

# **Online Appendix to “Forecasting Dutch inflation using machine learning methods”**

Robert-Paul Berben<sup>\*1</sup>, Rajni N. Rasiawan<sup>1,2</sup>, and Jasper M. de Winter<sup>1</sup>

<sup>1</sup> De Nederlandsche Bank

<sup>2</sup> Vrije Universiteit Amsterdam

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\* Corresponding author: [r.p.berben@dnb.nl](mailto:r.p.berben@dnb.nl).

This is the online appendix to the paper “Forecasting Dutch inflation using machine learning methods”. The appendix contains a link to a pdf-file containing figures on the outcomes of the OOS.R<sup>2</sup> tests and median gains, and four Excel-workbooks, each containing the root mean squared error (RMSE), the out-of-sample R<sup>2</sup> (OOSR2) and the *p*-value of the Diebold-Mariano tests (p\_DM) for each model and HICP measure. Each forecast horizon is presented in a separate sheet. Additionally, each workbook includes a sheet showing the test statistic and p-value from the test for average Superior Predictive Ability, calculated over short-term horizons (1-6 months), long-term horizons (7-12 months) and all horizons (1-12 months). When the NIPE inflation forecast serves as the benchmark, the horizons are defined as (1-5 months), (6-10 months), and (1-10 months), respectively. The sheet named *pMCSSave* reports the p-value of Model Confidence Set for each model, averaged across all forecast horizons. The sheet *pMCSSave\_sorted* presents the same information, but with models ranked from highest to lowest p-value. The reader is re-directed to the Excel-workbook when clicking on the title.

#### [additional charts](#)

This file includes additional OOS.R<sup>2</sup> charts for the pre-pandemic sample at significance levels of 10%, 5%, and 1%, the median gain in OOS.R<sup>2</sup> pre-pandemic, as well as the gain in OOS.R<sup>2</sup> charts for both the full sample at 5% and 1% significance levels,.

#### [appendix\\_ref\\_model=M.RWD\\_sample=2023-12-01\\_vintage=04-03-2024.xlsx](#)

This file contains the outcomes against the RW.D model for the full sample (2010M1–2023M12). The workbook contains 12 sheets, one for each of the 12 horizons, named “h = 1” until “h =12”. The test results are shown for all models, where each row presents one model. The RMSE, OOSR2 and p\_DM are shown in the columns for each inflation measure, i.e. HICP, HICPMEF, HICPNEIG and HICPS.

#### [appendix\\_ref\\_model=NIPE.RR\\_sample=2023-12-01\\_vintage=04-03-2024.xlsx](#)

This file contains the outcomes against DNB’s NIPE inflation forecast for the full sample (2010M1–2023M12). The workbook contains 10 sheets, one for each of the 10 horizons, named “h = 1” until “h =10”. The test results are shown for all models, where each row presents one model. The RMSE, OOSR2 and p\_DM are shown in the columns for each inflation measure, i.e. HICP, HICPMEF, HICPNEIG and HICPS.

[`appendix\_ref\_model=M.RWD\_sample=2019-01-01\_vintage=04-03-2024.xlsx`](#)

This file contains the outcomes against the RW.D model for the pre-pandemic sample (2010M1–2019M12). The workbook contains 12 sheets, one for each of the 12 horizons, named “ $h = 1$ ” until “ $h = 12$ ”. The test results are shown for all models, where each row presents one model. The RMSE, OOSR2 and p\_DM are shown in the columns for each inflation measure, i.e. HICP, HICPMEF, HICPNEIG and HICPS.

[`appendix\_ref\_model=NIPE.RR\_sample=2019-01-01\_vintage=04-03-2024.xlsx`](#)

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