# Online appendix to "Forecasting Dutch inflation using machine learning methods"

Robert–Paul Berben\* Rajni N. Rasiawan<sup>†</sup> Jasper M. de Winter<sup>‡</sup>

January 7, 2025

<sup>\*</sup>Economics and Research Division, De Nederlandsche Bank, Amsterdam, The Netherlands, r.p.berben@dnb.nl

<sup>†</sup>Economics and Research Division, De Nederlandsche Bank, Amsterdam, The Netherlands, r.n.rasiawan@dnb.nl

<sup>&</sup>lt;sup>‡</sup>Economics and Research Division, De Nederlandsche Bank, Amsterdam, The Netherlands, j.m.de.winter@dnb.nl

The online appendix to the paper "Forecasting Dutch inflation using machine learning methods" consists of **four Excel-workbooks**, each containing the root mean squared error (RMSE), the the marginal improvement in out-of-sample (OOSR2), model confidence set p-values (pMCS), Diebold-Mariano p-values (p\_DM) for all models, HICP measures and horizons. Moreover, we report the outcome of the test for average superior predictive ability (aSPA) of Quadvlieg. We report both the test-scores (asPA) as well as the p-values (p\_aSPA) for all horizons (\_all), the long (\_long) and short horizon (\_short). Below we describe the content of each of the four Excelworkbooks

#### 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 13 sheets, 12 sheets for each of the 12 horizons, names "h = 1" until "h =12". The  $13^{th}$  sheet contains the outcomes of the aSPA test. The test results are shown for all models, where each row presentat one model. The RMSE, OOSR2, pMCS, p\_DM and aSPA are shown in the columns for each inflation measure, i.e. HICP, HICPMEF, HICPNEIG and HICPS.

## ${\tt appendix\_ref\_model=M.RWD\_sample=2023-12-01\_vintage=04-03-2024.xlsx}$

This file contains the outcomes against the RW.D model for the full sample (2010M1–2023M12). The workbook contains 13 sheets, 12 sheets for each of the 12 horizons, names "h = 1" until "h = 12". The  $13^{th}$  sheet contains the outcomes of the aSPA test. The test results are shown for all models, where each row presentat one model. The RMSE, OOSR2, pMCS, p\_DM and aSPA 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

This file contains the outcomes against DNB's NIPE inflation forecast for the prepandemic sample (2010M1–2019M12). The workbook contains 12 sheets, 10 sheets for each of the 12 horizons, names "h = 1" until "h = 10". The  $11^{th}$  sheet contains the outcomes of the aSPA test. The test results are shown for all models, where each row presentat one model. The RMSE, OOSR2, pMCS, p\_DM and aSPA 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 11 sheets, 10 sheets for each of the 11 horizons, names "h = 1" until "h = 10". The  $11^{th}$  sheet contains the outcomes of the aSPA test. The test results are shown for all models, where each row presentat one model. The RMSE, OOSR2, pMCS, p\_DM and aSPA are shown in the columns for each inflation measure, i.e. HICP, HICPMEF, HICPNEIG and HICPS.