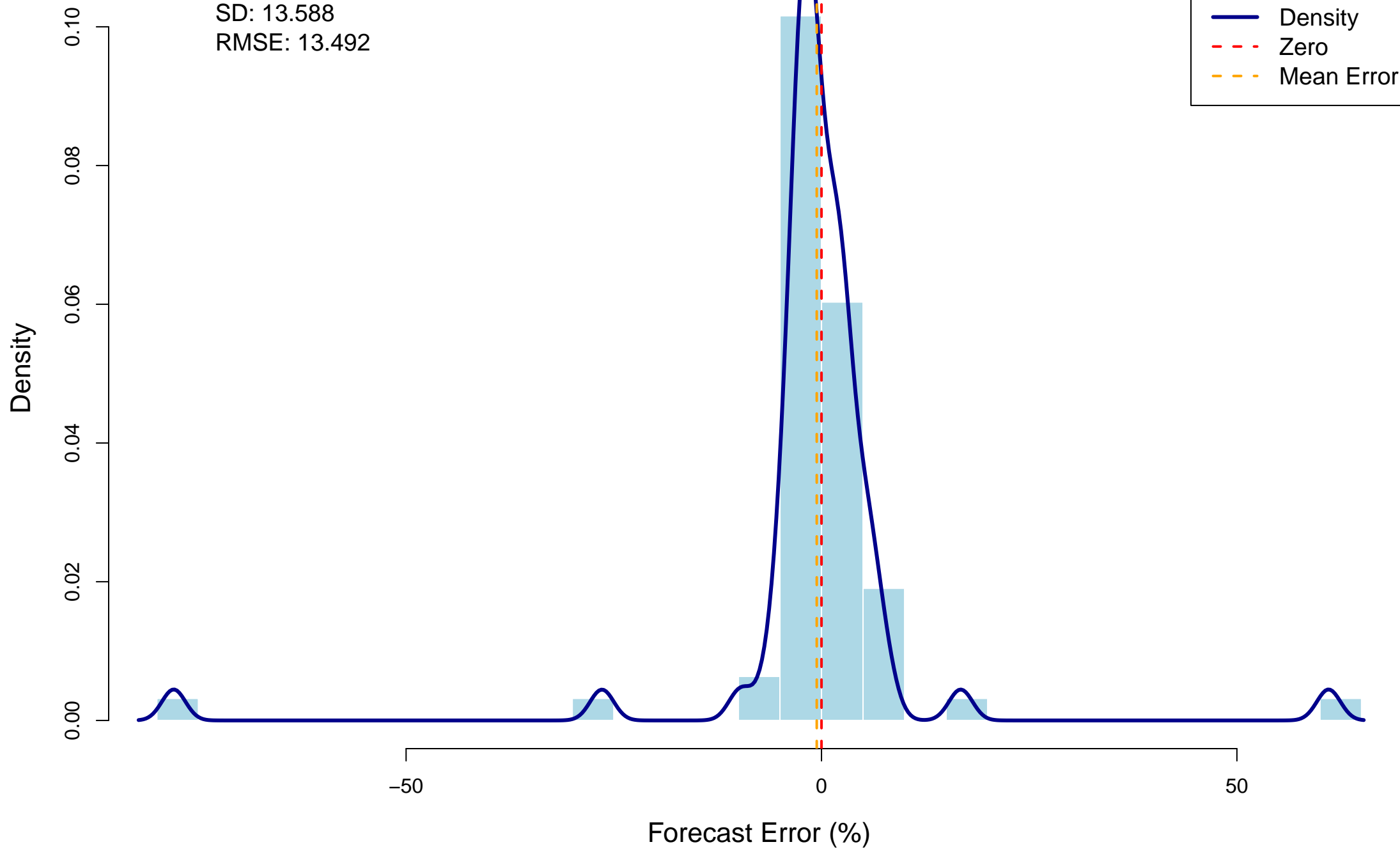
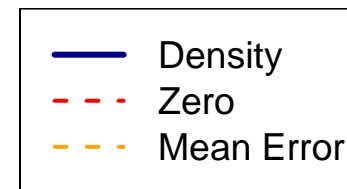


MIDAS: Forecast Errors – MIDAS_AR1_lag3_m2

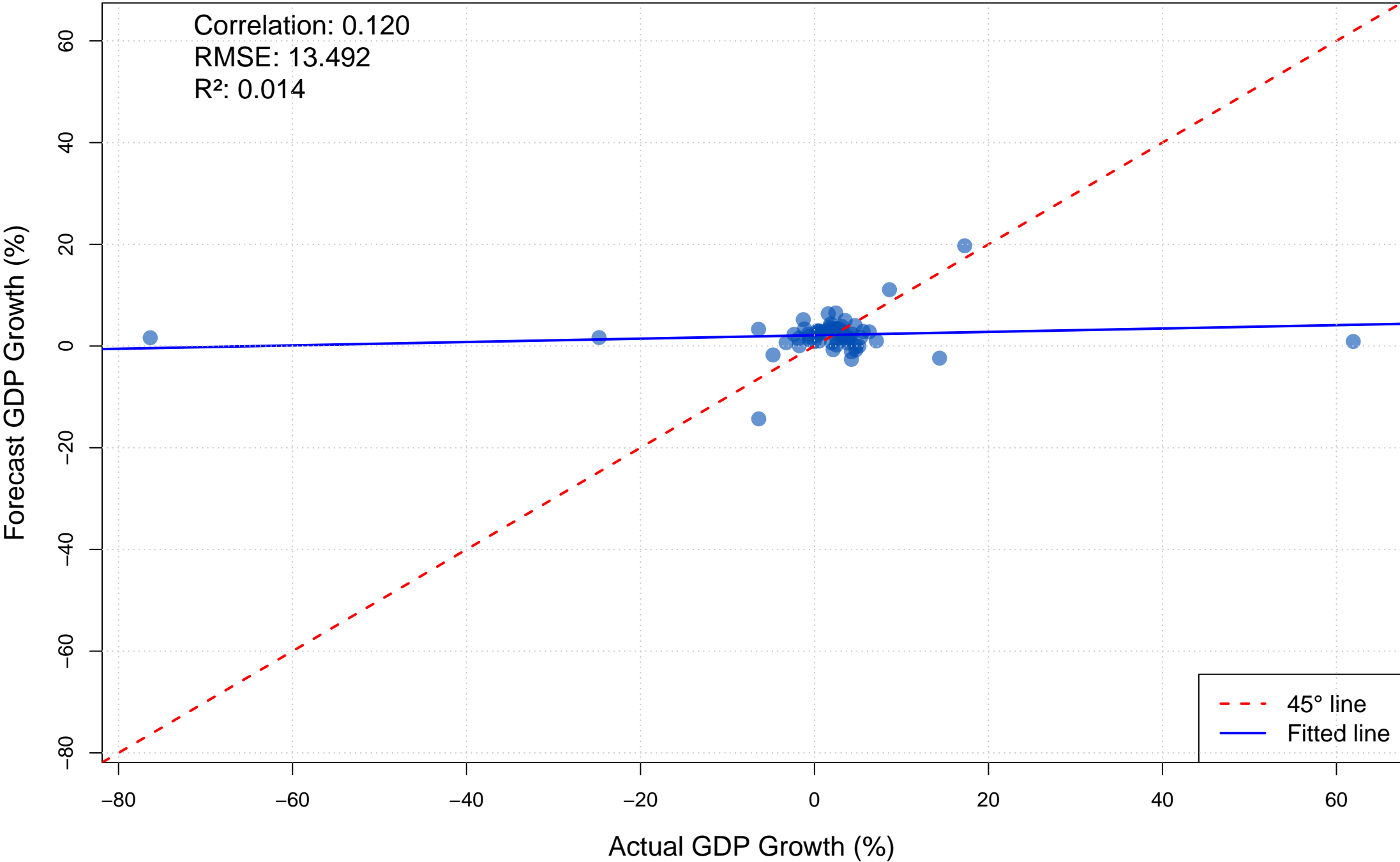


MIDAS: Error Distribution – MIDAS_AR1_lag3_m2

mean: 0.074
SD: 13.588
RMSE: 13.492



MIDAS: Forecast vs Actual Scatter – MIDAS_AR1_lag3_m2



TPRF–MIDAS MODEL EVALUATION

Best Model: TPRF_AR2_lag4_m2

RMSE: 14.669

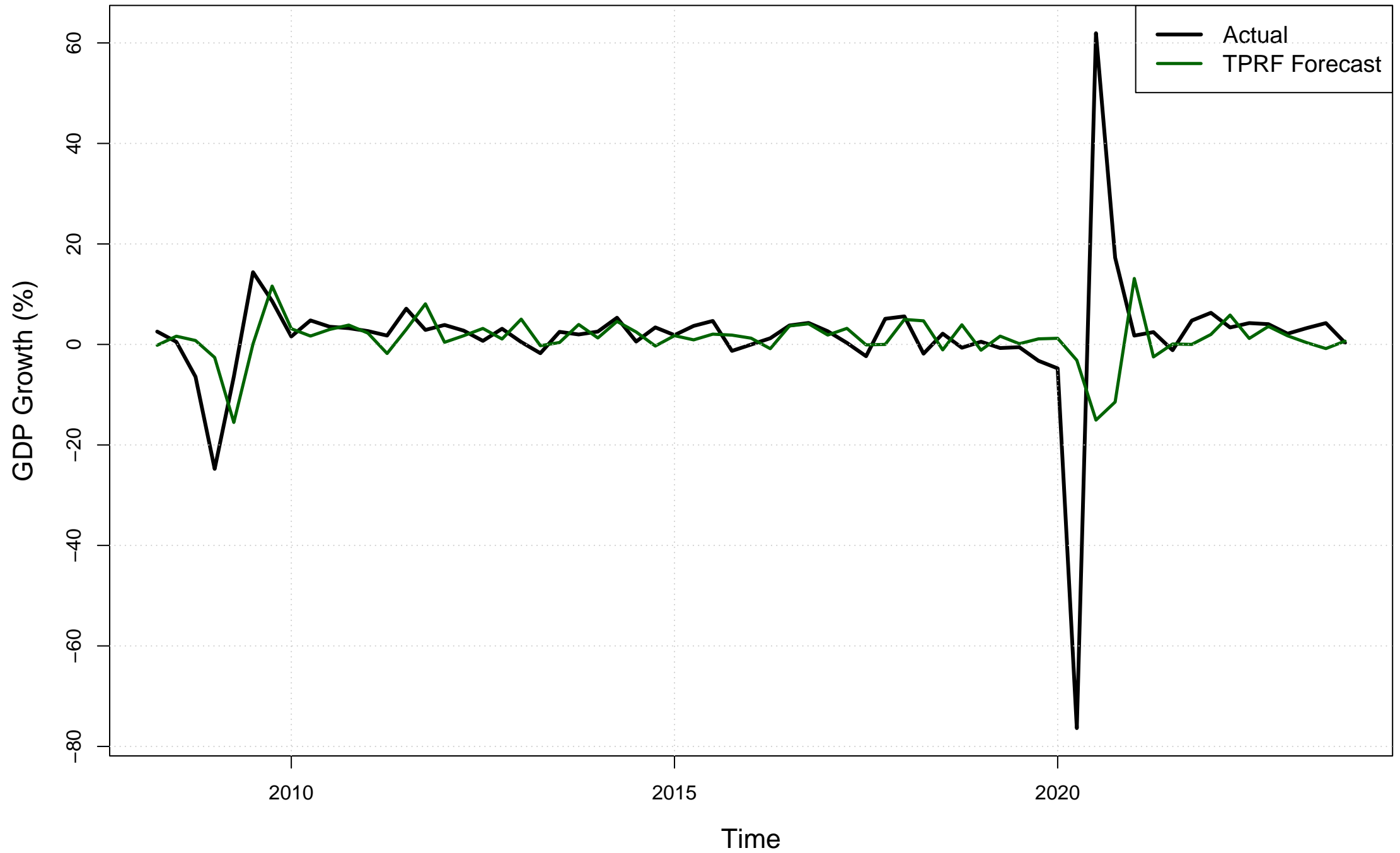
MAE: 6.015

Mean Error: 0.431

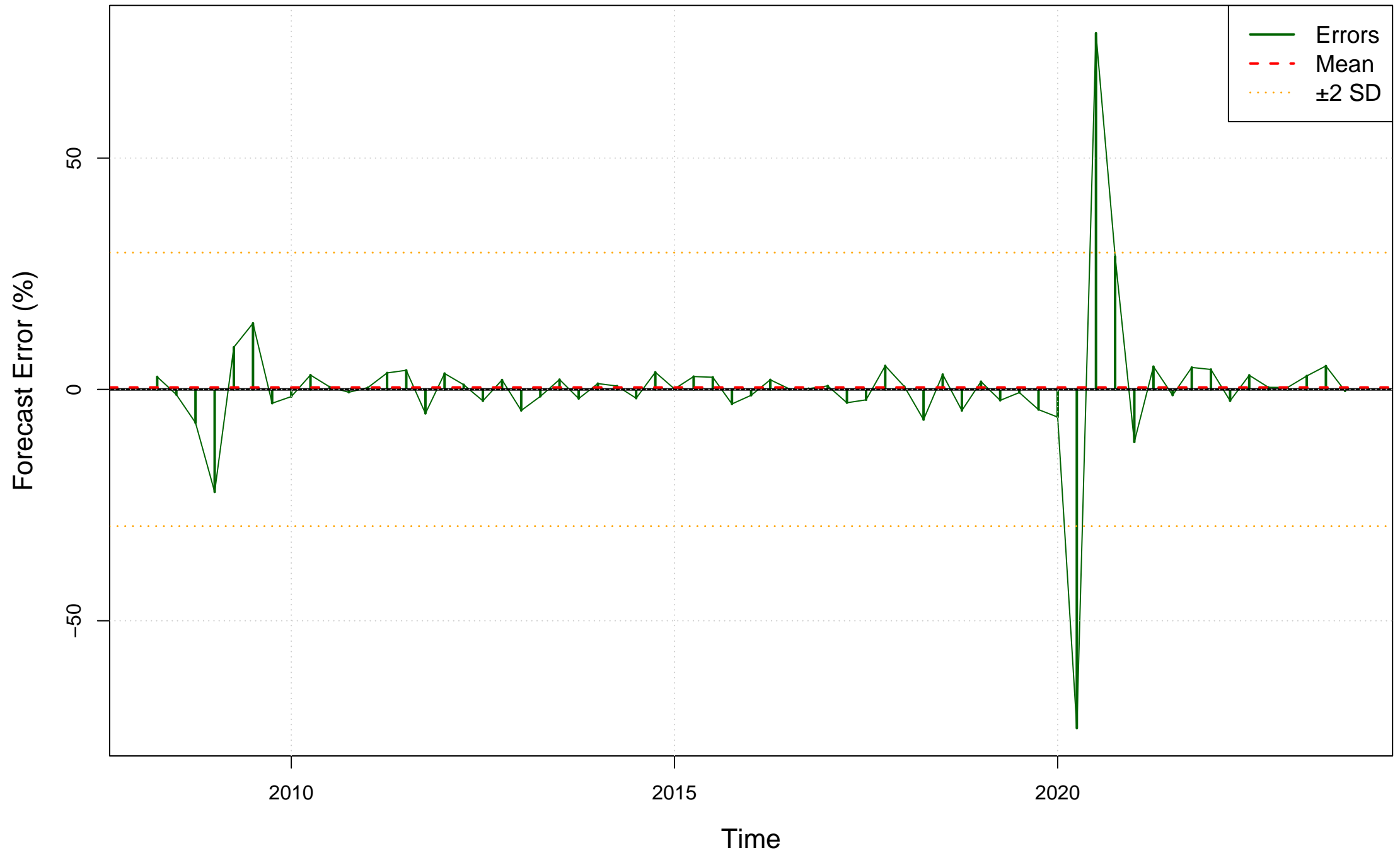
Number of forecasts: 63

Method: Factor–Based (Three–Pass Regression Filter)

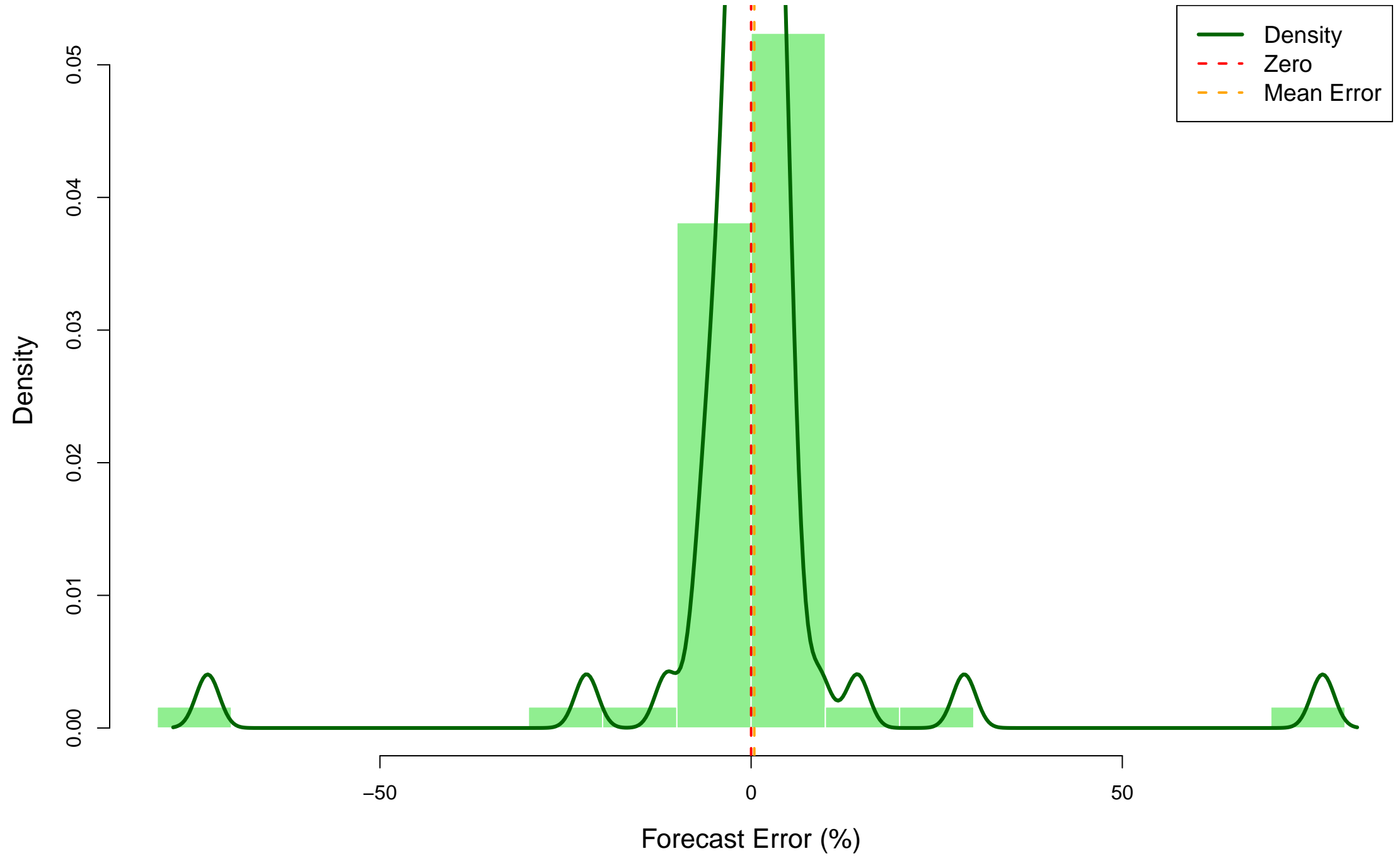
TPRF: Forecast vs Actual – TPRF_AR2_lag4_m2



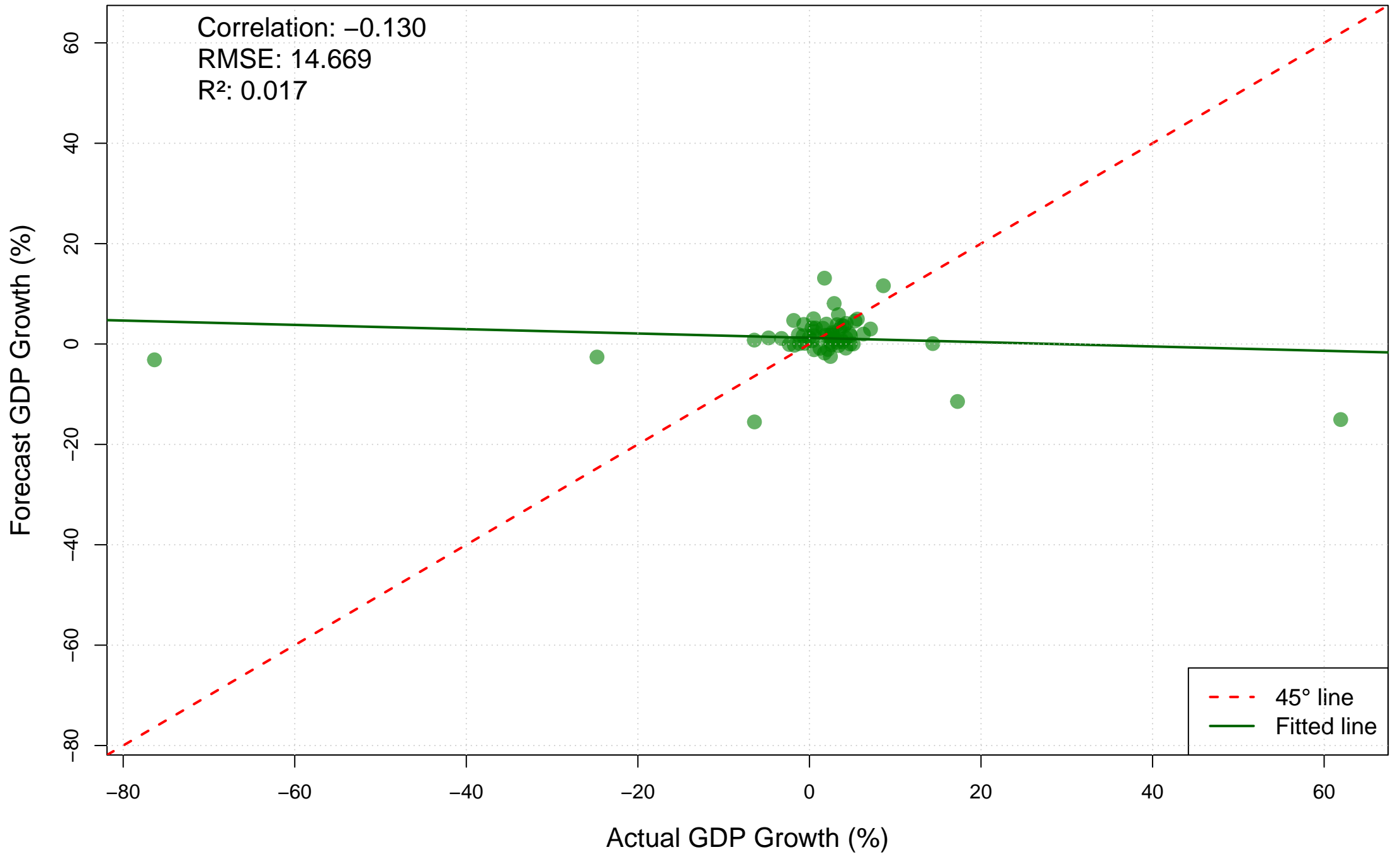
TPRF: Forecast Errors – TPRF_AR2_lag4_m2



TPRF: Error Distribution – TPRF_AR2_lag4_m2



TPRF: Forecast vs Actual Scatter – TPRF_AR2_lag4_m2



MIDAS vs TPRF-MIDAS COMPARISON

MIDAS Model

MIDAS_AR1_lag3_m2

RMSE: 13.492

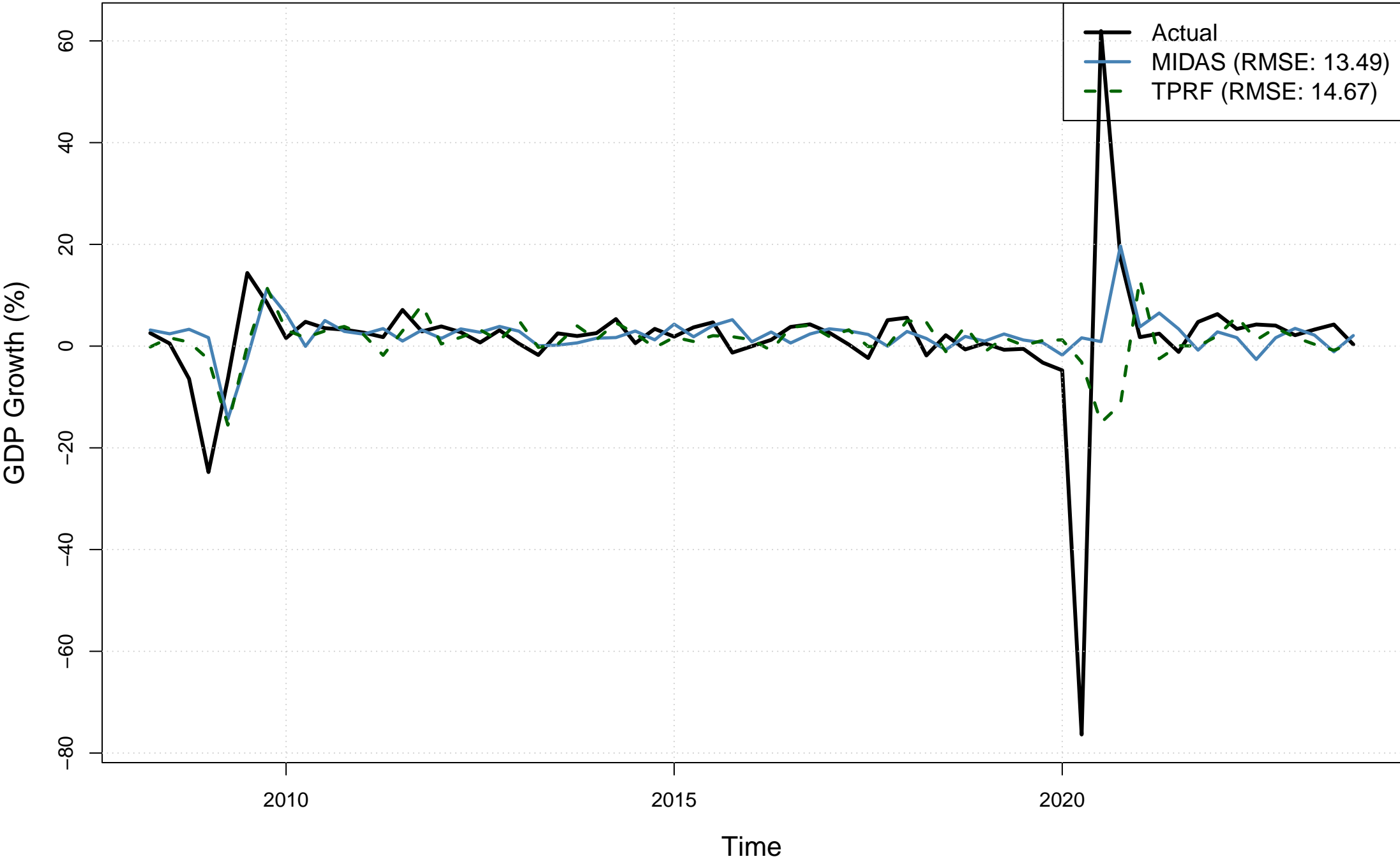
TPRF Model

TPRF_AR2_lag4_m2

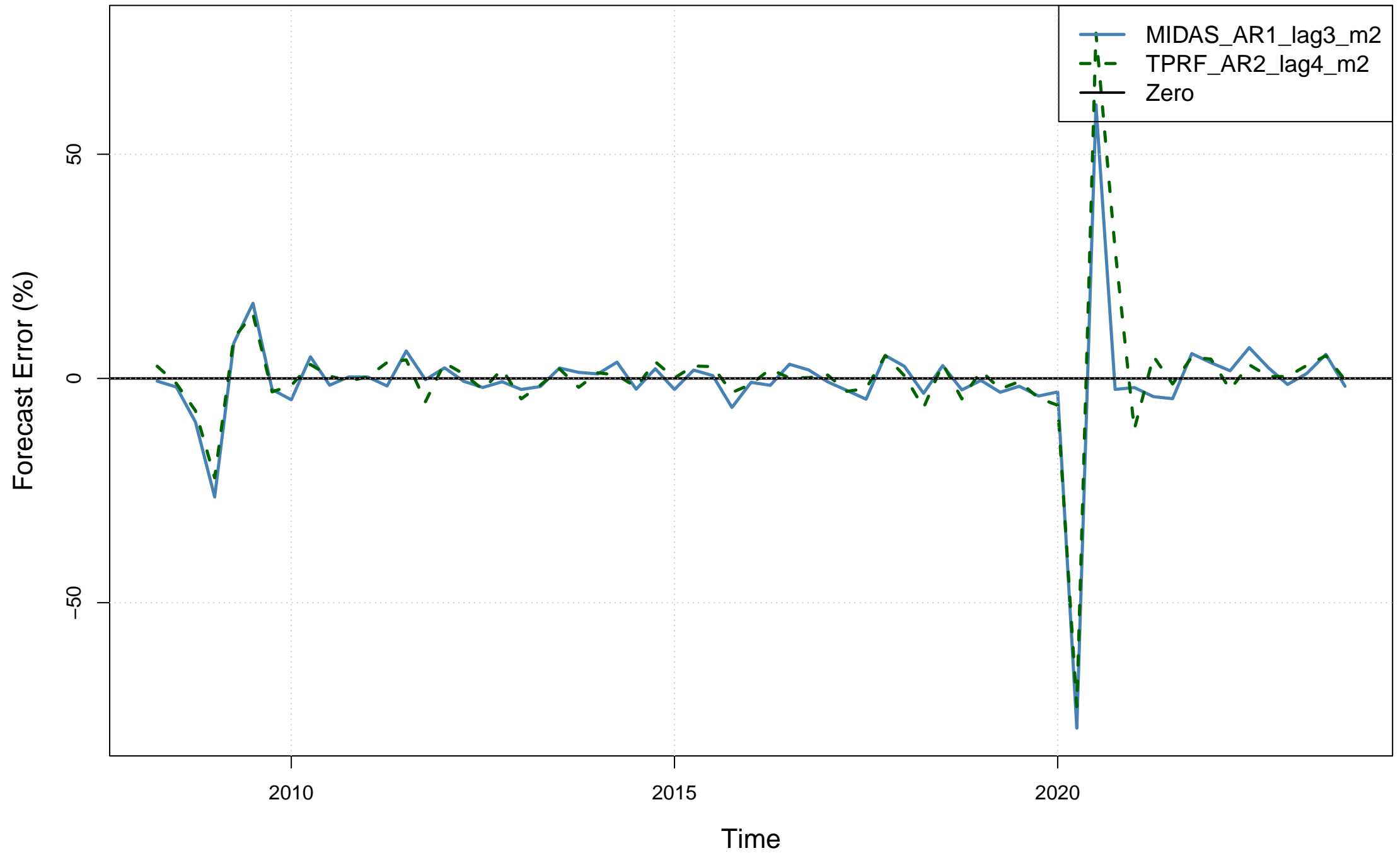
RMSE: 14.669

TPRF performs better by 8.7%

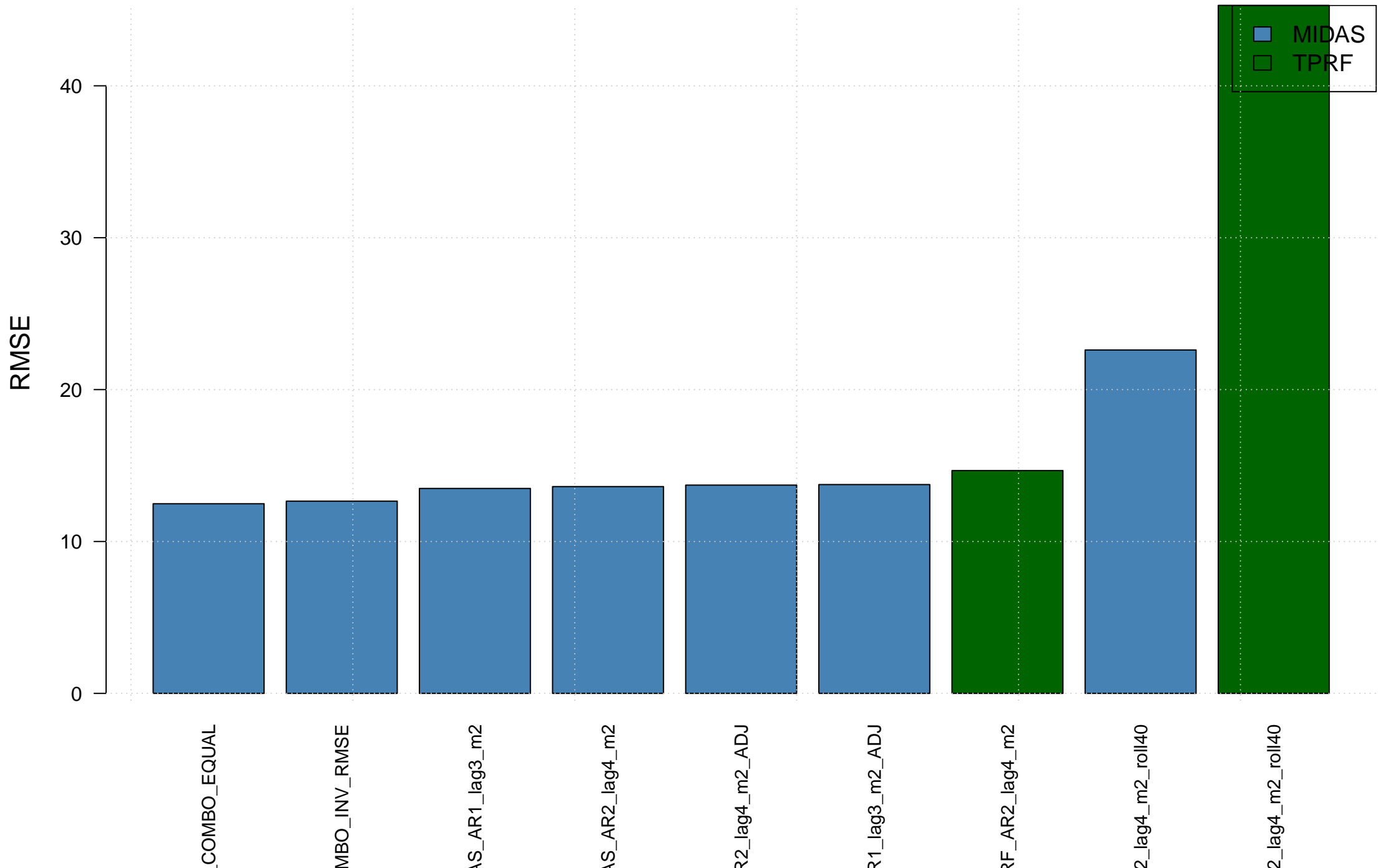
Forecast Comparison: MIDAS vs TPRF



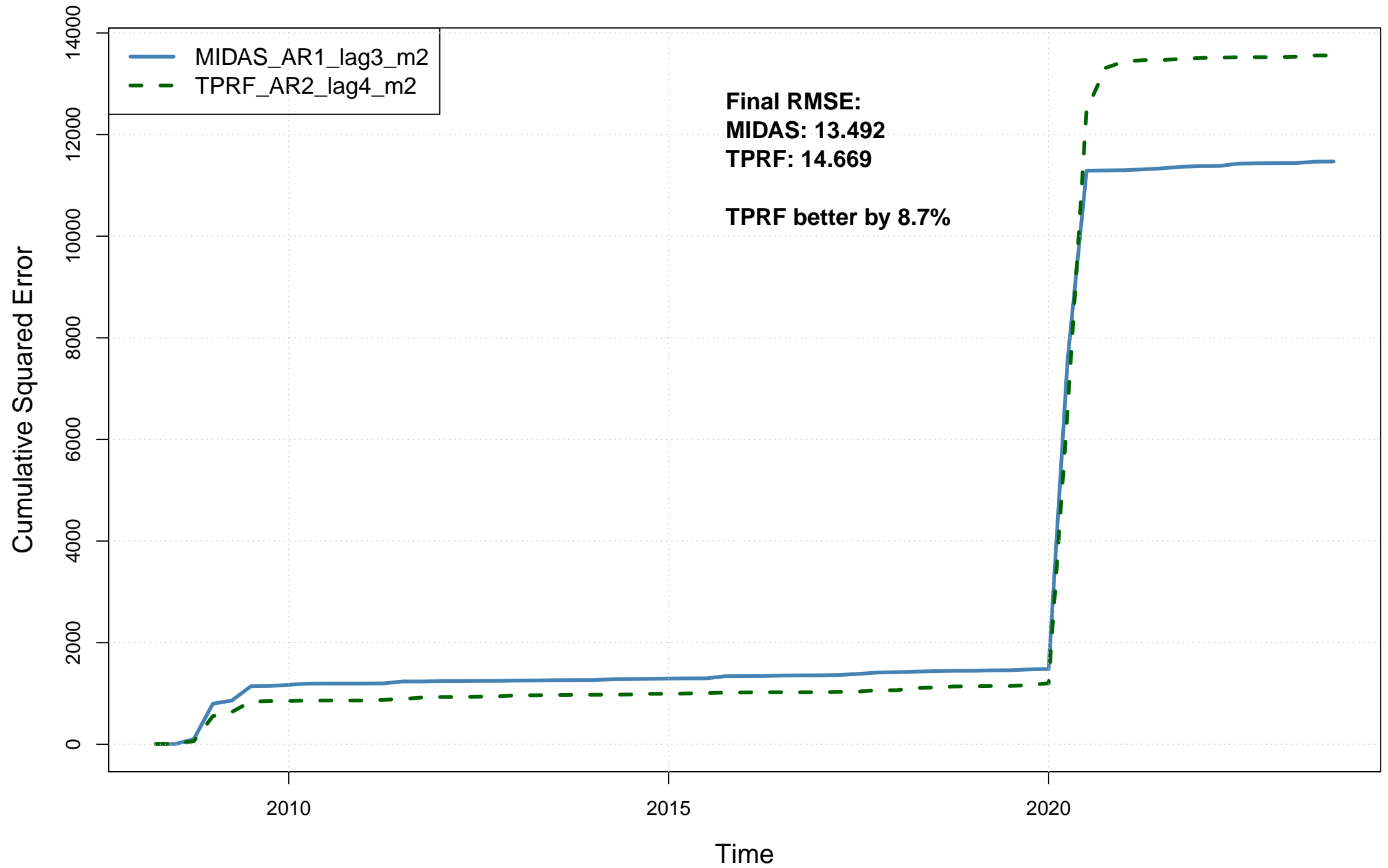
Forecast Errors: MIDAS vs TPRF



RMSE Comparison: All Models



Cumulative Forecast Performance



MIDAS MODEL COMBINATION

Number of models combined: 5

Equal Weights

RMSE: 12.485

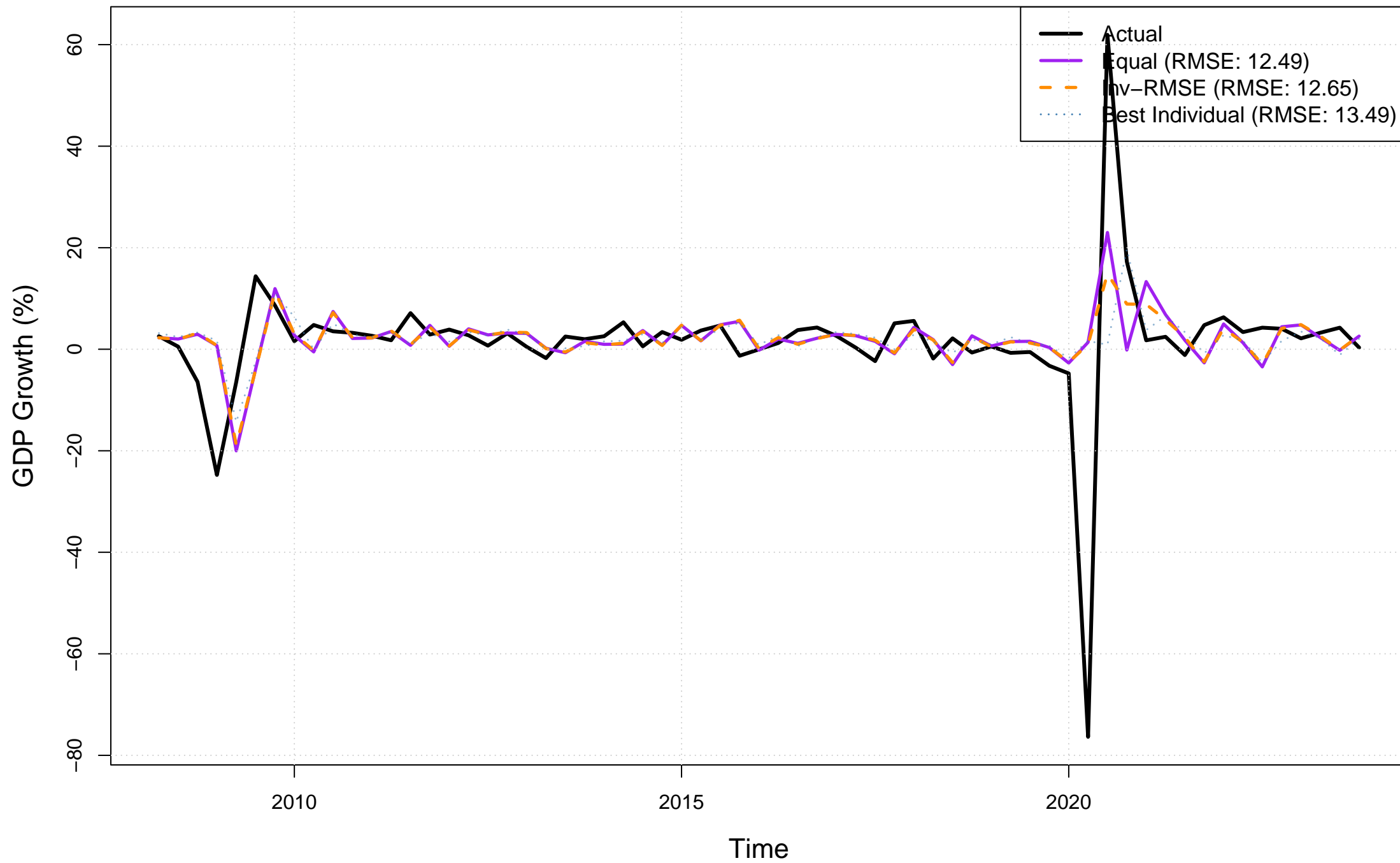
Inverse-RMSE Weights

RMSE: 12.654

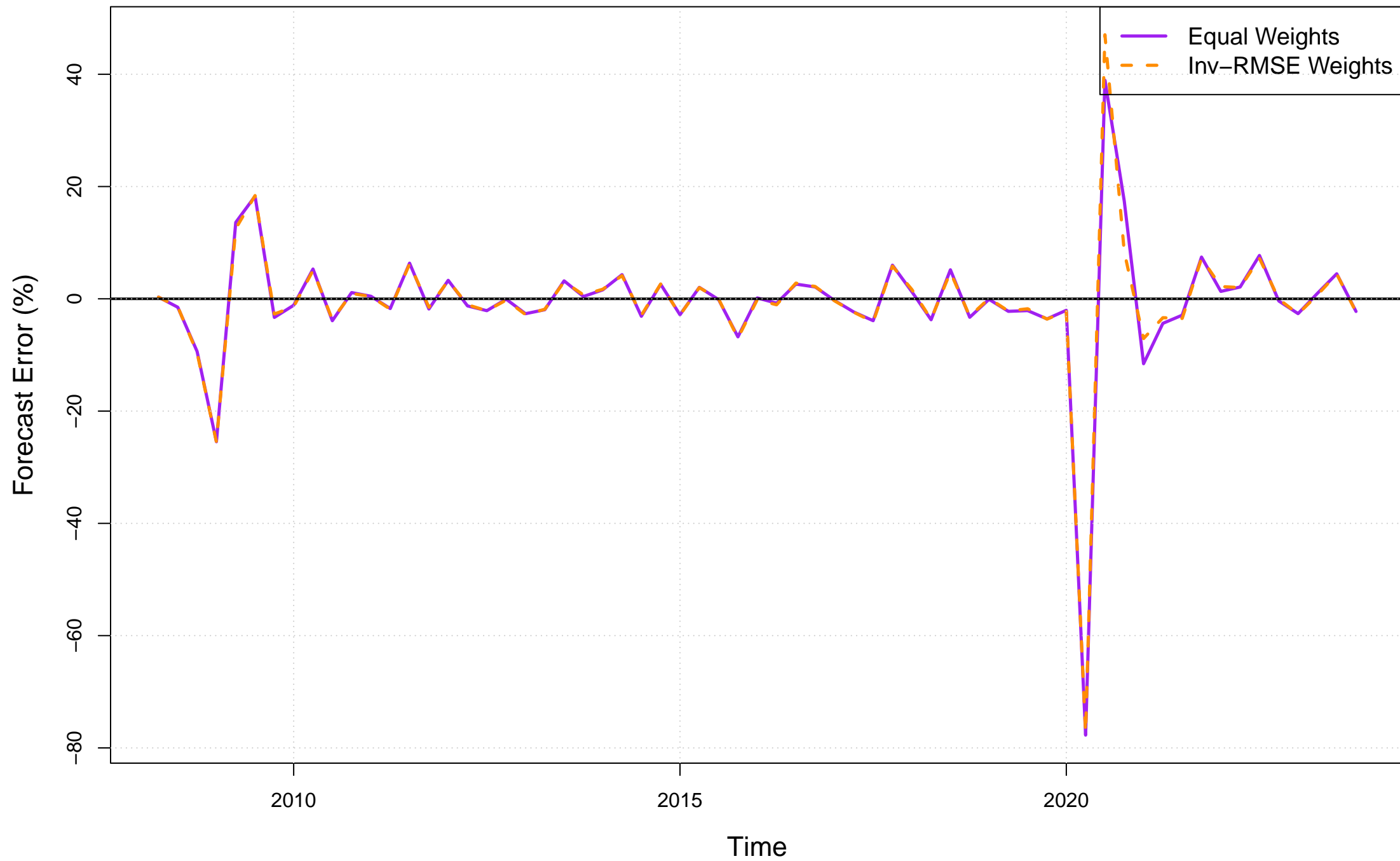
Best individual MIDAS: RMSE = 13.492

Improvement: Equal = 7.5%, Inv-RMSE = 6.2%

MIDAS Combinations: Forecast vs Actual



MIDAS Combinations: Forecast Errors



RMSE Comparison: All Models + Combinations

