Unit Averaging for Heterogeneous Panels Online Appendix

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October 25, 2022

This supplementary appendix provides additional theoretical, numerical, and empirical results. In section OA.1, we show how to construct an asymptotically valid confidence interval for the unit averaging estimator when weights depend on the data. In section OA.2, we provide simulation results for two additional focus parameters. Finally, section OA.3 contains a full list of variables used for prediction and additional empirical results. We expand the scope of the empirical study in the main text to include both nowcasting and forecasting quarterly GDP. Furthermore, in addition to U-MIDAS, we consider forecasting with bridge equations.

Contents

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We thank Jan Ditzen, Kirill Evdokimov, Geert Mesters, Luca Neri, Katerina Petrova, Barbara Rossi, Wendun Wang, and the participants at 26th International Panel Data Conference, 7th RCEA Time Series Workshop, 9th SIDE WEEE, and the 2021 Econometric Research in Finance Workshop for comments and discussion. Christian Brownlees acknowledges support from the Spanish Ministry of Science and Technology (Grant MTM2012-37195) and the Spanish Ministry of Economy and Competitiveness through the Severo Ochoa Programme for Centres of Excellence in R&D (SEV-2011-0075).

OA.1 Confidence Intervals for the Minimum MSE Unit Averaging Estimator

It might be of interest to also construct a confidence interval for the parameter of interest on the basis of the minimum MSE unit averaging estimator. Here, we offer a procedure for constructing a theoretically-justified two-step interval similar to ones explored in Hjort and Claeskens (2003) for model averaging and DiTraglia (2016) in the context of misspecified GMM. We consider only the fixed-N regime, the construction requires only minor modifications for the large-N regime.

Inference with estimated weights is not straightforward, because a naive application of theorem 2 in the main text will not correctly account for randomness in the weights (characterized by theorems 3 and 4). To overcome this challenge, our procedure involves two steps. We form a collection of guesses for $\boldsymbol{\eta}_i$ that contains the true parameters with high probability; and for each of those guesses we form a interval treating the guess as fixed. Taking the union over all such CIs results in correct coverage.

Observe that by lemma 2 for $\bar{N}$ fixed we have

$$\begin{pmatrix} \sqrt{T}\left(\mu\left(\hat{\boldsymbol{\theta}}_2\right) - \mu\left(\hat{\boldsymbol{\theta}}_1\right)\right) \\ \vdots \\ \sqrt{T}\left(\mu\left(\hat{\boldsymbol{\theta}}_{\bar{N}}\right) - \mu\left(\hat{\boldsymbol{\theta}}_1\right)\right) \end{pmatrix} \Rightarrow \begin{pmatrix} \Lambda_2 - \Lambda_1 \\ \vdots \\ \Lambda_{\bar{N}} - \Lambda_1 \end{pmatrix},$$

$$\begin{pmatrix} \Lambda_2 - \Lambda_1 \\ \vdots \\ \Lambda_{\bar{N}} - \Lambda_1 \end{pmatrix} \sim N\left(\begin{pmatrix} \boldsymbol{d}_0'(\boldsymbol{\eta}_2 - \boldsymbol{\eta}_1) \\ \vdots \\ \boldsymbol{d}_0'(\boldsymbol{\eta}_{\bar{N}} - \boldsymbol{\eta}_1) \end{pmatrix}, \begin{pmatrix} \boldsymbol{d}_0'(\boldsymbol{V}_2 + \boldsymbol{V}_1)\boldsymbol{d}_0 & \cdots & \boldsymbol{d}_0'\boldsymbol{V}_1\boldsymbol{d}_0 \\ \vdots & \ddots & \vdots \\ \boldsymbol{d}_0'\boldsymbol{V}_1\boldsymbol{d}_0 & \cdots & \boldsymbol{d}_0'(\boldsymbol{V}_{\bar{N}} + \boldsymbol{V}_1)\boldsymbol{d}_0 \end{pmatrix}\right).$$

For clarity, we assume that $\boldsymbol{d}_0$ and $\boldsymbol{V}_i$ are known. The argument proceeds without changes if they are replaced with consistent estimators.

The following procedure constructs an interval that has at least $(1 - \alpha - \gamma) \times 100\%$ asymptotic coverage:

1. Let $L_{\bar{N},T}$ be the $(1-\gamma)\times 100\%$ asymptotic confidence set for $(\boldsymbol{d}_0'(\boldsymbol{\eta}_2-\boldsymbol{\eta}_1),\ldots,\boldsymbol{d}_0'(\boldsymbol{\eta}_{\bar{N}}-\boldsymbol{\eta}_1))$ formed on the basis of the highest density region of $\boldsymbol{\Lambda}=(\Lambda_2-\Lambda_1,\ldots,\Lambda_{\bar{N}}-\Lambda_1)$. Since $\boldsymbol{\Lambda}$ is normal, $L_{\bar{N},T}$ is an ellipse.[1]

2. Each vector $\boldsymbol{E}^\kappa=(E_2^\kappa,\ldots,E_{\bar{N}}^\kappa)\in L_{\bar{N},T}$ forms a guess for $(\boldsymbol{d}_0'(\boldsymbol{\eta}_2-\boldsymbol{\eta}_1),\ldots,\boldsymbol{d}_0'(\boldsymbol{\eta}_{\bar{N}}-\boldsymbol{\eta}_1))$. Form the $\bar{N}\times\bar{N}$ matrix $\boldsymbol{\Psi}_{\bar{N}}^\kappa$ as $[\boldsymbol{\Psi}_{\bar{N}}^\kappa]_{i\,i}=(E_i^\kappa)^2+\boldsymbol{d}_0'\boldsymbol{V}_i\boldsymbol{d}_0$ and $[\boldsymbol{\Psi}_{\bar{N}}^\kappa]_{i\,j}=E_i^\kappa E_j^\kappa$ when $i\neq j$. Define

$$\boldsymbol{w}^{\boldsymbol{E}^\kappa}=\underset{\boldsymbol{w}^{\bar{N}}\in\Delta^{\bar{N}}}{\arg\min}\,\boldsymbol{w}^{\bar{N}\prime}\boldsymbol{\Psi}_{\bar{N}}^\kappa\boldsymbol{w}^{\bar{N}}.$$

Observe that for a given value of $\boldsymbol{E}^\kappa$, the weights $\boldsymbol{w}^{\boldsymbol{E}^\kappa}$ do not depend on data, and so satisfy the assumptions of theorem 2. The resulting averaging estimator $\mu(\boldsymbol{w}^{\boldsymbol{E}^\kappa})$ is asymptotically normal.

Define

$$m_{\bar{N},T}(\boldsymbol{E}^\kappa)=\hat{\mu}(\boldsymbol{w}^{\boldsymbol{E}^\kappa})-\frac{z_{1-\alpha/2}\sqrt{\sum_{i=1}^{\bar{N}}(w_i^{\boldsymbol{E}^\kappa})^2\boldsymbol{d}_0'\boldsymbol{V}_i\boldsymbol{d}_0}+\sum_{i=2}^{\bar{N}}w_i^{\boldsymbol{E}^\kappa}E_i^\kappa}{\sqrt{T}}$$
$$M_{\bar{N},T}(\boldsymbol{E}^\kappa)=\hat{\mu}(\boldsymbol{w}^{\boldsymbol{E}^\kappa})+\frac{z_{1-\alpha/2}\sqrt{\sum_{i=1}^{\bar{N}}(w_i^{\boldsymbol{E}^\kappa})^2\boldsymbol{d}_0'\boldsymbol{V}_i\boldsymbol{d}_0}+\sum_{i=1}^{\bar{N}}w_i^{\boldsymbol{E}^\kappa}E_i^\kappa}{\sqrt{T}},$$

where z_α is the αth quantile of the standard normal distribution.

3. Define

$$\mathcal{I}_{\bar{N},T}=\left[\min_{\boldsymbol{E}^\kappa\in L_{\bar{N},T}}m_{\bar{N},T}(\boldsymbol{E}^\kappa),\max_{\boldsymbol{E}^\kappa\in L_{\bar{N},T}}M_{\bar{N},T}(\boldsymbol{E}^\kappa)\right]$$

[1] For example, if $N=2$, then $\sqrt{T}\left(\mu\left(\hat{\boldsymbol{\theta}}_2\right)-\mu\left(\hat{\boldsymbol{\theta}}_1\right)\right)-\boldsymbol{d}_0'(\boldsymbol{\eta}_2-\boldsymbol{\eta}_1)\Rightarrow N(0,\boldsymbol{d}_0'(\boldsymbol{V}_2+\boldsymbol{V}_1)\boldsymbol{d}_1)$ so that

$$P\left(z_{\gamma/2}\sqrt{\boldsymbol{d}_0'(\boldsymbol{V}_i+\boldsymbol{V}_1)\boldsymbol{d}_0}\leq\sqrt{T}\left(\mu\left(\hat{\boldsymbol{\theta}}_2\right)-\mu\left(\hat{\boldsymbol{\theta}}_1\right)\right)-\boldsymbol{d}_0'(\boldsymbol{\eta}_2-\boldsymbol{\eta}_1)\leq z_{1-\gamma/2}\sqrt{\boldsymbol{d}_0'(\boldsymbol{V}_i+\boldsymbol{V}_1)\boldsymbol{d}_0}\right)\to 1-\alpha$$

where z_γ is the γth quantile of the standard normal distribution. Then $L_{2,T}=\left[\sqrt{T}\left(\mu\left(\hat{\boldsymbol{\theta}}_2\right)-\mu\left(\hat{\boldsymbol{\theta}}_1\right)\right)-z_{1-\gamma/2}\sqrt{\boldsymbol{d}_0'(\boldsymbol{V}_i+\boldsymbol{V}_1)\boldsymbol{d}_0},\sqrt{T}\left(\mu\left(\hat{\boldsymbol{\theta}}_2\right)-\mu\left(\hat{\boldsymbol{\theta}}_1\right)\right)-z_{\gamma/2}\sqrt{\boldsymbol{d}_1'(\boldsymbol{V}_i+\boldsymbol{V}_1)\boldsymbol{d}_1},\right]$ forms a $(1-\alpha)\times 100\%$ asymptotic CI for $\boldsymbol{d}_1'(\boldsymbol{\eta}_i-\boldsymbol{\eta}_1)$. $\boldsymbol{V}$ and $\boldsymbol{d}$ can be replaced by consistent estimators. This logic generalizes to higher dimensions.

Theorem OA.1.1. *Let assumptions A.1-A.5 hold. Then*

$$\liminf_{T\to\infty} P\left(\mu(\boldsymbol{\theta}_1) \in \mathcal{I}_{\bar{N},T}\right) \geq 1-\alpha-\gamma.$$

Three remarks are in order before we provide the proof of theorem OA.1.1. First, for a given value of $\boldsymbol{E}^{\kappa}$, the coverage of the interval $\left[m_{\bar{N},T}(\boldsymbol{E}^{\kappa}), M_{\bar{N},T}(\boldsymbol{E}^{\kappa})\right]$ is not necessarily $(1-\alpha)$ even under the data generating process for which the true bias parameters are equal to $\boldsymbol{E}^{\kappa}$. This is because the asymptotic variances of the individual estimators may also depend on $\boldsymbol{\eta}$; in this case $\{\boldsymbol{V}_1,\ldots,\boldsymbol{V}_{\bar{N}}\}$ are not necessarily the variances under $\boldsymbol{E}^{\kappa}$. The key exception is when $\boldsymbol{E}^{\kappa}$ is equal to the true vector of bias parameters $\boldsymbol{E}^{True} = (\boldsymbol{d}_0'(\boldsymbol{\eta}_2-\boldsymbol{\eta}_1),\ldots,\boldsymbol{d}_0'(\boldsymbol{\eta}_{\bar{N}}-\boldsymbol{\eta}_1))$. Under the true DGP, $\{\boldsymbol{V}_1,\ldots,\boldsymbol{V}_{\bar{N}}\}$ are the correct asymptotic variances, and the corresponding interval of step 2 has asymptotic coverage $(1-\alpha)$. The overall CI $\mathcal{I}_{\bar{N},T}$ then has correct coverage probability precisely because it contains $\left[m_{\bar{N},T}(\boldsymbol{E}^{True}), M_{\bar{N},T}(\boldsymbol{E}^{True})\right]$ with high probability under the true DGP. Second, if $L_{\bar{N},T}$ is constructed as in footnote 1, it includes $(\sqrt{T}(\hat{\boldsymbol{\theta}}_2-\hat{\boldsymbol{\theta}}_1),\ldots,\sqrt{T}(\hat{\boldsymbol{\theta}}_{\bar{N}}-\hat{\boldsymbol{\theta}}_1))$. In this case $\mathcal{I}_{\bar{N},T}$ automatically includes the minimum MSE unit averaging estimator $\mu(\hat{\boldsymbol{w}}^{\bar{N}})$ where the weights $\hat{\boldsymbol{w}}^{\bar{N}}$ are as in eq. (4) in the main text. Third, the above interval will be difficult to compute for N large. We conjecture that there might exist computational simplifications due to the symmetric role of units $2,\ldots,\bar{N}$, but we leave this possibility to future research.

Proof of theorem OA.1.1. Let $\boldsymbol{E}^{True} = (\boldsymbol{d}_0'(\boldsymbol{\eta}_2-\boldsymbol{\eta}_1),\ldots,\boldsymbol{d}_0'(\boldsymbol{\eta}_N-\boldsymbol{\eta}_1))$ be the true values of the bias parameters, and let P_0 be the probability when the true heterogeneity parameters are $[\boldsymbol{\eta}_1,\boldsymbol{\eta}_2,\ldots,\boldsymbol{\eta}_{\bar{N}}]$. Define the event $A_{\bar{N},T} = \{\mu(\boldsymbol{\theta}_1) \in [m_{\bar{N},T}(\boldsymbol{E}^{True}), M_{\bar{N},T}(\boldsymbol{E}^{(True)})\}$. Observe that since $\{\boldsymbol{V}_1,\ldots,\boldsymbol{V}_{\bar{N}}\}$ are the asymptotic variances of individual estimators under P_0, it holds that $P_0(A_{\bar{N},T}) \to 1-\alpha$.

Now also define the event that the true bias components are captured by the ellipse

$L_{\bar{N},T}$: $B_{\bar{N},T} = \{\boldsymbol{E}^{True} \in L_{\bar{N},T}\}$. Then

$$\liminf_{T\to\infty} P_0(A_{\bar{N},T}) = \liminf_{T\to\infty} \left[P_0(A_{\bar{N},T} \cap B_{\bar{N},T}) + P_0(A_{\bar{N},T} \cap B^c_{\bar{N},T})\right] = 1 - \alpha.$$

By definition of $L_{\bar{N},T}$, $\limsup_{T\to\infty} P_0(B^c_{\bar{N},T}) \leq \gamma$, which implies that

$$\liminf_{T\to\infty} P_0(A_{\bar{N},T} \cap B_{\bar{N},T}) \geq 1 - \alpha - \gamma. \tag{OA.1}$$

When $B_{\bar{N},T}$ holds, $\boldsymbol{E}^{True} \in L_{\bar{N},T}$. Thus $\boldsymbol{E}^{True}$ is one of the values $\boldsymbol{E}^{\kappa}$ considered in the second step, which implies that under the event $B_{\bar{N},T}$

$$[m(\boldsymbol{E}^{True}), M(\boldsymbol{E}^{True})] \subset \left[\min_{\boldsymbol{E}^{\kappa}\in L_{\bar{N},T}} m_{\bar{N},T}(\boldsymbol{E}^{\kappa}), \max_{\boldsymbol{E}^{\kappa}\in L_{\bar{N},T}} M_{\bar{N},T}(\boldsymbol{E}^{\kappa})\right] = \mathcal{I}_{\bar{N},T}. \tag{OA.2}$$

Combining eqs. (OA.1) and (OA.2), we conclude that

$$\liminf_{T\to\infty} P_0\left(\left\{\mu(\boldsymbol{\theta}_1) \in \mathcal{I}_{\bar{N},T}\right\} \cap B_{\bar{N},T}\right) \geq 1 - \alpha - \gamma.$$

Last, trivially it holds that $P_0\left(\left\{\mu(\boldsymbol{\theta}_1) \in \mathcal{I}_{\bar{N},T}\right\}\right) \geq P_0\left(\left\{\mu(\boldsymbol{\theta}_1) \in \left\{\mu(\boldsymbol{\theta}_1) \in \mathcal{I}_{\bar{N},T}\right\}\right\} \cap B_{\bar{N},T}\right)$, which yields the desired statement about coverage of $\mathcal{I}_{\bar{N},T}$:

$$\liminf_{T\to\infty} P_0\left(\left\{\mu(\boldsymbol{\theta}_1) \in \mathcal{I}_{\bar{N},T}\right\}\right) \geq 1 - \alpha - \gamma.$$

□

OA.2 Additional Focus Parameters For Simulations

In this section we complement the results of the simulation study of section 4 in the main text with two additional focus parameters. We consider estimating β_1, the slope on the exogenous variables, and $\beta_1/(1-\lambda_1)$, the long-run effect of a change in the exogenous

variable. The design of the simulation study and the averaging strategies considered are as in the main text.

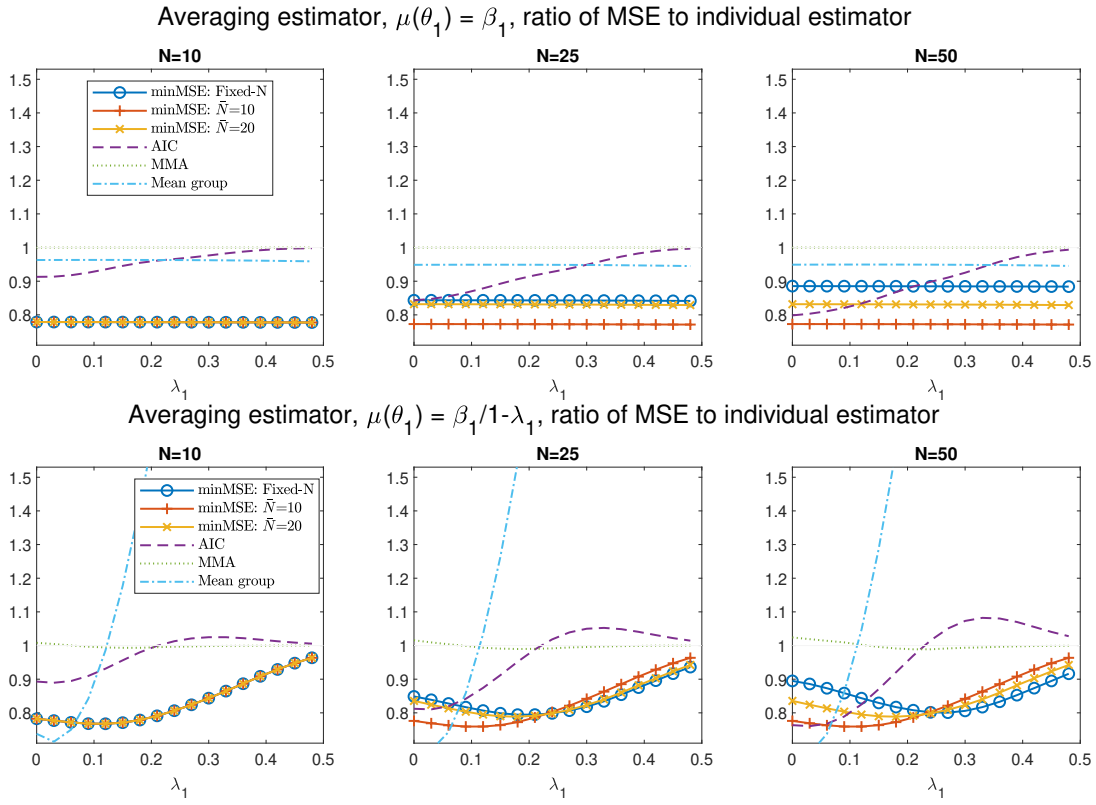

Figure OA.1: MSE performance of the unit averaging estimator relative to the individual estimator. The focus parameters are the slope parameter on the exogenous coefficient β_1 and the long-run effect of a change in x. $T = 60$, $N = 10, 25, 50$

The results are presented in fig. OA.1. For a range of values of λ_1, we plot the MSE of a given weighting scheme relative to the MSE of the individual estimator. A value larger than 1 indicates that the individual estimator is more efficient. For estimating β_1, all averaging estimators except AIC offer a flat risk profile as λ_1 is varied. It is natural to expect this feature given the statistical independence of the parameters. The AIC weights are an exception, as the value of λ_i affects the overall magnitude of the individual likelihood functions. As larger values of λ_1 correspond to an (on average) larger value of likelihood of unit 1 relative to other units, AIC weights assign a larger weight to unit 1 as λ_1 increases. For estimating the long-run effect, the results are in line with those presented in the main text, to which we refer for discussion.

OA.3 Supplemental Materials for the Empirical Application

OA.3.1 Description of the Variables Used

In this section we describe the monthly predictors used for forecasting. The descriptions are contained in table OA.1. Table OA.1 is split in two parts. The first part broadly corresponds to "hard" economic activity data obtained from Eurostat. The second part lists the business and economic survey data available from the Directorate-General for Economic and Financial Affairs of the European Commission.

Description of the first part:

- Columns `Name`, `Description`, `Group` list the Eurostat name, description, and economic content of a given variable.
- `Code` provides the Eurostat code.
- `Delay weeks`: how many weeks after the end of the relevant month is the variable released. We simplify the calendar to two releases in a month: at the beginning of a month and in the middle.[2]
- `Tr.`: code of the transformation applied to the data to transform it to an $I(0)$ variable. Transformation codes are as follows:

  0 None, data used in levels

  1 First difference

  2 Log difference

  3 Translation upwards to ensure that variable is strictly positive + log difference

  4 Quarterly difference (quarterly GDP)

[2]The full calendar is available from https://ec.europa.eu/eurostat/news/release-calendar

For survey variables we use their DG ECFIN survey codes. We omit the descriptions of each individual question; see the official description available from DG ECFIN.[3]

[3] https://ec.europa.eu/info/business-economy-euro/indicators-statistics/economic-databases/business-and-consumer-surveys_en

Table OA.1: List of variables

n	Name	Tr.	Units	Delay weeks	Group	Code	Description
1	PROD-B	1	[I15] Index, 2015=100	6	Industrial Production	STS_INPR_M	[B] Mining and quarrying
2	PROD-B-D	1	[I15] Index, 2015=100	6	Industrial Production	STS_INPR_M	[B-D] Mining and quarrying; manufacturing; electricity, gas, steam and air conditioning supply
3	PROD-B-D_F	1	[I15] Index, 2015=100	6	Industrial Production	STS_INPR_M	[B-D_F] Mining and quarrying; manufacturing; electricity, gas, steam and air conditioning supply; construction
4	PROD-B_C	1	[I15] Index, 2015=100	6	Industrial Production	STS_INPR_M	[B_C] Mining and quarrying; manufacturing
5	PROD-C	1	[I15] Index, 2015=100	6	Industrial Production	STS_INPR_M	[C] Manufacturing
6	PROD-C_HTC	1	[I15] Index, 2015=100	6	Industrial Production	STS_INPR_M	[C_HTC] High-technology manufacturing
7	PROD-C_LTC	1	[I15] Index, 2015=100	6	Industrial Production	STS_INPR_M	[C_LTC] Low-technology manufacturing
8	PROD-D	1	[I15] Index, 2015=100	6	Industrial Production	STS_INPR_M	[D] Electricity, gas, steam and air conditioning supply
9	PROD-MIG_CAG	1	[I15] Index, 2015=100	6	Industrial Production	STS_INPR_M	[MIG_CAG] MIG - capital goods
10	PROD-MIG_COG	1	[I15] Index, 2015=100	6	Industrial Production	STS_INPR_M	[MIG_COG] MIG - consumer goods
11	PROD-MIG_DCOG	1	[I15] Index, 2015=100	6	Industrial Production	STS_INPR_M	[MIG_DCOG] MIG - durable consumer goods
12	PROD-MIG_ING	1	[I15] Index, 2015=100	6	Industrial Production	STS_INPR_M	[MIG_ING] MIG - intermediate goods
13	PROD-MIG_NDCOG	1	[I15] Index, 2015=100	6	Industrial Production	STS_INPR_M	[MIG_NDCOG] MIG - non-durable consumer goods

Table OA.1 continued from previous page

n	Name	Tr.	Units	Delay weeks	Group	Code	Description
14	PROD-MIG_NRG_X_E	1	[I15] Index, 2015=100	6	Industrial Production	STS_INPR_M	[MIG_NRG_X_E] MIG - energy (except section E)
15	PROD-MIG_ING_CAG	1	[I15] Index, 2015=100	6	Industrial Production	STS_INPR_M	[MIG_ING_CAG] MIG - intermediate and capital goods
16	PSQM-F_CC1	2	[PSQM] Building permits - m2 of useful floor area	6	Building Permits	STS_COBP_M	[F_CC1] Buildings
17	PSQM-F_CC11	2	[PSQM] Building permits - m2 of useful floor area	6	Building Permits	STS_COBP_M	[F_CC11] Residential buildings
18	TOVT-B	1	[I15] Index, 2015=100	6	Turnover in Industry	STS_INTV_M	[B] Mining and quarrying
19	TOVT-C	1	[I15] Index, 2015=100	6	Turnover in Industry	STS_INTV_M	[C] Manufacturing
20	TOVT-MIG_CAG	1	[I15] Index, 2015=100	6	Turnover in Industry	STS_INTV_M	[MIG_CAG] MIG - capital goods
21	TOVT-MIG_COG	1	[I15] Index, 2015=100	6	Turnover in Industry	STS_INTV_M	[MIG_COG] MIG - consumer goods
22	TOVT-MIG_ING	1	[I15] Index, 2015=100	6	Turnover in Industry	STS_INTV_M	[MIG_ING] MIG - intermediate goods
23	TOVV-G47	1	[I15] Index, 2015=100	6	Wholesale and retail, turnover	STS_TRTU_M	[G47] Retail trade, except of motor vehicles and motorcycles
24	TOVT-G-N_STS	0	[PCH_PRE] Percentage change on previous period	6	Turnover in services	STS_SETU_M	[G-N_STS] Services required by STS regulation
25	TOVT-H	0	[PCH_PRE] Percentage change on previous period	6	Turnover in services	STS_SETU_M	[H] Transportation and storage
26	TOVT-H51_I55_N79	0	[PCH_PRE] Percentage change on previous period	6	Turnover in services	STS_SETU_M	[H51_I55_N79] Air transport; accommodation; travel agency, tour operator and other reservation service and related activities

Table OA.1 continued from previous page

n	Name	Tr.	Units	Delay weeks	Group	Code	Description
27	TOVT-I	0	[PCH_PRE] Percentage change on previous period	6	Turnover in services	STS_SETU_M	[I] Accommodation and food service activities
28	TOVT-J	0	[PCH_PRE] Percentage change on previous period	6	Turnover in services	STS_SETU_M	[J] Information and communication
29	TOVT-M69_M702	0	[PCH_PRE] Percentage change on previous period	6	Turnover in services	STS_SETU_M	[M69_M702] Legal, accounting and management consultancy activitie
30	TOVT-M_STS	0	[PCH_PRE] Percentage change on previous period	6	Turnover in services	STS_SETU_M	[M_STS] Professional, scientific and technical activities required by STS regulation
31	TOVT-N_STS	0	[PCH_PRE] Percentage change on previous period	6	Turnover in services	STS_SETU_M	[N_STS] Administrative and support service activities required by STS regulation
32	PCH_SM-I551-I553	0	[PCH_SM] Percentage change compared to same period in previous year	8	Nights spent at tourist accommodation	TOUR_OCC_NIM	[I551-I553] Hotels; holiday and other short-stay accommodation; camping grounds, recreational vehicle parks and trailer parks
33	PAS-PAS_BRD	2	[PAS] Passenger	8	Air transport of passengers	TTR00016	[PAS_BRD] Passengers on board
34	PAS-PAS_BRD_ARR	2	[PAS] Passenger	8	Air transport of passengers	TTR00016	[PAS_BRD_ARR] Passengers on board (arrivals)
35	PAS-PAS_BRD_DEP	2	[PAS] Passenger	8	Air transport of passengers	TTR00016	[PAS_BRD_DEP] Passengers on board (departures)
36	PAS-PAS_CRD	2	[PAS] Passenger	8	Air transport of passengers	TTR00016	[PAS_CRD] Passengers carried
37	PAS-PAS_CRD_ARR	2	[PAS] Passenger	8	Air transport of passengers	TTR00016	[PAS_CRD_ARR] Passengers carried (arrival)

Table OA.1 continued from previous page

n	Name	Tr.	Units	Delay weeks	Group	Code	Description
38	PAS-PAS_CRD_DEP	2	[PAS] Passenger	8	Air transport of passengers	TTR00016	[PAS_CRD_DEP] Passengers carried (departures)
39	FA	3	[BAL] Balance, Million Euro	6	Balance of Payments	BOP_C6_M	[FA] Financial account
40	CA	3	[BAL] Balance, Million Euro	6	Balance of Payments	BOP_C6_M	[CA] Current account
41	CKA	3	[BAL] Balance, Million Euro	6	Balance of Payments	BOP_C6_M	[CKA] Current plus capital account (balance = Net lending (+) / net borrowing (-))
42	GS	3	[BAL] Balance, Million Euro	6	Balance of Payments	BOP_C6_M	[GS] Goods and services
43	KA	3	[BAL] Balance, Million Euro	6	Balance of Payments	BOP_C6_M	[KA] Capital account
44	THS_T-B_195500	3	[THS_T] Thousand tonnes	6	Crude oil	NRG_JODI	[B_195500] Demand
45	TJ_GCV-B_190400	3	[TJ_GCV] Terajoule (gross calorific value - GCV)	6	Natural gas supply	NRG_IND_343M	[B_190400] Stock Changes
46	TJ_GCV-B_190900	2	[TJ_GCV] Terajoule (gross calorific value - GCV)	6	Natural gas supply	NRG_IND_343M	[B_190900] Supply
47	GWH	2	[GWh] GWh	6	Electricity available	NRG_CB_EIM	Electricity available to internal market
48	GWH-B_190600	3	[GWh] GWh	6	Electricity supply	NRG_IND_342M	[B_190600] Net Imports
49	GWH-B_190900	2	[GWh] GWh	6	Electricity supply	NRG_IND_342M	[B_190900] Supply
50	GWH-B_197000	2	[GWh] GWh	6	Electricity supply	NRG_IND_342M	[B_197000] Total gross production

Table OA.1 continued from previous page

n	Name	Tr.	Units	Delay weeks	Group	Code	Description
51	IRT_DTD	0	% rate	0	Money market interest rates	IRT_ST_M	[IRT_DTD] Day-to-day rate
52	IRT_M1	0	% rate	0	Money market interest rates	IRT_ST_M	[IRT_M12] 12-month rate
53	IRT_M12	0	% rate	0	Money market interest rates	IRT_ST_M	[IRT_M1] 1-month rate
54	IRT_M3	0	% rate	0	Money market interest rates	IRT_ST_M	[IRT_M3] 3-month rate
55	IRT_M6	0	% rate	0	Money market interest rates	IRT_ST_M	[IRT_M6] 6-month rate
56	NEER_IC42	1	[I10] Index, 2010=100	4	Effective exchange rate	ERT_EFF_IC_M	[NEER_IC42] Nominal effective exchange rate - 42 trading partners (industrial countries)
57	MCBY	0	% rate	4	EMU convergence criterion	IRT_LT_MCBY_M	[MCBY] EMU convergence criterion bond yields
58	RCH_M-CP00	0	% monthly change	2	Harmonised Index of Consumer Prices	PRC_HICP_MMOR	[CP00] All-items HICP
59	RCH_M-CP01	0	% monthly change	2	Harmonised Index of Consumer Prices	PRC_HICP_MMOR	[CP01] Food and non-alcoholic beverages
60	RCH_M-CP03	0	% monthly change	2	Harmonised Index of Consumer Prices	PRC_HICP_MMOR	[CP03] Clothing and footwear
61	RCH_M-CP04	0	% monthly change	2	Harmonised Index of Consumer Prices	PRC_HICP_MMOR	[CP04] Housing, water, electricity, gas and other fuels

Table OA.1 continued from previous page

n	Name	Tr.	Units	Delay weeks	Group	Code	Description
62	RCH_M-CP045	0	% monthly change	2	Harmonised Index of Consumer Prices	PRC_HICP_MMOR	[CP045] Electricity, gas and other fuels
63	RCH_M-CP05	0	% monthly change	2	Harmonised Index of Consumer Prices	PRC_HICP_MMOR	[CP05] Furnishings, household equipment and routine household maintenance
64	RCH_M-CP06	0	% monthly change	2	Harmonised Index of Consumer Prices	PRC_HICP_MMOR	[CP06] Health
65	RCH_M-CP07	0	% monthly change	2	Harmonised Index of Consumer Prices	PRC_HICP_MMOR	[CP07] Transport
66	RCH_M-CP08	0	% monthly change	2	Harmonised Index of Consumer Prices	PRC_HICP_MMOR	[CP08] Communications
67	RCH_M-CP10	0	% monthly change	2	Harmonised Index of Consumer Prices	PRC_HICP_MMOR	[CP10] Education
68	RCH_M-FOOD	0	% monthly change	2	Harmonised Index of Consumer Prices	PRC_HICP_MMOR	[FOOD] Food including alcohol and tobacco
69	RCH_M-FUEL	0	% monthly change	2	Harmonised Index of Consumer Prices	PRC_HICP_MMOR	[FUEL] Liquid fuels and fuels and lubricants for personal transport equipment
70	RCH_M-GD	0	% monthly change	2	Harmonised Index of Consumer Prices	PRC_HICP_MMOR	[GD] Goods (overall index excluding services)
71	RCH_M-IGD	0	% monthly change	2	Harmonised Index of Consumer Prices	PRC_HICP_MMOR	[IGD] Industrial goods
72	RCH_M-NRG	0	% monthly change	2	Harmonised Index of Consumer Prices	PRC_HICP_MMOR	[NRG] Energy

Table OA.1 continued from previous page

n	Name	Tr.	Units	Delay weeks	Group	Code	Description
73	RCH_M-SERV	0	% monthly change	2	Harmonised Index of Consumer Prices	PRC_HICP_MMOR	[SERV] Services (overall index excluding goods)
74	PRON-B	1	[I15] Index, 2015=100	2	Producer prices in industry, total	STS_INPP_M	[B] Mining and quarrying
75	PRON-B-E36	1	[I15] Index, 2015=100	2	Producer prices in industry, total	STS_INPP_M	[B-E36] Industry (except construction, sewerage, waste management and remediation activities)
76	PRON-C	1	[I15] Index, 2015=100	2	Producer prices in industry, total	STS_INPP_M	[C] Manufacturing
77	PRON-D	1	[I15] Index, 2015=100	2	Producer prices in industry, total	STS_INPP_M	[D] Electricity, gas, steam and air conditioning supply
78	PRON-MIG_CAG	1	[I15] Index, 2015=100	2	Producer prices in industry, total	STS_INPP_M	[MIG_CAG] MIG - capital goods
79	PRON-MIG_COG	1	[I15] Index, 2015=100	2	Producer prices in industry, total	STS_INPP_M	[MIG_COG] MIG - consumer goods
80	PRON-MIG_DCOG	1	[I15] Index, 2015=100	2	Producer prices in industry, total	STS_INPP_M	[MIG_DCOG] MIG - durable consumer goods
81	PRON-MIG_NDCOG	1	[I15] Index, 2015=100	2	Producer prices in industry, total	STS_INPP_M	[MIG_NDCOG] MIG - non-durable consumer goods
82	TOTAL-PC_ACT	1	[PC_ACT] Percentage of population in the labour force	4	Unemployment	UNE_RT_M	[TOTAL] Total

Table OA.1 continued from previous page

n	Name	Tr.	Units	Delay weeks	Group	Code	Description
83	Y25-74-PC_ACT	1	[PC_ACT] Percentage of population in the labour force	4	Unemployment	UNE_RT_M	[Y_LT25] Less than 25 years
84	Y_LT25-PC_ACT	1	[PC_ACT] Percentage of population in the labour force	4	Unemployment	UNE_RT_M	[Y25-74] From 25 to 74 years
85	BUIL-TOT-COF-BS	1		0	Survey		
86	BUIL-TOT-1-BS	1		0	Survey		
87	BUIL-TOT-2-F1S	1		0	Survey		
88	BUIL-TOT-2-F2S	1		0	Survey		
89	BUIL-TOT-2-F3S	1		0	Survey		
90	BUIL-TOT-2-F4S	1		0	Survey		
91	BUIL-TOT-2-F5S	1		0	Survey		
92	BUIL-TOT-2-F6S	1		0	Survey		
93	BUIL-TOT-2-F7S	1		0	Survey		
94	BUIL-TOT-3-BS	1		0	Survey		
95	BUIL-TOT-4-BS	1		0	Survey		
96	BUIL-TOT-5-BS	1		0	Survey		
97	CONS-TOT-COF-BS	1		0	Survey		
98	CONS-TOT-1-BS	1		0	Survey		
99	CONS-TOT-2-BS	1		0	Survey		
100	CONS-TOT-3-BS	1		0	Survey		

Table OA.1 continued from previous page

n	Name	Tr.	Units	Delay weeks	Group	Code	Description
101	CONS-TOT-4-BS	1		0	Survey		
102	CONS-TOT-5-BS	1		0	Survey		
103	CONS-TOT-6-BS	1		0	Survey		
104	CONS-TOT-7-BS	1		0	Survey		
105	CONS-TOT-8-BS	1		0	Survey		
106	CONS-TOT-9-BS	1		0	Survey		
107	CONS-TOT-10-BS	1		0	Survey		
108	CONS-TOT-11-BS	1		0	Survey		
109	CONS-TOT-12-BS	1		0	Survey		
110	INDU-TOT-COF-BS	1		0	Survey		
111	INDU-TOT-1-BS	1		0	Survey		
112	INDU-TOT-2-BS	1		0	Survey		
113	INDU-TOT-3-BS	1		0	Survey		
114	INDU-TOT-4-BS	1		0	Survey		
115	INDU-TOT-5-BS	1		0	Survey		
116	INDU-TOT-6-BS	1		0	Survey		
117	INDU-TOT-7-BS	1		0	Survey		
118	INDU	1		0	Survey		
119	SERV	1		0	Survey		
120	CONS	1		0	Survey		
121	RETA	1		0	Survey		
122	BUIL	1		0	Survey		

Table OA.1 continued from previous page

n	Name	Tr.	Units	Delay weeks	Group	Code	Description
123	ESI	1		0	Survey		
124	EEI	1		0	Survey		
125	RETA-TOT-COF-BS	1		0	Survey		
126	RETA-TOT-1-BS	1		0	Survey		
127	RETA-TOT-2-BS	1		0	Survey		
128	RETA-TOT-3-BS	1		0	Survey		
129	RETA-TOT-4-BS	1		0	Survey		
130	RETA-TOT-5-BS	1		0	Survey		
131	RETA-TOT-6-BS	1		0	Survey		
132	SERV-TOT-COF-BS	1		0	Survey		
133	SERV-TOT-1-BS	1		0	Survey		
134	SERV-TOT-2-BS	1		0	Survey		
135	SERV-TOT-3-BS	1		0	Survey		
136	SERV-TOT-4-BS	1		0	Survey		
137	SERV-TOT-5-BS	1		0	Survey		
138	SERV-TOT-6-BS	1		0	Survey		
139	EMPL-B	1		0	Survey		
140	EMPL-B-E36	1		0	Survey		
141	EMPL-C	1		0	Survey		
142	EMPL-D	1		0	Survey		
143	EMPL-MIG_CAG	1		0	Survey		
144	EMPL-MIG_COG	1		0	Survey		

Table OA.1 continued from previous page

n	Name	Tr.	Units	Delay weeks	Group	Code	Description
145	EMPL-MIG_DCOG	1		0	Survey		
146	EMPL-MIG_NDCOG	1		0	Survey		
147	HOWK-B	1		0	Survey		
148	HOWK-B-E36	1		0	Survey		
149	HOWK-C	1		0	Survey		
150	HOWK-D	1		0	Survey		
151	HOWK-MIG_CAG	1		0	Survey		
152	HOWK-MIG_COG	1		0	Survey		
153	HOWK-MIG_DCOG	1		0	Survey		
154	HOWK-MIG_NDCOG	1		0	Survey		
155	WAGE-B	1		0	Survey		
156	WAGE-B-E36	1		0	Survey		
157	WAGE-C	1		0	Survey		
158	WAGE-D	1		0	Survey		
159	WAGE-MIG_CAG	1		0	Survey		
160	WAGE-MIG_COG	1		0	Survey		
161	WAGE-MIG_DCOG	1		0	Survey		
162	WAGE-MIG_NDCOG	1		0	Survey		
163	CLV_I15	4	[I15]	6	Quarterly GDP	CLV_I15	Quarterly GDP

OA.3.2 Additional Estimation Results

In this section we provide additional results for our empirical application. In addition to nowcasting, we consider forecasting quarterly GDP for up to two quarters ahead. We consider two estimation approaches: factor U-MIDAS (as in the main text) and factor bridge equations (Giannone, Reichlin, and Small, 2008; Rünstler, Barhoum, Benk, Cristadoro, Reijer, Jakaitiene, Jelonek, Rua, Ruth, and van Nieuwenhuyze, 2009).[4]

We now define the specifications used for forecasting. Let v be defined as in the main text. For U-MIDAS models, now- and forecasts of GDP given vintage v are constructed directly via the specification

$$y_{i\,3(t+h)} = \alpha_{i|h,v} + \sum_{k=0}^{11} \beta_{i\,k|h,v} \hat{f}_{i\,\lfloor 3t+v-k \rfloor|h,v} + \lambda_{i|h,v} y_{i\,3(t-1)} + \varepsilon_{i\,3t|h,v}$$

where $y_{i\,3t}$ is GDP in quarter $3t$, $h = 0, 1, 2$ is the forecast horizon where $h = 0$ corresponds to nowcasting. As in the main text, the country factors estimates $\hat{f}_{i\,t|v}$ are extracted from the monthly predictor variables using the EM-PCA method (Stock and Watson, 1999). If GDP of quarter $3(t-1)$ is not available at vintage v, we use $y_{i\,3(t-2)}$ instead.

In contrast to U-MIDAS, bridge equations provide an iterated forecast of GDP according to the model:

$$\begin{aligned} y_{i\,3t} &= a_{i|v} + b_{i|v} \tilde{f}_{i3t|v} + \lambda_{i|v} y_{i\,t-1|v} + \varepsilon_{i\,3t} \\ \tilde{f}_{i\,3t|v} &= \frac{1}{3}\left(\hat{f}_{i\,3t|v} + \hat{f}_{i\,3t-1|v} + \hat{f}_{i\,3t-2|v}\right) \end{aligned} \tag{OA.3}$$

where $y_{i\,3t}$ is GDP of country i at quarter $3t$ and $\tilde{f}_{i\,3t|v}$ is the estimated aggregated quarterly factor at quarter $3t$. Following the literature, we construct $\tilde{f}_{i\,3t|v}$ as a simple average of the three monthly factors of the quarter. Eq. (OA.3) is complemented by a forecasting

[4] In addition, we estimated factor MIDAS with exponential Almon lag (Ghysels, Santa-Clara, and Valkanov, 2006; Marcellino and Schumacher, 2010). However, it is dominated by U-MIDAS in forecasting performance, and so we do not report estimation results for it.

equation for the factors. In line with the bridge equation literature, we adopt an AR(1) model:[5]

$$\hat{f}_{i\,t+1|v} = c_{i|v} + d_{i|v}\hat{f}_{i\,t|v} + u_{i\,t|v} \ . \tag{OA.4}$$

When $\hat{f}_{i\,T+s|v}$ or $y_{i,3(T-1+s)}$ are not available, we replace the missing values by forecasts from eqs. (OA.3) and (OA.4) until reaching the desired forecast for $y_{i,3T+h}$.

Full results across estimation and averaging methods, horizons, weekly vintages, and estimation window sizes are presented in table OA.7. For the individual estimators, the table reports the MSE; for all other averaging strategies we provide the MSE relative to the individual estimator. In addition, tables OA.2-OA.6 provide analogs of table 1 in the main text for different horizons and estimation strategies. As in the main text, tables OA.2-OA.6 report results for the five largest economies in our sample along with the GDP-weighted mean for the representative vintages of to $-6, 0, +4$ weeks relative to the end of the quarter.

Our key finding is that unit averaging with minimum MSE or AIC weights improves forecasting performance across horizons, vintages, and estimating strategies. Neither weighting scheme dominates the other. This finding is in line with the results reported in the main text. The magnitude of improvement in the MSE appears to be stronger for bridge equations (tables OA.2-OA.4) than for U-MIDAS (tables OA.5-OA.6).

We highlight several additional results. First, U-MIDAS and bridge equations do not dominate each other, in line with the findings of Schumacher (2016). Second, forecasting performance deteriorates as the forecasting horizons h is increased (see also Giannone et al. (2008)). However, the impact of increasing h is asymmetric between countries. For example, for the UK the MSE for forecasting two quarters ahead is roughly only double of that for nowcasting; for Spain the MSE for $h = 2$ is more than ten times larger than for $h = 0$. Last, the impact of estimation window size on MSE differs according to h. For nowcasting, the MSE decreases as estimation window size is increased from 44 to 72

[5]Forecasts for factors can also be obtained from a state space model like in Giannone et al. (2008).

quarters. For one quarter ahead forecasting, the MSE is generally minimized when using 60 quarters; for two quarter ahead forecasting the MSE is increasing in estimating window size for most countries. However, this result must be interpreted carefully, as overall forecasting performance also deteriorates rapidly as h is increased. The above pattern does not hold for the UK, where the MSE is of the same order of magnitude for all h.

		−6 weeks			0 weeks			+4 weeks		
	Averaging	44q	60q	76q	44q	60q	76q	44q	60q	76q
MEAN	Individual	0.914	0.737	0.901	0.850	0.724	0.903	0.881	0.754	0.951
	minMSE	0.940	0.731	0.696	1.028	0.820	0.770	1.138	0.877	0.839
	AIC	1.022	0.719	0.686	1.17	0.811	0.768	1.235	0.857	0.837
	MMA	4.265	2.025	2.820	4.259	2.571	3.215	5.140	3.229	3.453
	Mean group	1.074	0.763	0.710	1.16	0.857	0.790	1.386	0.973	0.900
DE	Individual	0.804	0.371	0.326	0.672	0.336	0.289	0.725	0.371	0.353
	minMSE	1.170	0.702	0.655	1.236	0.844	0.728	1.209	0.857	0.806
	AIC	1.459	0.719	0.664	1.692	0.865	0.737	1.591	0.876	0.793
	MMA	2.873*	0.867	0.816	2.561*	1.278*	0.735	2.939*	1.869*	1.305*
	Mean group	1.152	0.662	0.629	1.161	0.787	0.676	1.207	0.828	0.790
FR	Individual	0.178	0.116	0.115	0.143	0.101	0.104	0.144	0.101	0.104
	minMSE	0.951*	0.786	0.906	0.998	1.058	1.233	0.936	0.879*	1.096
	AIC	0.970	0.777	0.922	1.023	1.053	1.260*	0.942	0.878*	1.114*
	MMA	7.222*	2.958*	3.077*	7.251*	4.866*	4.636*	7.422*	4.579*	4.732*
	Mean group	1.183*	0.824*	0.901	1.204*	1.084	1.185	1.186*	0.936	1.117
IT	Individual	0.452	0.130	0.065	0.367	0.105	0.062	0.380	0.110	0.066
	minMSE	0.820	0.521	0.368	1.335	0.599	0.436	1.647	0.851	0.659
	AIC	0.819	0.452	0.388	1.384	0.530	0.455	1.714	0.731	0.704
	MMA	2.906*	2.464*	3.477*	5.164*	3.186*	3.920*	6.108*	5.099*	6.821*
	Mean group	0.940	0.598	0.408	1.598	0.700	0.500	2.009	1.009	0.763
ES	Individual	0.384	0.083	0.059	0.323	0.072	0.061	0.328	0.074	0.069
	minMSE	1.132	0.584*	0.536*	1.099	0.802*	0.747*	1.062	0.983*	0.933*
	AIC	1.158	0.533*	0.537*	1.128	0.739*	0.724*	1.109	0.868*	0.887*
	MMA	5.367*	2.628*	0.841*	5.003*	3.905*	1.757*	4.477*	4.609*	1.965*
	Mean group	1.272	0.878*	0.689*	1.195	1.174*	0.981*	1.206	1.532*	1.258*
UK	Individual	0.216	0.147	0.043	0.202	0.145	0.038	0.207	0.156	0.040
	minMSE	0.770	1.032*	0.899	0.726	0.831*	0.680	1.130	0.947*	0.747
	AIC	0.776	1.059*	0.828	0.729	0.847*	0.648	0.984	0.965*	0.750
	MMA	5.139*	2.493*	7.49*	4.307*	1.936*	7.489*	7.176*	2.48*	5.204*
	Mean group	1.011	0.915*	0.832	1.035	0.787	0.704	1.740	0.933	0.753

Table OA.2: Nowcasting, bridge equations. MSE. *For individual estimator*: absolute value. *For averaging estimators*: MSE relative to individual estimator. For different estimation window sizes (44, 60, 76); selected weekly horizons relative to quarter end $(-6, 0, +4$ weeks). * – forecasting performance difference significant at 10% in Diebold-Mariano test (Diebold and Mariano, 1995)

		−6 weeks			0 weeks			+4 weeks		
	Averaging	44q	60q	76q	44q	60q	76q	44q	60q	76q
MEAN	Individual	1.360	1.203	1.691	1.361	1.208	1.698	1.321	1.234	1.758
	minMSE	0.792	0.740	0.826	0.883	0.757	0.835	0.883	0.677	0.729
	AIC	0.868	0.740	0.834	1.010	0.756	0.845	0.985	0.674	0.736
	MMA	1.719	1.203	1.419	1.995	1.311	1.606	2.081	1.258	1.305
	Mean group	0.829	0.757	0.834	0.936	0.778	0.852	0.968	0.701	0.756
DE	Individual	0.920	0.482	0.447	0.897	0.463	0.442	0.862	0.484	0.499
	minMSE	0.748	0.643	0.852	1.086	0.693	0.777	1.017	0.585	0.619
	AIC	0.991	0.640	0.867	1.510	0.686	0.789	1.394	0.569	0.621
	MMA	1.410*	1.035*	1.477*	2.318*	1.249*	1.302*	2.132*	1.133*	1.052*
	Mean group	0.751	0.633	0.851	1.119	0.685	0.777	1.084	0.591	0.629
FR	Individual	0.961	1.091	1.783	0.959	1.121	1.810	0.928	1.097	1.789
	minMSE	0.972	0.980	1.020	0.955	0.974	1.009	0.950	0.939	0.980
	AIC	0.994*	0.990	1.028	0.977*	0.980	1.015	0.970*	0.950*	0.987
	MMA	2.065*	1.340	1.326	2.050*	1.408*	1.291	2.148*	1.411*	1.236
	Mean group	1.012*	0.988	1.029*	1.005*	0.987*	1.019	1.002*	0.948	0.987
IT	Individual	1.303	1.107	1.550	1.278	1.073	1.532	1.239	1.065	1.544
	minMSE	0.929	1.088	1.074	0.946	1.033	1.064	1.111	0.986	1.000
	AIC	0.965	1.081	1.088	0.989	1.026	1.078	1.174	0.983	1.012
	MMA	1.539*	1.605*	1.538*	1.652*	1.558*	1.580*	1.917*	1.433*	1.422*
	Mean group	0.982*	1.135	1.107	1.011*	1.080	1.101	1.199*	1.024	1.031
ES	Individual	1.430	1.147	1.741	1.367	1.122	1.739	1.355	1.162	1.800
	minMSE	0.509	0.779*	0.929	0.712	0.878*	0.913	0.826	0.791*	0.852
	AIC	0.511	0.779*	0.944*	0.719	0.877*	0.925*	0.844	0.785*	0.858
	MMA	0.803	0.824	0.795	1.175	0.913	0.778	1.344	0.822	0.731
	Mean group	0.511	0.825*	0.945	0.721	0.924*	0.928	0.846	0.829*	0.864
UK	Individual	0.330	0.082	0.034	0.316	0.084	0.032	0.283	0.075	0.028
	minMSE	0.742	0.333	0.322	0.612	0.340	0.603	0.652	0.299	0.431
	AIC	0.752	0.347	0.325	0.621	0.354	0.626	0.550	0.306	0.454
	MMA	2.560*	1.316*	1.802*	2.263*	1.305*	3.448*	2.762*	1.554*	2.368*
	Mean group	0.830	0.364	0.328	0.702	0.374	0.650	0.833	0.345	0.522

Table OA.3: One quarter ahead forecasting, bridge equations. MSE. *For individual estimator*: absolute value. *For averaging estimators*: MSE relative to individual estimator. For different estimation window sizes (44, 60, 76); selected weekly horizons relative to quarter end $(-6, 0, +4$ weeks). * – forecasting performance difference significant at 10% in Diebold-Mariano test (Diebold and Mariano, 1995)

		−6 weeks			0 weeks			+4 weeks		
	Averaging	44q	60q	76q	44q	60q	76q	44q	60q	76q
MEAN	Individual	3.936	4.715	7.550	3.948	4.697	7.527	3.942	4.754	7.594
	minMSE	0.890	0.846	0.894	0.872	0.854	0.891	0.839	0.830	0.859
	AIC	0.931	0.854	0.904	0.917	0.861	0.909	0.875	0.835	0.868
	MMA	1.291	1.044	1.362	1.283	1.027	1.453	1.218	1.014	1.274
	Mean group	0.903	0.853	0.901	0.888	0.861	0.906	0.854	0.833	0.866
DE	Individual	3.046	3.401	5.336	3.027	3.374	5.313	3.018	3.388	5.347
	minMSE	0.950	0.863*	0.958	0.891	0.926*	0.968	0.849	0.893*	0.929
	AIC	1.074	0.869	0.969	1.031	0.933*	0.980	0.969	0.897	0.938
	MMA	1.280*	0.978	1.144	1.208*	1.056	1.167	1.172*	1.011	1.109*
	Mean group	0.953	0.864*	0.963	0.896	0.928*	0.975	0.857	0.894*	0.933
FR	Individual	4.467	5.927	9.854	4.484	5.956	9.891	4.444	5.911	9.839
	minMSE	0.988	1.047	1.051	0.994	1.049	1.044	1.043	1.029	1.032
	AIC	1.001*	1.053	1.055	1.006*	1.052	1.046	1.059*	1.035*	1.036
	MMA	1.231*	1.131	1.191	1.242*	1.135	1.180	1.320*	1.120	1.174
	Mean group	0.997*	1.059	1.054	1.004*	1.059	1.047	1.056*	1.030	1.035
IT	Individual	4.209	5.124	8.214	4.198	5.102	8.196	4.191	5.102	8.201
	minMSE	1.039*	1.043	1.065	0.986*	1.070	1.077	0.972	1.076	1.077
	AIC	1.062*	1.051	1.073	1.010*	1.078	1.086	0.996*	1.083	1.085
	MMA	1.395*	1.257*	1.257*	1.325*	1.294*	1.273*	1.318*	1.305*	1.277*
	Mean group	1.073*	1.063	1.082	1.019*	1.092	1.096	1.007*	1.097	1.096
ES	Individual	7.974	10.129	16.715	7.944	10.077	16.667	7.942	10.152	16.78
	minMSE	0.979	0.940	0.947	1.024	0.959	0.952	0.968	0.928	0.940
	AIC	0.986	0.944*	0.951	1.034	0.964*	0.957	0.978	0.930*	0.944
	MMA	0.964	0.875	0.892	1.012	0.896	0.899	0.960	0.862	0.886
	Mean group	0.978	0.945*	0.949	1.024	0.967*	0.955	0.969	0.932	0.941
UK	Individual	0.424	0.104	0.032	0.412	0.102	0.025	0.448	0.112	0.033
	minMSE	0.575	0.341	0.411	0.603*	0.260*	0.389	0.464*	0.307*	0.359
	AIC	0.580	0.355	0.435	0.612	0.274	0.454	0.446*	0.312	0.381
	MMA	1.742*	1.067*	2.466*	1.872*	0.793*	2.963*	1.476*	0.928*	2.102*
	Mean group	0.614	0.352	0.420	0.659	0.269	0.442	0.509	0.304	0.368

Table OA.4: Two quarters ahead forecasting, bridge equations. MSE. *For individual estimator*: absolute value. *For averaging estimators*: MSE relative to individual estimator. For different estimation window sizes (44, 60, 76); selected weekly horizons relative to quarter end $(-6, 0, +4$ weeks). * – forecasting performance difference significant at 10% in Diebold-Mariano test (Diebold and Mariano, 1995)

		−6 weeks			0 weeks			+4 weeks		
	Averaging	44q	60q	76q	44q	60q	76q	44q	60q	76q
MEAN	Individual	1.731	1.403	1.801	1.538	1.403	1.832	1.578	1.642	2.169
	minMSE	0.910	0.987	1.012	0.972	0.991	0.994	0.961	0.999	1.008
	AIC	0.942	0.978	1.001	0.971	0.978	0.988	0.931	0.965	0.991
	MMA	1.277	0.894	1.020	0.972	1.083	1.216	1.546	1.132	1.252
	Mean group	0.868	0.846	1.025	1.029	1.023	1.258	1.252	1.071	1.279
DE	Individual	1.223	0.691	0.526	0.807	0.623	0.569	0.823	0.792	0.804
	minMSE	0.796	1.010	1.119*	1.005	1.008	1.056	1.014	1.042	1.079
	AIC	0.935*	0.973*	0.999	1.021	0.987*	0.998	0.986	0.982*	0.998
	MMA	0.910	0.824*	0.978	1.118	1.055	1.129	1.366	1.253	1.206
	Mean group	0.701	0.662	1.069	0.956	0.824	1.012	1.250	1.024	1.108
FR	Individual	0.992	1.100	1.728	1.007	1.148	1.782	0.980	1.168	1.817
	minMSE	1.004	0.991	1.001	1.027*	1.012	1.005	1.004	1.013	1.019
	AIC	0.999	1.010	1.014	1.006	1.002	1.007	0.980	0.999	0.999
	MMA	1.541*	1.033	1.044	1.021	1.070	1.081	1.391*	1.236*	1.159*
	Mean group	1.048	0.998	1.053	1.074	1.065	1.072	1.156*	1.137*	1.070*
IT	Individual	1.447	1.063	1.521	1.381	1.089	1.514	1.131	1.133	1.623
	minMSE	1.052	1.089	1.019	1.013	0.987	1.003	0.980	1.022	1.002
	AIC	1.037	0.998	0.999	0.948	0.979*	0.995	0.980	0.996	1.003
	MMA	1.099	1.022	1.024	0.931	1.073	1.186*	1.258	1.006	1.101
	Mean group	1.002	1.079	1.092	0.931	0.970	1.040	1.050	0.991	1.011
ES	Individual	2.436	1.524	1.883	1.652	1.325	1.912	1.416	1.524	2.125
	minMSE	0.665*	0.931*	0.957*	0.761*	0.944*	0.965	0.850*	0.938*	0.958*
	AIC	0.715*	0.968*	1.000	0.879*	0.945*	0.977*	0.927*	0.948*	0.985*
	MMA	0.662	0.867*	0.989*	0.891	0.971	1.003	0.966	1.050	1.058*
	Mean group	0.533*	0.774*	0.873*	0.701*	0.904	0.921	0.869	1.011	1.004
UK	Individual	0.446	0.245	0.107	0.494	0.243	0.053	0.513	0.245	0.072
	minMSE	1.049	0.907	0.916*	0.994	0.943	0.870*	0.952	0.971	0.943
	AIC	0.891	0.910*	0.964	0.912	0.915*	0.946	0.740*	0.902*	0.983
	MMA	2.201*	0.649	0.997	0.722	0.860	1.691	2.863*	0.895	1.886*
	Mean group	0.955	0.716	0.915	1.183	1.076	2.345*	1.751	1.172	2.415*

Table OA.5: One quarter ahead forecasting, U-MIDAS. MSE. *For individual estimator*: absolute value. *For averaging estimators*: MSE relative to individual estimator. For different estimation window sizes (44, 60, 76); selected weekly horizons relative to quarter end $(-6, 0, +4$ weeks). * – forecasting performance difference significant at 10% in Diebold-Mariano test (Diebold and Mariano, 1995)

		−6 weeks			0 weeks			+4 weeks		
	Averaging	44q	60q	76q	44q	60q	76q	44q	60q	76q
MEAN	Individual	4.323	5.020	7.737	4.318	4.882	7.707	4.372	5.121	8.010
	minMSE	0.970	0.949	0.979	0.946	0.971	0.965	0.930	0.953	0.965
	AIC	0.950	0.947	0.974	0.952	0.941	0.967	0.915	0.978	0.991
	MMA	1.019	0.915	1.075	1.110	1.036	1.149	0.996	0.915	1.016
	Mean group	0.936	0.888	1.003	0.945	0.872	0.935	0.867	0.863	0.941
DE	Individual	3.213	3.863	5.567	3.399	3.567	5.471	3.548	3.722	5.747
	minMSE	0.981	0.928	0.999	0.908	0.994	0.997	0.903*	0.975*	0.985
	AIC	0.972*	0.998	0.999	0.965	0.996	0.995	0.945	0.997*	0.998
	MMA	0.949	0.888	0.939	0.904	0.926	0.957	0.899	0.973	0.954
	Mean group	0.946	0.854	0.969	0.898	0.916	0.994	0.818*	0.849	0.926
FR	Individual	4.528	5.643	9.346	4.521	5.678	9.461	4.258	5.733	9.511
	minMSE	1.006	1.002	1.010	1.009	1.012	1.014	1.021	1.007	1.013
	AIC	1.004	1.024	1.020	1.008	1.014	1.007	1.010	1.001	0.999
	MMA	1.051	1.045	1.031	1.057	1.141	1.093	1.083*	1.017	1.019
	Mean group	1.023	1.023	1.043	1.041	1.039	1.052	1.059	1.009	1.028
IT	Individual	4.171	5.093	8.014	4.381	4.942	7.898	4.426	4.915	7.900
	minMSE	0.958	1.011	1.016	0.968	1.004	1.016	0.944	1.001	1.012
	AIC	1.002	0.990	1.042	0.987	1.003	1.000	0.958	1.000	1.000
	MMA	1.020	1.006	1.025	0.984	1.037	1.027	0.962	1.010	1.017
	Mean group	1.069	1.053	1.093	1.048	1.061	1.084	1.002	1.063	1.085
ES	Individual	7.862	10.786	17.587	7.487	10.516	17.446	7.910	10.945	17.759
	minMSE	0.940*	0.961*	0.971	0.956*	0.967	0.969	0.949*	0.967*	0.974
	AIC	0.992	0.996*	1.000	0.993*	0.994*	0.996*	0.973*	0.986*	0.994*
	MMA	1.040	0.989	0.987*	1.087	0.948	0.949	0.989	0.969	0.966*
	Mean group	0.950	0.914	0.925	1.007	0.924	0.925	0.968	0.922	0.940
UK	Individual	0.693	0.274	0.083	0.629	0.349	0.066	0.846	0.321	0.097
	minMSE	0.985	0.870*	0.893*	0.947	0.892*	0.823*	0.889	0.848*	0.871*
	AIC	0.759*	0.673*	0.796	0.849*	0.669*	0.823	0.668*	0.957*	0.981
	MMA	1.168	0.693	1.512	1.724*	1.152	1.938	1.165	0.616	1.222
	Mean group	0.805	0.645	1.041	0.918	0.425*	0.627	0.577*	0.561*	0.827

Table OA.6: Two quarters ahead forecasting, U-MIDAS. MSE. *For individual estimator*: absolute value. *For averaging estimators*: MSE relative to individual estimator. For different estimation window sizes (44, 60, 76); selected weekly horizons relative to quarter end $(-6, 0, +4$ weeks). * – forecasting performance difference significant at 10% in Diebold-Mariano test (Diebold and Mariano, 1995)

Table OA.7: Full estimation results for horizons h, countries, averaging methods, estimators, rolling window sizes T, and weekly vintages

					Weekly position								
Country	Averaging	Estimator	h	T	-12	-10	-8	-6	-4	-2	0	$+2$	$+4$
AT	Individual	U-MIDAS	0	44	0.52	0.49	0.58	0.40	0.45	0.32	0.27	0.35	0.34
AT	minMSE	U-MIDAS	0	44	0.94	0.89	0.88	0.96	0.97	1.00	0.88	0.87	0.88
AT	AIC	U-MIDAS	0	44	0.91	0.89	0.83	0.89	0.88	0.85	0.82	0.82	0.83
AT	MMA	U-MIDAS	0	44	0.89	0.91	1.94	1.30	0.85	1.02	0.95	0.83	1.15
AT	Mean group	U-MIDAS	0	44	0.78	0.85	1.07	1.08	1.07	0.92	1.02	0.98	0.98
AT	Individual	U-MIDAS	0	60	0.30	0.24	0.32	0.28	0.34	0.21	0.21	0.27	0.30
AT	minMSE	U-MIDAS	0	60	1.10	1.04	0.93	0.94	0.93	0.93	0.95	0.93	0.91
AT	AIC	U-MIDAS	0	60	0.97	0.95	0.91	0.96	0.92	0.90	0.94	0.92	0.90
AT	MMA	U-MIDAS	0	60	0.97	0.92	2.03	1.40	1.56	1.34	0.89	1.81	0.92
AT	Mean group	U-MIDAS	0	60	1.03	1.09	1.40	1.31	1.48	1.30	1.31	1.37	1.21
AT	Individual	U-MIDAS	0	76	0.25	0.22	0.31	0.28	0.33	0.18	0.21	0.24	0.25
AT	minMSE	U-MIDAS	0	76	1.00	0.89	0.90	0.99	0.98	1.04	1.04	0.99	0.99
AT	AIC	U-MIDAS	0	76	0.98	0.97	0.98	0.99	0.93	0.90	0.91	0.93	0.94
AT	MMA	U-MIDAS	0	76	1.00	0.88	1.76	1.46	1.83	1.43	0.97	2.26	1.13
AT	Mean group	U-MIDAS	0	76	0.94	0.99	1.30	1.19	1.47	1.32	1.24	1.39	1.35
BE	Individual	U-MIDAS	0	44	1.06	0.76	2.27	1.24	2.64	1.14	1.78	0.90	0.91
BE	minMSE	U-MIDAS	0	44	1.18	1.11	1.02	1.45	1.00	0.97	1.04	0.97	0.98
BE	AIC	U-MIDAS	0	44	1.14	1.09	1.01	1.09	0.95	0.98	0.81	0.90	0.86
BE	MMA	U-MIDAS	0	44	1.59	1.59	1.54	1.36	0.53	0.68	0.43	0.60	1.05
BE	Mean group	U-MIDAS	0	44	2.76	2.87	2.68	3.81	1.97	2.48	1.43	1.96	1.27
BE	Individual	U-MIDAS	0	60	1.25	0.68	2.89	1.40	2.70	1.59	3.17	1.14	1.35
BE	minMSE	U-MIDAS	0	60	1.08	1.10	1.02	1.11	0.99	0.97	0.94	0.97	0.90
BE	AIC	U-MIDAS	0	60	1.11	1.13	0.98	1.06	0.97	0.97	0.78	0.87	0.81
BE	MMA	U-MIDAS	0	60	1.42	3.22	2.68	1.92	1.83	1.48	0.98	1.93	0.93
BE	Mean group	U-MIDAS	0	60	2.97	3.88	2.82	4.51	2.46	2.39	1.12	1.92	1.11
BE	Individual	U-MIDAS	0	76	2.36	1.10	5.11	2.15	2.87	1.32	3.02	1.44	2.40
BE	minMSE	U-MIDAS	0	76	1.02	1.06	0.99	0.98	1.05	1.00	0.96	0.98	0.88
BE	AIC	U-MIDAS	0	76	0.97	1.08	0.91	1.05	1.10	1.12	0.86	0.90	0.76
BE	MMA	U-MIDAS	0	76	0.76	2.62	1.36	1.94	2.50	1.82	1.74	2.58	0.62
BE	Mean group	U-MIDAS	0	76	1.69	2.73	1.84	3.23	2.77	3.03	1.42	1.82	0.67
DE	Individual	U-MIDAS	0	44	0.73	0.73	0.75	0.66	0.64	0.52	0.51	0.58	0.57
DE	minMSE	U-MIDAS	0	44	0.99	1.00	0.99	0.79	0.81	0.77	0.79	0.82	0.82
DE	AIC	U-MIDAS	0	44	1.00	1.00	0.97	0.96	0.97	0.96	0.97	0.98	0.98
DE	MMA	U-MIDAS	0	44	1.10	1.11	1.40	1.00	1.16	1.74	0.86	0.68	0.74
DE	Mean group	U-MIDAS	0	44	0.91	1.00	1.17	0.99	0.99	1.06	1.07	0.97	0.96
DE	Individual	U-MIDAS	0	60	0.49	0.59	0.63	0.55	0.50	0.42	0.42	0.45	0.45

Table OA.7 continued from previous page

					Weekly position								
Country	Averaging	Estimator	h	T	-12	-10	-8	-6	-4	-2	0	$+2$	$+4$
DE	minMSE	U-MIDAS	0	60	1.04	1.03	1.04	0.82	0.83	0.83	0.82	0.82	0.81
DE	AIC	U-MIDAS	0	60	0.99	0.99	0.98	0.98	0.98	0.97	0.98	0.99	0.99
DE	MMA	U-MIDAS	0	60	0.81	1.48	1.29	1.26	1.11	1.23	0.97	1.38	0.83
DE	Mean group	U-MIDAS	0	60	0.82	0.89	1.07	0.94	1.11	1.21	1.16	1.26	1.15
DE	Individual	U-MIDAS	0	76	0.43	0.59	0.64	0.54	0.49	0.41	0.43	0.46	0.46
DE	minMSE	U-MIDAS	0	76	1.02	1.05	1.08	0.82	0.82	0.79	0.78	0.80	0.79
DE	AIC	U-MIDAS	0	76	1.00	1.00	0.99	0.99	0.98	0.97	0.97	0.98	0.98
DE	MMA	U-MIDAS	0	76	0.78	1.44	1.16	1.10	0.85	0.72	0.74	1.16	0.83
DE	Mean group	U-MIDAS	0	76	0.89	0.92	1.03	0.77	0.82	0.73	0.74	0.83	0.85
EL	Individual	U-MIDAS	0	44	12.24	12.10	12.53	14.74	11.85	12.03	10.43	10.58	10.85
EL	minMSE	U-MIDAS	0	44	0.55	0.46	0.74	0.74	0.79	0.78	0.69	0.69	0.72
EL	AIC	U-MIDAS	0	44	0.97	0.98	1.01	1.00	1.00	1.00	1.00	1.00	1.00
EL	MMA	U-MIDAS	0	44	0.46	0.46	0.49	0.38	0.45	0.43	0.41	0.44	0.43
EL	Mean group	U-MIDAS	0	44	0.46	0.46	0.37	0.37	0.42	0.42	0.46	0.47	0.45
EL	Individual	U-MIDAS	0	60	8.89	8.56	7.32	7.15	7.23	7.54	7.61	7.14	7.14
EL	minMSE	U-MIDAS	0	60	0.74	0.72	0.83	0.77	0.84	0.84	0.83	0.83	0.72
EL	AIC	U-MIDAS	0	60	1.01	1.00	0.98	0.94	1.00	1.00	1.00	1.00	1.00
EL	MMA	U-MIDAS	0	60	0.58	0.82	0.84	0.66	0.97	0.90	0.53	0.82	0.53
EL	Mean group	U-MIDAS	0	60	0.50	0.50	0.50	0.54	0.60	0.59	0.59	0.60	0.59
EL	Individual	U-MIDAS	0	76	5.90	5.63	4.88	3.63	3.24	3.36	3.17	3.16	2.73
EL	minMSE	U-MIDAS	0	76	0.28	0.28	0.67	0.66	0.71	0.70	0.65	0.65	0.71
EL	AIC	U-MIDAS	0	76	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
EL	MMA	U-MIDAS	0	76	0.23	0.87	0.24	0.31	0.85	0.83	0.18	0.92	0.27
EL	Mean group	U-MIDAS	0	76	0.17	0.17	0.15	0.18	0.20	0.19	0.22	0.22	0.24
ES	Individual	U-MIDAS	0	44	0.96	0.87	0.67	0.29	0.33	0.28	0.23	0.21	0.25
ES	minMSE	U-MIDAS	0	44	0.61	0.61	0.72	0.92	0.95	1.01	0.95	0.94	0.96
ES	AIC	U-MIDAS	0	44	0.82	0.79	0.85	0.96	0.91	0.88	0.86	0.84	0.81
ES	MMA	U-MIDAS	0	44	0.55	0.77	0.93	0.93	0.66	0.88	0.92	0.95	1.31
ES	Mean group	U-MIDAS	0	44	0.53	0.50	0.71	1.24	1.48	0.87	1.01	1.15	0.95
ES	Individual	U-MIDAS	0	60	0.38	0.37	0.44	0.20	0.20	0.14	0.12	0.10	0.11
ES	minMSE	U-MIDAS	0	60	0.84	0.81	0.86	0.91	0.89	0.95	0.95	0.91	0.92
ES	AIC	U-MIDAS	0	60	0.82	0.83	0.84	0.96	0.95	0.93	0.94	0.94	0.93
ES	MMA	U-MIDAS	0	60	0.93	1.24	1.24	0.90	1.19	0.95	0.91	1.11	0.82
ES	Mean group	U-MIDAS	0	60	0.83	0.97	1.13	1.43	1.96	1.24	1.56	2.08	1.89
ES	Individual	U-MIDAS	0	76	0.30	0.25	0.35	0.15	0.15	0.10	0.11	0.09	0.10
ES	minMSE	U-MIDAS	0	76	0.92	0.82	0.87	0.86	0.84	0.88	0.93	0.87	0.89
ES	AIC	U-MIDAS	0	76	0.81	0.79	0.88	0.97	0.97	0.96	0.94	0.94	0.93
ES	MMA	U-MIDAS	0	76	0.68	1.30	1.18	1.00	1.11	1.20	1.00	1.15	1.00

Table OA.7 continued from previous page

					Weekly position								
Country	Averaging	Estimator	h	T	-12	-10	-8	-6	-4	-2	0	$+2$	$+4$
ES	Mean group	U-MIDAS	0	76	0.87	0.85	1.02	1.23	1.39	0.97	1.35	1.28	1.25
FI	Individual	U-MIDAS	0	44	2.41	2.28	2.09	2.11	1.91	1.32	1.43	1.45	1.41
FI	minMSE	U-MIDAS	0	44	0.98	0.86	0.93	0.83	0.87	0.88	0.89	0.93	0.96
FI	AIC	U-MIDAS	0	44	1.00	1.00	1.00	0.99	1.00	1.00	1.00	1.00	1.00
FI	MMA	U-MIDAS	0	44	0.97	0.78	0.99	1.52	0.82	1.09	0.84	0.84	0.91
FI	Mean group	U-MIDAS	0	44	0.73	0.61	0.68	0.56	0.57	0.74	0.65	0.73	0.75
FI	Individual	U-MIDAS	0	60	1.06	1.18	1.61	1.44	1.68	0.87	0.80	0.84	0.83
FI	minMSE	U-MIDAS	0	60	0.98	0.85	0.91	0.84	0.85	0.77	0.81	0.78	0.76
FI	AIC	U-MIDAS	0	60	0.99	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FI	MMA	U-MIDAS	0	60	0.69	0.84	0.75	0.61	0.74	0.84	0.70	1.42	0.72
FI	Mean group	U-MIDAS	0	60	0.75	0.59	0.49	0.49	0.47	0.55	0.59	0.62	0.59
FI	Individual	U-MIDAS	0	76	0.54	0.76	1.16	0.49	0.55	0.66	0.65	0.59	0.58
FI	minMSE	U-MIDAS	0	76	0.83	0.78	0.87	0.83	0.87	0.78	0.84	0.85	0.85
FI	AIC	U-MIDAS	0	76	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FI	MMA	U-MIDAS	0	76	0.77	0.81	0.79	0.65	0.97	0.81	0.64	1.36	0.69
FI	Mean group	U-MIDAS	0	76	0.74	0.58	0.45	0.59	0.54	0.55	0.63	0.66	0.65
FR	Individual	U-MIDAS	0	44	0.25	0.23	0.22	0.19	0.15	0.13	0.14	0.15	0.16
FR	minMSE	U-MIDAS	0	44	1.04	1.04	1.05	0.99	0.99	1.02	0.97	0.97	0.92
FR	AIC	U-MIDAS	0	44	0.96	0.93	0.92	0.88	0.89	0.86	0.83	0.86	0.83
FR	MMA	U-MIDAS	0	44	1.04	1.15	3.62	1.22	1.56	1.82	1.08	1.14	1.16
FR	Mean group	U-MIDAS	0	44	1.31	1.33	1.74	2.13	2.91	2.76	2.74	2.66	2.47
FR	Individual	U-MIDAS	0	60	0.17	0.16	0.16	0.15	0.13	0.10	0.10	0.11	0.12
FR	minMSE	U-MIDAS	0	60	0.97	0.98	1.06	1.07	0.98	1.05	1.06	1.01	0.98
FR	AIC	U-MIDAS	0	60	0.95	0.94	0.99	0.93	0.93	0.97	0.98	0.96	0.93
FR	MMA	U-MIDAS	0	60	0.79	1.15	2.62	1.34	1.22	1.79	1.37	1.69	1.05
FR	Mean group	U-MIDAS	0	60	1.21	1.39	2.18	2.07	2.62	2.78	2.94	2.95	2.65
FR	Individual	U-MIDAS	0	76	0.16	0.16	0.15	0.13	0.10	0.09	0.09	0.09	0.10
FR	minMSE	U-MIDAS	0	76	0.99	0.96	1.01	1.04	1.01	1.11	1.16	1.10	1.07
FR	AIC	U-MIDAS	0	76	0.97	0.97	1.01	0.98	1.01	1.04	1.05	1.05	1.00
FR	MMA	U-MIDAS	0	76	1.04	1.07	2.11	1.14	1.35	1.57	1.66	1.89	1.34
FR	Mean group	U-MIDAS	0	76	0.97	1.08	1.62	1.35	1.85	1.76	2.17	2.32	2.16
IE	Individual	U-MIDAS	0	44	11.84	12.03	13.82	13.23	14.02	13.83	13.91	13.80	13.11
IE	minMSE	U-MIDAS	0	44	0.95	0.94	0.88	0.99	0.94	0.94	0.94	0.93	0.92
IE	AIC	U-MIDAS	0	44	1.00	1.00	1.01	0.98	0.97	0.97	0.96	0.96	0.96
IE	MMA	U-MIDAS	0	44	0.85	0.83	0.79	0.93	0.88	0.88	0.85	0.85	0.91
IE	Mean group	U-MIDAS	0	44	1.04	1.03	0.89	0.93	0.89	0.89	0.87	0.88	0.93
IE	Individual	U-MIDAS	0	60	14.21	14.29	15.64	16.85	17.96	17.73	17.71	17.66	16.77
IE	minMSE	U-MIDAS	0	60	1.10	1.11	1.02	1.02	0.96	0.96	0.89	0.89	0.93

Table OA.7 continued from previous page

					Weekly position								
Country	Averaging	Estimator	h	T	-12	-10	-8	-6	-4	-2	0	$+2$	$+4$
IE	AIC	U-MIDAS	0	60	1.01	1.01	1.01	0.98	0.97	0.97	0.96	0.96	0.96
IE	MMA	U-MIDAS	0	60	1.03	0.93	0.95	0.93	0.89	0.90	0.88	0.89	0.89
IE	Mean group	U-MIDAS	0	60	1.09	1.09	0.99	0.92	0.86	0.86	0.85	0.85	0.89
IE	Individual	U-MIDAS	0	76	21.33	21.46	22.73	25.20	26.66	26.47	26.66	26.44	25.27
IE	minMSE	U-MIDAS	0	76	1.19	1.19	1.09	1.04	1.01	1.01	0.94	0.94	0.98
IE	AIC	U-MIDAS	0	76	1.01	1.01	1.01	0.98	0.96	0.96	0.96	0.95	0.96
IE	MMA	U-MIDAS	0	76	1.03	1.01	0.90	0.95	0.93	0.93	0.95	0.93	0.94
IE	Mean group	U-MIDAS	0	76	1.19	1.19	1.10	0.97	0.92	0.92	0.90	0.90	0.95
IT	Individual	U-MIDAS	0	44	0.86	0.77	0.56	0.59	0.52	0.31	0.28	0.26	0.23
IT	minMSE	U-MIDAS	0	44	0.96	0.97	0.90	0.89	0.96	0.96	0.97	0.97	1.05
IT	AIC	U-MIDAS	0	44	0.84	0.84	0.87	0.95	0.97	1.00	0.96	0.93	0.95
IT	MMA	U-MIDAS	0	44	0.70	1.08	1.14	0.91	0.99	1.32	1.32	1.60	1.35
IT	Mean group	U-MIDAS	0	44	0.72	0.77	0.91	0.90	0.99	1.25	1.29	1.30	1.49
IT	Individual	U-MIDAS	0	60	0.28	0.26	0.25	0.25	0.29	0.19	0.18	0.14	0.13
IT	minMSE	U-MIDAS	0	60	0.91	1.01	1.08	0.91	0.96	0.98	0.97	1.06	1.03
IT	AIC	U-MIDAS	0	60	0.89	0.91	0.97	0.97	0.97	0.97	0.95	0.97	0.97
IT	MMA	U-MIDAS	0	60	0.78	1.05	1.03	0.71	0.73	0.96	0.65	1.22	0.92
IT	Mean group	U-MIDAS	0	60	0.74	0.99	0.83	0.90	0.98	1.02	1.04	1.65	1.60
IT	Individual	U-MIDAS	0	76	0.16	0.09	0.20	0.16	0.18	0.10	0.12	0.08	0.08
IT	minMSE	U-MIDAS	0	76	0.96	0.99	1.03	0.85	0.90	0.86	0.86	0.87	0.86
IT	AIC	U-MIDAS	0	76	0.90	0.92	0.96	0.98	0.99	0.97	0.98	0.98	0.98
IT	MMA	U-MIDAS	0	76	0.65	1.63	1.05	0.73	0.80	0.95	0.70	1.72	0.69
IT	Mean group	U-MIDAS	0	76	0.66	1.09	0.49	0.82	0.90	0.87	0.72	1.42	1.24
LU	Individual	U-MIDAS	0	44	3.75	3.28	3.63	3.47	3.22	2.75	2.74	2.94	2.78
LU	minMSE	U-MIDAS	0	44	0.79	0.73	0.81	0.78	0.84	0.83	0.74	0.79	0.69
LU	AIC	U-MIDAS	0	44	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
LU	MMA	U-MIDAS	0	44	0.56	0.61	0.69	0.90	0.74	0.67	0.62	0.57	0.71
LU	Mean group	U-MIDAS	0	44	0.55	0.60	0.57	0.56	0.61	0.58	0.58	0.53	0.57
LU	Individual	U-MIDAS	0	60	1.87	1.85	2.31	1.83	1.94	1.56	1.51	1.59	1.65
LU	minMSE	U-MIDAS	0	60	1.00	1.01	0.93	0.88	0.87	0.87	0.91	0.93	0.91
LU	AIC	U-MIDAS	0	60	1.00	0.99	1.00	1.00	1.00	1.00	1.00	1.00	1.00
LU	MMA	U-MIDAS	0	60	0.81	0.92	1.04	0.98	1.04	1.12	1.00	1.05	0.93
LU	Mean group	U-MIDAS	0	60	0.97	0.90	0.83	0.88	0.87	0.89	0.95	0.90	0.88
LU	Individual	U-MIDAS	0	76	1.55	1.95	2.24	1.74	1.98	1.80	1.78	1.71	1.75
LU	minMSE	U-MIDAS	0	76	1.30	1.13	1.05	1.03	0.98	0.97	1.02	1.06	1.03
LU	AIC	U-MIDAS	0	76	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
LU	MMA	U-MIDAS	0	76	0.95	0.78	0.94	0.84	0.96	0.96	0.96	0.92	0.91
LU	Mean group	U-MIDAS	0	76	1.18	0.97	0.91	0.97	0.94	0.92	0.99	0.96	0.96

Table OA.7 continued from previous page

					Weekly position								
Country	Averaging	Estimator	h	T	-12	-10	-8	-6	-4	-2	0	$+2$	$+4$
PT	Individual	U-MIDAS	0	44	1.18	0.91	1.20	0.80	2.50	0.57	0.72	0.56	0.71
PT	minMSE	U-MIDAS	0	44	0.86	0.88	0.92	0.95	0.87	0.91	0.88	0.93	0.92
PT	AIC	U-MIDAS	0	44	0.84	0.92	0.91	0.93	0.91	0.94	0.97	0.97	0.91
PT	MMA	U-MIDAS	0	44	0.71	0.98	0.63	0.78	0.17	0.82	0.76	0.89	0.72
PT	Mean group	U-MIDAS	0	44	0.73	0.77	0.60	0.66	0.30	0.79	0.77	0.95	0.62
PT	Individual	U-MIDAS	0	60	0.63	0.67	0.83	0.89	2.98	0.41	0.60	0.54	0.59
PT	minMSE	U-MIDAS	0	60	0.87	0.88	0.90	0.87	0.90	0.89	0.86	0.92	0.91
PT	AIC	U-MIDAS	0	60	0.97	0.95	0.99	0.97	0.99	0.97	0.97	0.96	0.98
PT	MMA	U-MIDAS	0	60	0.72	0.90	0.78	0.76	0.18	0.88	0.69	0.73	0.60
PT	Mean group	U-MIDAS	0	60	0.75	0.79	0.80	0.55	0.28	0.79	0.68	0.92	0.78
PT	Individual	U-MIDAS	0	76	0.45	0.41	0.57	0.47	0.48	0.33	0.38	0.33	0.31
PT	minMSE	U-MIDAS	0	76	0.86	0.84	0.90	0.86	0.84	0.76	0.90	0.91	0.96
PT	AIC	U-MIDAS	0	76	0.95	0.95	0.97	0.97	0.97	0.99	0.99	0.98	0.99
PT	MMA	U-MIDAS	0	76	0.46	0.87	0.86	0.54	0.58	0.65	0.56	0.76	0.56
PT	Mean group	U-MIDAS	0	76	0.51	0.59	0.64	0.60	0.68	0.73	0.81	0.88	0.97
UK	Individual	U-MIDAS	0	44	0.46	0.42	0.47	0.28	0.34	0.31	0.25	0.27	0.24
UK	minMSE	U-MIDAS	0	44	1.00	0.96	0.95	0.93	0.81	0.91	0.84	0.85	0.74
UK	AIC	U-MIDAS	0	44	0.92	0.91	0.75	0.87	0.84	0.85	0.88	0.84	0.73
UK	MMA	U-MIDAS	0	44	0.79	0.97	2.52	1.46	1.03	1.26	1.24	1.21	1.52
UK	Mean group	U-MIDAS	0	44	1.21	0.99	1.86	1.71	2.24	2.12	2.53	2.13	4.33
UK	Individual	U-MIDAS	0	60	0.23	0.23	0.23	0.12	0.17	0.16	0.14	0.14	0.14
UK	minMSE	U-MIDAS	0	60	0.95	0.92	0.97	0.99	1.14	1.03	0.98	1.02	1.03
UK	AIC	U-MIDAS	0	60	0.91	0.89	0.90	0.93	0.96	0.94	0.96	0.95	0.92
UK	MMA	U-MIDAS	0	60	1.25	0.58	1.24	1.38	1.39	1.16	1.32	1.35	1.07
UK	Mean group	U-MIDAS	0	60	1.10	0.80	1.18	2.44	3.20	2.85	2.44	2.32	2.21
UK	Individual	U-MIDAS	0	76	0.04	0.05	0.06	0.04	0.05	0.05	0.05	0.04	0.05
UK	minMSE	U-MIDAS	0	76	0.90	0.91	0.99	0.95	1.06	0.99	0.87	0.88	0.91
UK	AIC	U-MIDAS	0	76	0.90	0.88	0.93	0.95	1.02	1.00	0.94	0.91	0.90
UK	MMA	U-MIDAS	0	76	1.76	1.31	1.38	1.35	1.87	1.02	1.58	1.40	0.85
UK	Mean group	U-MIDAS	0	76	2.54	1.60	2.16	3.69	4.39	3.94	3.12	2.59	2.65
AT	Individual	Bridge	0	44	0.44	0.42	0.39	0.42	0.41	0.33	0.28	0.31	0.36
AT	minMSE	Bridge	0	44	0.80	0.83	0.67	0.99	0.84	0.97	1.00	0.86	0.99
AT	AIC	Bridge	0	44	0.88	0.91	0.74	1.00	0.88	1.05	1.12	0.95	1.06
AT	MMA	Bridge	0	44	2.54	2.58	2.06	3.13	2.69	3.30	3.77	3.19	3.50
AT	Mean group	Bridge	0	44	0.84	0.87	0.71	0.98	0.86	0.97	1.02	0.88	1.04
AT	Individual	Bridge	0	60	0.22	0.20	0.19	0.28	0.32	0.25	0.23	0.26	0.33
AT	minMSE	Bridge	0	60	0.71	0.82	0.59	0.98	0.89	1.16	1.08	0.95	1.03
AT	AIC	Bridge	0	60	0.70	0.81	0.57	0.98	0.88	1.16	1.08	0.94	1.01

Table OA.7 continued from previous page

					Weekly position								
Country	Averaging	Estimator	h	T	-12	-10	-8	-6	-4	-2	0	$+2$	$+4$
AT	MMA	Bridge	0	60	1.25	1.50	1.56	1.44	1.62	1.66	1.98	2.23	2.81
AT	Mean group	Bridge	0	60	0.71	0.82	0.59	0.89	0.84	1.01	0.95	0.86	1.00
AT	Individual	Bridge	0	76	0.19	0.18	0.20	0.29	0.34	0.24	0.23	0.27	0.33
AT	minMSE	Bridge	0	76	0.77	0.88	0.66	0.99	0.95	1.32	1.10	1.10	1.21
AT	AIC	Bridge	0	76	0.78	0.88	0.64	0.97	0.93	1.30	1.09	1.08	1.18
AT	MMA	Bridge	0	76	1.70	1.83	1.30	1.59	1.58	2.21	1.89	2.03	2.54
AT	Mean group	Bridge	0	76	0.76	0.86	0.63	0.91	0.92	1.18	0.98	1.02	1.19
BE	Individual	Bridge	0	44	0.77	0.44	0.76	0.25	0.90	0.52	0.54	0.33	0.57
BE	minMSE	Bridge	0	44	0.73	0.68	0.39	0.36	0.42	0.51	0.32	0.44	0.71
BE	AIC	Bridge	0	44	0.73	0.68	0.44	0.31	0.45	0.55	0.34	0.44	0.79
BE	MMA	Bridge	0	44	4.36	4.11	3.46	5.48	3.99	5.70	3.55	4.66	8.47
BE	Mean group	Bridge	0	44	0.96	0.93	0.75	0.93	0.84	1.05	0.62	0.81	1.53
BE	Individual	Bridge	0	60	0.58	0.37	0.97	0.21	1.06	0.56	0.55	0.37	0.76
BE	minMSE	Bridge	0	60	0.51	0.65	0.36	0.30	0.46	0.44	0.21	0.37	0.58
BE	AIC	Bridge	0	60	0.49	0.60	0.37	0.23	0.47	0.46	0.22	0.36	0.64
BE	MMA	Bridge	0	60	2.29	3.05	2.30	3.56	3.52	3.74	1.67	2.83	4.81
BE	Mean group	Bridge	0	60	0.65	0.81	0.59	0.71	0.82	0.81	0.38	0.61	1.11
BE	Individual	Bridge	0	76	0.67	0.46	1.36	0.26	1.56	0.75	0.80	0.51	1.17
BE	minMSE	Bridge	0	76	0.25	0.42	0.23	0.23	0.51	0.60	0.26	0.35	0.41
BE	AIC	Bridge	0	76	0.24	0.39	0.24	0.19	0.54	0.63	0.27	0.34	0.46
BE	MMA	Bridge	0	76	0.12	0.42	0.48	1.67	2.03	2.75	1.06	1.04	1.68
BE	Mean group	Bridge	0	76	0.28	0.47	0.36	0.49	0.87	1.01	0.43	0.54	0.76
DE	Individual	Bridge	0	44	0.81	0.80	0.77	0.80	0.79	0.69	0.67	0.66	0.72
DE	minMSE	Bridge	0	44	1.07	1.07	0.99	1.17	1.15	1.26	1.24	1.06	1.21
DE	AIC	Bridge	0	44	1.55	1.50	1.41	1.46	1.45	1.71	1.69	1.44	1.59
DE	MMA	Bridge	0	44	2.35	2.34	2.34	2.87	2.57	2.65	2.56	2.68	2.94
DE	Mean group	Bridge	0	44	1.11	1.11	1.06	1.15	1.13	1.20	1.16	1.04	1.21
DE	Individual	Bridge	0	60	0.35	0.36	0.36	0.37	0.38	0.34	0.34	0.34	0.37
DE	minMSE	Bridge	0	60	0.64	0.56	0.53	0.70	0.78	0.84	0.84	0.80	0.86
DE	AIC	Bridge	0	60	0.63	0.55	0.51	0.72	0.79	0.87	0.86	0.82	0.88
DE	MMA	Bridge	0	60	1.10	0.93	1.00	0.87	1.15	1.26	1.28	1.61	1.87
DE	Mean group	Bridge	0	60	0.63	0.55	0.54	0.66	0.74	0.78	0.79	0.75	0.83
DE	Individual	Bridge	0	76	0.27	0.29	0.30	0.33	0.33	0.29	0.29	0.31	0.35
DE	minMSE	Bridge	0	76	0.61	0.48	0.46	0.66	0.72	0.76	0.73	0.72	0.81
DE	AIC	Bridge	0	76	0.61	0.48	0.46	0.66	0.73	0.77	0.74	0.72	0.79
DE	MMA	Bridge	0	76	1.11	0.82	0.83	0.82	0.95	0.92	0.73	1.00	1.30
DE	Mean group	Bridge	0	76	0.60	0.48	0.46	0.63	0.70	0.71	0.68	0.68	0.79
EL	Individual	Bridge	0	44	6.21	6.18	5.75	6.01	6.38	6.39	5.82	6.01	5.84

Table OA.7 continued from previous page

					Weekly position								
Country	Averaging	Estimator	h	T	-12	-10	-8	-6	-4	-2	0	$+2$	$+4$
EL	minMSE	Bridge	0	44	0.41	0.40	0.38	0.35	0.44	0.43	0.47	0.47	0.46
EL	AIC	Bridge	0	44	0.44	0.45	0.43	0.37	0.47	0.46	0.51	0.52	0.51
EL	MMA	Bridge	0	44	0.51	0.51	0.50	0.47	0.58	0.58	0.67	0.66	0.66
EL	Mean group	Bridge	0	44	0.41	0.41	0.38	0.35	0.43	0.43	0.48	0.47	0.47
EL	Individual	Bridge	0	60	5.50	5.49	5.12	5.16	5.39	5.53	5.26	5.15	5.00
EL	minMSE	Bridge	0	60	0.47	0.49	0.56	0.56	0.57	0.55	0.53	0.56	0.55
EL	AIC	Bridge	0	60	0.56	0.58	0.67	0.66	0.66	0.64	0.63	0.66	0.66
EL	MMA	Bridge	0	60	0.39	0.41	0.47	0.56	0.56	0.54	0.55	0.58	0.59
EL	Mean group	Bridge	0	60	0.49	0.51	0.58	0.53	0.54	0.52	0.50	0.53	0.53
EL	Individual	Bridge	0	76	0.76	0.74	0.60	0.91	0.91	0.92	1.00	0.99	1.09
EL	minMSE	Bridge	0	76	0.13	0.13	0.14	0.28	0.30	0.29	0.32	0.33	0.38
EL	AIC	Bridge	0	76	0.12	0.13	0.13	0.31	0.34	0.32	0.36	0.36	0.42
EL	MMA	Bridge	0	76	0.17	0.18	0.20	0.34	0.38	0.36	0.41	0.42	0.51
EL	Mean group	Bridge	0	76	0.13	0.13	0.14	0.27	0.29	0.28	0.31	0.31	0.38
ES	Individual	Bridge	0	44	0.66	0.67	0.64	0.38	0.36	0.35	0.32	0.32	0.33
ES	minMSE	Bridge	0	44	0.49	0.54	0.68	1.13	0.88	0.98	1.10	1.17	1.06
ES	AIC	Bridge	0	44	0.48	0.54	0.69	1.16	0.93	1.02	1.13	1.22	1.11
ES	MMA	Bridge	0	44	1.56	1.71	2.28	5.37	4.32	4.79	5.00	5.12	4.48
ES	Mean group	Bridge	0	44	0.50	0.56	0.72	1.27	0.99	1.09	1.20	1.27	1.21
ES	Individual	Bridge	0	60	0.16	0.16	0.16	0.08	0.09	0.08	0.07	0.06	0.07
ES	minMSE	Bridge	0	60	0.55	0.57	0.48	0.58	0.57	0.73	0.80	0.91	0.98
ES	AIC	Bridge	0	60	0.51	0.53	0.45	0.53	0.53	0.68	0.74	0.82	0.87
ES	MMA	Bridge	0	60	1.32	1.33	1.16	2.63	3.17	3.07	3.91	4.10	4.61
ES	Mean group	Bridge	0	60	0.71	0.76	0.64	0.88	0.86	1.05	1.17	1.35	1.53
ES	Individual	Bridge	0	76	0.09	0.08	0.10	0.06	0.06	0.06	0.06	0.05	0.07
ES	minMSE	Bridge	0	76	0.40	0.44	0.39	0.54	0.53	0.72	0.75	0.70	0.93
ES	AIC	Bridge	0	76	0.42	0.48	0.40	0.54	0.53	0.72	0.72	0.72	0.89
ES	MMA	Bridge	0	76	0.33	0.37	0.31	0.84	1.07	1.40	1.76	1.66	1.97
ES	Mean group	Bridge	0	76	0.47	0.56	0.49	0.69	0.68	0.89	0.98	0.85	1.26
FI	Individual	Bridge	0	44	1.98	1.97	1.81	1.85	1.70	1.74	1.68	1.82	1.95
FI	minMSE	Bridge	0	44	0.78	0.82	0.83	0.81	0.82	1.20	1.06	1.16	1.26
FI	AIC	Bridge	0	44	1.01	1.05	1.10	0.91	0.94	1.36	1.21	1.30	1.38
FI	MMA	Bridge	0	44	0.90	0.96	1.16	1.20	0.80	1.07	1.01	1.04	1.25
FI	Mean group	Bridge	0	44	0.75	0.79	0.83	0.76	0.78	1.13	0.99	1.07	1.16
FI	Individual	Bridge	0	60	0.64	0.62	0.59	0.65	0.69	0.54	0.54	0.56	0.65
FI	minMSE	Bridge	0	60	0.57	0.50	0.34	0.45	0.39	0.65	0.69	0.69	0.74
FI	AIC	Bridge	0	60	0.56	0.48	0.34	0.45	0.39	0.69	0.74	0.72	0.74
FI	MMA	Bridge	0	60	0.57	0.50	0.36	0.45	0.48	0.73	0.76	0.68	0.82

Table OA.7 continued from previous page

					Weekly position								
Country	Averaging	Estimator	h	T	-12	-10	-8	-6	-4	-2	0	$+2$	$+4$
FI	Mean group	Bridge	0	60	0.56	0.49	0.35	0.44	0.38	0.64	0.68	0.67	0.71
FI	Individual	Bridge	0	76	0.38	0.38	0.36	0.33	0.31	0.39	0.42	0.41	0.51
FI	minMSE	Bridge	0	76	0.70	0.50	0.31	0.76	0.65	0.60	0.62	0.70	0.76
FI	AIC	Bridge	0	76	0.71	0.51	0.32	0.78	0.67	0.60	0.63	0.70	0.72
FI	MMA	Bridge	0	76	1.02	0.73	0.43	1.28	1.34	1.05	1.01	1.04	1.20
FI	Mean group	Bridge	0	76	0.69	0.50	0.31	0.75	0.64	0.59	0.61	0.68	0.74
FR	Individual	Bridge	0	44	0.22	0.21	0.20	0.18	0.16	0.15	0.14	0.14	0.14
FR	minMSE	Bridge	0	44	0.91	0.93	0.93	0.95	1.09	1.23	1.00	0.97	0.94
FR	AIC	Bridge	0	44	0.94	0.97	0.96	0.97	1.13	1.26	1.02	0.98	0.94
FR	MMA	Bridge	0	44	4.50	4.87	5.42	7.22	7.48	8.37	7.25	7.58	7.42
FR	Mean group	Bridge	0	44	1.08	1.13	1.17	1.18	1.30	1.48	1.20	1.20	1.19
FR	Individual	Bridge	0	60	0.11	0.11	0.11	0.12	0.11	0.10	0.10	0.10	0.10
FR	minMSE	Bridge	0	60	0.70	0.72	0.73	0.79	0.88	1.04	1.06	0.94	0.88
FR	AIC	Bridge	0	60	0.69	0.70	0.72	0.78	0.87	1.04	1.05	0.93	0.88
FR	MMA	Bridge	0	60	2.28	2.57	2.97	2.96	3.76	4.33	4.87	4.65	4.58
FR	Mean group	Bridge	0	60	0.75	0.77	0.81	0.82	0.90	1.04	1.08	0.98	0.94
FR	Individual	Bridge	0	76	0.12	0.12	0.12	0.11	0.10	0.10	0.10	0.10	0.10
FR	minMSE	Bridge	0	76	0.76	0.76	0.82	0.91	1.09	1.20	1.23	1.14	1.10
FR	AIC	Bridge	0	76	0.77	0.77	0.83	0.92	1.11	1.22	1.26	1.16	1.11
FR	MMA	Bridge	0	76	1.65	1.92	1.68	3.08	4.28	4.69	4.64	5.00	4.73
FR	Mean group	Bridge	0	76	0.78	0.78	0.86	0.90	1.05	1.17	1.19	1.11	1.12
IE	Individual	Bridge	0	44	12.25	12.26	12.16	11.98	11.95	11.89	11.82	11.81	11.99
IE	minMSE	Bridge	0	44	1.05	1.04	0.90	1.00	0.94	0.95	0.94	0.95	1.01
IE	AIC	Bridge	0	44	1.03	1.01	0.87	0.90	0.85	0.85	0.84	0.85	0.91
IE	MMA	Bridge	0	44	1.07	1.05	0.91	1.36	1.28	1.30	1.29	1.29	1.34
IE	Mean group	Bridge	0	44	1.05	1.03	0.90	1.16	1.10	1.10	1.10	1.10	1.17
IE	Individual	Bridge	0	60	15.13	15.13	14.99	14.43	14.45	14.37	14.25	14.24	14.45
IE	minMSE	Bridge	0	60	1.11	1.10	1.00	0.99	0.93	0.94	0.94	0.94	1.00
IE	AIC	Bridge	0	60	1.06	1.06	0.96	0.86	0.81	0.82	0.81	0.81	0.87
IE	MMA	Bridge	0	60	1.11	1.10	1.01	1.38	1.30	1.31	1.58	1.59	1.38
IE	Mean group	Bridge	0	60	1.10	1.09	0.99	1.18	1.11	1.11	1.11	1.11	1.18
IE	Individual	Bridge	0	76	24.21	24.20	23.98	22.97	23.01	22.89	22.74	22.71	23.03
IE	minMSE	Bridge	0	76	1.18	1.18	1.11	1.05	1.00	1.00	0.99	1.00	1.05
IE	AIC	Bridge	0	76	1.15	1.15	1.07	0.92	0.87	0.87	0.86	0.86	0.91
IE	MMA	Bridge	0	76	1.30	1.29	1.22	1.81	1.71	1.72	1.71	1.72	1.80
IE	Mean group	Bridge	0	76	1.17	1.16	1.10	1.26	1.19	1.19	1.18	1.19	1.25
IT	Individual	Bridge	0	44	0.63	0.63	0.59	0.45	0.44	0.41	0.37	0.36	0.38
IT	minMSE	Bridge	0	44	0.74	0.82	1.05	0.82	0.88	1.37	1.33	1.42	1.65

Table OA.7 continued from previous page

					Weekly position								
Country	Averaging	Estimator	h	T	-12	-10	-8	-6	-4	-2	0	$+2$	$+4$
IT	AIC	Bridge	0	44	0.78	0.87	1.14	0.82	0.89	1.39	1.38	1.48	1.71
IT	MMA	Bridge	0	44	1.62	1.78	2.28	2.91	3.06	5.29	5.16	5.61	6.11
IT	Mean group	Bridge	0	44	0.81	0.90	1.18	0.94	1.01	1.62	1.60	1.75	2.01
IT	Individual	Bridge	0	60	0.19	0.19	0.17	0.13	0.14	0.12	0.11	0.10	0.11
IT	minMSE	Bridge	0	60	0.71	0.78	0.72	0.52	0.46	0.64	0.60	0.82	0.85
IT	AIC	Bridge	0	60	0.63	0.69	0.64	0.45	0.40	0.56	0.53	0.70	0.73
IT	MMA	Bridge	0	60	1.76	1.82	1.72	2.46	2.07	3.17	3.19	4.93	5.10
IT	Mean group	Bridge	0	60	0.80	0.88	0.79	0.60	0.53	0.75	0.70	0.98	1.01
IT	Individual	Bridge	0	76	0.06	0.06	0.06	0.06	0.07	0.06	0.06	0.05	0.07
IT	minMSE	Bridge	0	76	0.32	0.54	0.23	0.37	0.33	0.54	0.44	0.63	0.66
IT	AIC	Bridge	0	76	0.33	0.56	0.24	0.39	0.34	0.57	0.45	0.67	0.70
IT	MMA	Bridge	0	76	2.70	4.31	1.78	3.48	2.73	5.04	3.92	7.84	6.82
IT	Mean group	Bridge	0	76	0.38	0.66	0.26	0.41	0.35	0.61	0.50	0.76	0.76
LU	Individual	Bridge	0	44	1.76	1.74	1.83	1.86	1.89	1.93	2.03	2.00	2.07
LU	minMSE	Bridge	0	44	0.52	0.58	0.52	0.53	0.56	0.63	0.64	0.60	0.64
LU	AIC	Bridge	0	44	0.46	0.52	0.47	0.52	0.55	0.62	0.63	0.57	0.60
LU	MMA	Bridge	0	44	0.89	1.01	0.95	0.89	0.89	0.93	0.95	0.86	0.98
LU	Mean group	Bridge	0	44	0.50	0.56	0.52	0.54	0.58	0.64	0.65	0.61	0.66
LU	Individual	Bridge	0	60	1.20	1.19	1.24	1.29	1.30	1.17	1.21	1.30	1.38
LU	minMSE	Bridge	0	60	0.76	0.74	0.62	0.81	0.78	0.90	0.95	0.94	0.94
LU	AIC	Bridge	0	60	0.65	0.65	0.53	0.78	0.76	0.86	0.90	0.87	0.86
LU	MMA	Bridge	0	60	0.97	0.97	0.84	0.89	0.84	0.96	1.06	1.08	1.19
LU	Mean group	Bridge	0	60	0.73	0.73	0.61	0.86	0.82	0.95	1.00	0.99	0.99
LU	Individual	Bridge	0	76	1.37	1.37	1.41	1.39	1.46	1.40	1.46	1.45	1.50
LU	minMSE	Bridge	0	76	1.07	0.87	0.77	0.94	0.85	0.93	0.97	1.01	1.01
LU	AIC	Bridge	0	76	0.88	0.71	0.64	0.97	0.89	0.94	0.97	1.00	1.00
LU	MMA	Bridge	0	76	1.27	1.02	0.90	1.12	0.99	1.12	1.15	1.22	1.23
LU	Mean group	Bridge	0	76	1.01	0.81	0.72	1.02	0.92	1.00	1.04	1.08	1.07
PT	Individual	Bridge	0	44	0.61	0.63	0.61	0.54	0.48	0.52	0.49	0.53	0.53
PT	minMSE	Bridge	0	44	0.52	0.67	0.50	0.64	0.18	0.85	0.66	0.91	0.73
PT	AIC	Bridge	0	44	0.57	0.74	0.56	0.68	0.19	0.90	0.73	0.97	0.80
PT	MMA	Bridge	0	44	1.27	1.65	1.20	1.87	0.60	2.32	2.09	2.29	1.75
PT	Mean group	Bridge	0	44	0.56	0.74	0.55	0.68	0.19	0.88	0.71	0.96	0.79
PT	Individual	Bridge	0	60	0.51	0.53	0.53	0.40	0.38	0.37	0.34	0.39	0.41
PT	minMSE	Bridge	0	60	0.67	0.66	0.53	0.41	0.11	0.82	0.54	0.67	0.64
PT	AIC	Bridge	0	60	0.64	0.64	0.52	0.40	0.11	0.78	0.55	0.66	0.64
PT	MMA	Bridge	0	60	1.13	1.14	1.01	0.68	0.27	1.26	1.25	1.25	1.35
PT	Mean group	Bridge	0	60	0.73	0.71	0.58	0.43	0.12	0.83	0.59	0.70	0.69

Table OA.7 continued from previous page

					Weekly position								
Country	Averaging	Estimator	h	T	-12	-10	-8	-6	-4	-2	0	$+2$	$+4$
PT	Individual	Bridge	0	76	0.27	0.27	0.26	0.25	0.26	0.23	0.24	0.23	0.24
PT	minMSE	Bridge	0	76	0.40	0.45	0.33	0.44	0.45	0.57	0.56	0.61	0.64
PT	AIC	Bridge	0	76	0.39	0.44	0.32	0.45	0.45	0.58	0.56	0.62	0.66
PT	MMA	Bridge	0	76	0.44	0.48	0.41	0.49	0.54	0.79	0.97	0.99	1.16
PT	Mean group	Bridge	0	76	0.40	0.44	0.33	0.41	0.42	0.54	0.56	0.58	0.62
UK	Individual	Bridge	0	44	0.32	0.31	0.28	0.22	0.23	0.22	0.20	0.21	0.21
UK	minMSE	Bridge	0	44	0.66	0.69	0.70	0.77	0.64	0.69	0.73	0.72	1.13
UK	AIC	Bridge	0	44	0.67	0.72	0.60	0.78	0.65	0.69	0.73	0.72	0.98
UK	MMA	Bridge	0	44	2.34	2.52	2.86	5.14	3.81	4.08	4.31	4.21	7.18
UK	Mean group	Bridge	0	44	0.77	0.82	0.89	1.01	0.87	0.95	1.04	1.00	1.74
UK	Individual	Bridge	0	60	0.09	0.08	0.07	0.15	0.16	0.15	0.15	0.15	0.16
UK	minMSE	Bridge	0	60	0.35	0.33	0.30	1.03	0.87	0.81	0.83	0.88	0.95
UK	AIC	Bridge	0	60	0.36	0.34	0.31	1.06	0.88	0.82	0.85	0.90	0.97
UK	MMA	Bridge	0	60	1.31	1.27	1.52	2.49	2.78	2.41	1.94	1.84	2.48
UK	Mean group	Bridge	0	60	0.38	0.35	0.34	0.91	0.89	0.81	0.79	0.82	0.93
UK	Individual	Bridge	0	76	0.03	0.03	0.03	0.04	0.05	0.04	0.04	0.04	0.04
UK	minMSE	Bridge	0	76	0.71	0.54	0.41	0.90	0.88	0.79	0.68	0.69	0.75
UK	AIC	Bridge	0	76	0.74	0.57	0.43	0.83	0.83	0.77	0.65	0.62	0.75
UK	MMA	Bridge	0	76	3.62	2.84	2.82	7.49	8.47	7.69	7.49	6.83	5.20
UK	Mean group	Bridge	0	76	0.77	0.59	0.47	0.83	0.95	0.86	0.70	0.57	0.75
AT	Individual	U-MIDAS	1	44	0.78	0.80	0.78	0.65	0.63	0.60	0.64	0.61	0.70
AT	minMSE	U-MIDAS	1	44	0.90	0.89	0.92	1.04	1.00	1.00	0.97	0.93	0.94
AT	AIC	U-MIDAS	1	44	0.88	0.85	0.87	0.96	0.96	0.97	0.93	0.93	0.90
AT	MMA	U-MIDAS	1	44	1.14	1.06	0.95	1.12	1.37	1.54	0.98	1.03	1.84
AT	Mean group	U-MIDAS	1	44	0.80	0.73	0.86	0.96	0.89	0.97	0.89	0.97	1.16
AT	Individual	U-MIDAS	1	60	0.60	0.56	0.48	0.51	0.52	0.49	0.48	0.42	0.53
AT	minMSE	U-MIDAS	1	60	1.03	1.04	0.97	1.04	1.04	1.06	1.11	1.09	1.01
AT	AIC	U-MIDAS	1	60	0.88	0.82	0.91	0.97	0.97	0.96	0.98	0.97	0.94
AT	MMA	U-MIDAS	1	60	0.70	0.65	0.70	0.76	0.89	0.81	1.25	0.97	1.52
AT	Mean group	U-MIDAS	1	60	0.68	0.62	0.79	0.80	0.82	0.83	0.93	0.98	1.18
AT	Individual	U-MIDAS	1	76	0.66	0.61	0.43	0.57	0.60	0.49	0.53	0.49	0.62
AT	minMSE	U-MIDAS	1	76	1.02	1.04	1.05	1.06	1.07	1.11	1.10	1.06	1.04
AT	AIC	U-MIDAS	1	76	0.86	0.86	0.99	1.00	0.99	0.99	0.99	1.00	0.99
AT	MMA	U-MIDAS	1	76	0.77	0.75	0.82	0.98	1.00	0.95	1.05	1.04	1.39
AT	Mean group	U-MIDAS	1	76	0.81	0.75	1.00	0.97	0.98	1.02	1.01	1.05	1.17
BE	Individual	U-MIDAS	1	44	1.00	0.93	1.79	1.15	2.98	0.88	1.29	1.00	2.61
BE	minMSE	U-MIDAS	1	44	0.93	0.93	0.77	0.72	0.97	1.15	1.11	1.07	0.88
BE	AIC	U-MIDAS	1	44	0.71	0.69	0.92	1.01	0.93	1.11	1.01	1.03	0.91

Table OA.7 continued from previous page

					Weekly position								
Country	Averaging	Estimator	h	T	-12	-10	-8	-6	-4	-2	0	$+2$	$+4$
BE	MMA	U-MIDAS	1	44	1.91	1.56	0.76	1.52	1.12	2.07	1.52	1.50	1.44
BE	Mean group	U-MIDAS	1	44	1.64	1.44	0.86	1.24	1.07	2.34	2.38	2.51	2.38
BE	Individual	U-MIDAS	1	60	0.62	0.89	1.68	0.99	2.48	0.89	1.26	1.01	4.94
BE	minMSE	U-MIDAS	1	60	1.06	0.48	0.86	0.98	1.06	1.27	1.07	1.05	0.95
BE	AIC	U-MIDAS	1	60	0.87	0.89	1.10	1.06	0.99	1.18	1.10	1.07	0.83
BE	MMA	U-MIDAS	1	60	0.75	1.17	0.67	1.53	1.29	0.99	2.78	2.34	1.71
BE	Mean group	U-MIDAS	1	60	2.48	1.28	1.09	1.36	1.42	2.22	2.86	2.70	1.64
BE	Individual	U-MIDAS	1	76	0.83	0.78	2.07	1.11	2.20	1.05	2.41	1.63	7.92
BE	minMSE	U-MIDAS	1	76	0.80	1.01	0.90	0.91	1.14	1.20	1.02	1.02	0.95
BE	AIC	U-MIDAS	1	76	1.18	1.08	1.12	1.13	1.15	1.12	0.97	1.05	0.89
BE	MMA	U-MIDAS	1	76	0.77	0.93	0.78	1.73	2.42	1.10	1.89	1.99	0.99
BE	Mean group	U-MIDAS	1	76	2.27	1.77	1.09	1.46	1.92	1.95	1.61	2.03	1.16
DE	Individual	U-MIDAS	1	44	1.21	1.23	1.34	1.22	0.98	1.07	0.81	0.81	0.82
DE	minMSE	U-MIDAS	1	44	0.70	0.73	0.75	0.80	0.94	0.94	1.01	1.01	1.01
DE	AIC	U-MIDAS	1	44	0.97	0.96	0.94	0.94	1.00	1.00	1.02	1.02	0.99
DE	MMA	U-MIDAS	1	44	0.86	0.87	0.89	0.91	1.32	1.31	1.12	1.16	1.37
DE	Mean group	U-MIDAS	1	44	0.79	0.76	0.63	0.70	0.79	0.78	0.96	1.05	1.25
DE	Individual	U-MIDAS	1	60	0.69	0.67	0.69	0.69	0.69	0.71	0.62	0.74	0.79
DE	minMSE	U-MIDAS	1	60	0.95	0.91	0.62	1.01	0.98	0.99	1.01	1.00	1.04
DE	AIC	U-MIDAS	1	60	0.99	0.99	0.99	0.97	0.97	0.96	0.99	0.99	0.98
DE	MMA	U-MIDAS	1	60	0.96	1.26	0.86	0.82	0.74	0.69	1.05	1.37	1.25
DE	Mean group	U-MIDAS	1	60	0.71	0.63	0.58	0.66	0.63	0.66	0.82	0.86	1.02
DE	Individual	U-MIDAS	1	76	0.42	0.41	0.50	0.53	0.57	0.58	0.57	0.76	0.80
DE	minMSE	U-MIDAS	1	76	1.03	0.95	0.92	1.12	1.07	1.08	1.06	1.06	1.08
DE	AIC	U-MIDAS	1	76	0.99	0.99	0.99	1.00	1.00	1.00	1.00	1.00	1.00
DE	MMA	U-MIDAS	1	76	1.24	0.93	0.92	0.98	0.98	0.93	1.13	1.55	1.21
DE	Mean group	U-MIDAS	1	76	1.04	0.99	0.85	1.07	0.95	0.94	1.01	1.00	1.11
EL	Individual	U-MIDAS	1	44	10.17	10.33	10.47	10.16	14.72	15.66	11.98	11.73	12.03
EL	minMSE	U-MIDAS	1	44	0.61	0.67	0.73	0.72	0.50	0.49	0.51	0.47	0.49
EL	AIC	U-MIDAS	1	44	1.00	1.00	1.00	1.00	0.98	0.98	0.98	0.98	1.00
EL	MMA	U-MIDAS	1	44	0.66	0.65	0.52	0.55	0.43	0.42	0.47	0.46	0.48
EL	Mean group	U-MIDAS	1	44	0.56	0.54	0.53	0.54	0.40	0.39	0.46	0.46	0.38
EL	Individual	U-MIDAS	1	60	6.05	5.83	5.86	6.29	8.91	9.40	7.94	7.70	6.38
EL	minMSE	U-MIDAS	1	60	0.54	0.56	0.61	0.73	0.58	0.56	0.69	0.67	0.78
EL	AIC	U-MIDAS	1	60	1.13	1.13	1.14	1.00	0.99	0.97	1.01	0.99	1.02
EL	MMA	U-MIDAS	1	60	0.58	0.70	0.63	0.72	0.69	0.65	0.66	0.78	0.76
EL	Mean group	U-MIDAS	1	60	0.55	0.56	0.53	0.52	0.41	0.41	0.41	0.41	0.42
EL	Individual	U-MIDAS	1	76	5.43	5.22	5.03	5.41	7.17	7.41	5.86	5.59	4.82

Table OA.7 continued from previous page

					Weekly position								
Country	Averaging	Estimator	h	T	-12	-10	-8	-6	-4	-2	0	$+2$	$+4$
EL	minMSE	U-MIDAS	1	76	0.48	0.48	0.32	0.67	0.61	0.61	0.67	0.68	0.68
EL	AIC	U-MIDAS	1	76	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
EL	MMA	U-MIDAS	1	76	0.37	0.67	0.33	0.51	0.68	0.58	0.33	0.87	0.26
EL	Mean group	U-MIDAS	1	76	0.22	0.23	0.28	0.29	0.24	0.24	0.22	0.22	0.19
ES	Individual	U-MIDAS	1	44	1.42	1.43	1.50	2.44	1.91	1.72	1.65	1.61	1.42
ES	minMSE	U-MIDAS	1	44	0.84	0.85	0.82	0.67	0.83	0.81	0.76	0.77	0.85
ES	AIC	U-MIDAS	1	44	0.98	0.95	0.91	0.71	0.91	0.91	0.88	0.87	0.93
ES	MMA	U-MIDAS	1	44	1.67	1.48	0.94	0.66	0.70	0.75	0.89	0.89	0.97
ES	Mean group	U-MIDAS	1	44	1.08	1.03	0.94	0.53	0.65	0.70	0.70	0.71	0.87
ES	Individual	U-MIDAS	1	60	1.43	1.52	1.52	1.52	1.56	1.41	1.33	1.48	1.52
ES	minMSE	U-MIDAS	1	60	0.92	0.91	0.85	0.93	0.92	0.94	0.94	0.93	0.94
ES	AIC	U-MIDAS	1	60	0.96	0.96	0.92	0.97	0.96	0.97	0.95	0.94	0.95
ES	MMA	U-MIDAS	1	60	1.01	0.94	0.97	0.87	0.86	0.92	0.97	1.02	1.05
ES	Mean group	U-MIDAS	1	60	0.85	0.83	0.86	0.77	0.78	0.82	0.90	0.93	1.01
ES	Individual	U-MIDAS	1	76	2.11	2.22	2.08	1.88	1.93	1.93	1.91	2.12	2.13
ES	minMSE	U-MIDAS	1	76	0.92	0.91	0.91	0.96	0.95	0.96	0.96	0.95	0.96
ES	AIC	U-MIDAS	1	76	0.97	0.97	0.97	1.00	0.99	0.99	0.98	0.97	0.98
ES	MMA	U-MIDAS	1	76	0.89	0.81	0.87	0.99	0.93	0.93	1.00	1.04	1.06
ES	Mean group	U-MIDAS	1	76	0.82	0.78	0.84	0.87	0.83	0.85	0.92	0.91	1.00
FI	Individual	U-MIDAS	1	44	3.92	3.70	3.20	3.07	2.53	2.74	2.55	2.38	2.20
FI	minMSE	U-MIDAS	1	44	0.71	0.69	0.75	0.75	0.88	0.75	0.70	0.80	0.93
FI	AIC	U-MIDAS	1	44	0.90	0.90	0.92	1.01	0.99	0.99	1.00	1.00	1.00
FI	MMA	U-MIDAS	1	44	0.90	0.81	0.87	0.82	0.82	0.83	0.93	0.75	1.12
FI	Mean group	U-MIDAS	1	44	0.50	0.50	0.56	0.59	0.66	0.68	0.69	0.58	0.64
FI	Individual	U-MIDAS	1	60	1.22	1.17	1.08	1.05	1.27	1.16	1.02	1.17	1.60
FI	minMSE	U-MIDAS	1	60	0.73	0.74	0.76	0.91	0.82	0.93	0.99	0.86	0.91
FI	AIC	U-MIDAS	1	60	0.83	0.83	0.97	1.00	1.00	1.01	1.00	1.00	1.00
FI	MMA	U-MIDAS	1	60	0.69	0.78	1.00	0.61	0.88	0.97	1.18	0.94	0.77
FI	Mean group	U-MIDAS	1	60	0.56	0.56	0.66	0.63	0.53	0.70	0.79	0.60	0.48
FI	Individual	U-MIDAS	1	76	0.71	0.58	0.64	0.49	0.74	0.63	0.50	0.73	1.05
FI	minMSE	U-MIDAS	1	76	0.75	0.77	0.81	0.93	0.84	0.85	0.86	0.79	0.92
FI	AIC	U-MIDAS	1	76	0.88	0.91	0.97	1.00	1.00	1.00	1.00	1.00	1.00
FI	MMA	U-MIDAS	1	76	0.73	0.85	0.86	0.78	0.92	0.90	0.89	0.81	0.83
FI	Mean group	U-MIDAS	1	76	0.73	0.74	0.76	0.92	0.64	0.68	0.75	0.58	0.47
FR	Individual	U-MIDAS	1	44	1.25	1.22	0.96	0.99	0.95	0.99	1.01	1.00	0.98
FR	minMSE	U-MIDAS	1	44	0.87	0.88	0.96	1.00	1.02	1.01	1.03	1.03	1.00
FR	AIC	U-MIDAS	1	44	0.95	0.96	0.98	1.00	1.01	1.01	1.01	1.00	0.98
FR	MMA	U-MIDAS	1	44	1.05	1.04	1.26	1.54	1.13	1.25	1.02	1.07	1.39

Table OA.7 continued from previous page

					Weekly position								
Country	Averaging	Estimator	h	T	-12	-10	-8	-6	-4	-2	0	$+2$	$+4$
FR	Mean group	U-MIDAS	1	44	0.92	0.94	1.08	1.05	1.08	1.06	1.07	1.07	1.16
FR	Individual	U-MIDAS	1	60	1.23	1.21	1.09	1.10	1.07	1.13	1.15	1.13	1.17
FR	minMSE	U-MIDAS	1	60	0.94	0.94	0.97	0.99	1.01	1.01	1.01	1.01	1.01
FR	AIC	U-MIDAS	1	60	1.00	1.00	1.01	1.01	1.00	1.00	1.00	1.00	1.00
FR	MMA	U-MIDAS	1	60	1.00	0.96	1.00	1.03	1.04	1.02	1.07	1.07	1.24
FR	Mean group	U-MIDAS	1	60	0.94	0.92	1.00	1.00	1.04	1.02	1.06	1.07	1.14
FR	Individual	U-MIDAS	1	76	1.91	1.89	1.68	1.73	1.70	1.76	1.78	1.76	1.82
FR	minMSE	U-MIDAS	1	76	0.98	0.98	0.98	1.00	1.01	1.01	1.01	1.00	1.02
FR	AIC	U-MIDAS	1	76	0.99	0.99	1.01	1.01	1.01	1.01	1.01	1.01	1.00
FR	MMA	U-MIDAS	1	76	0.97	0.96	1.05	1.04	1.07	1.07	1.08	1.06	1.16
FR	Mean group	U-MIDAS	1	76	0.98	0.96	1.05	1.05	1.07	1.07	1.07	1.07	1.07
IE	Individual	U-MIDAS	1	44	14.79	14.69	14.83	13.71	13.94	13.75	12.57	12.70	14.04
IE	minMSE	U-MIDAS	1	44	0.93	0.96	0.84	0.97	0.95	0.98	0.93	0.93	0.90
IE	AIC	U-MIDAS	1	44	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
IE	MMA	U-MIDAS	1	44	1.05	1.05	1.02	0.89	0.84	0.80	0.86	0.84	0.81
IE	Mean group	U-MIDAS	1	44	0.87	0.88	0.89	0.94	0.90	0.92	1.01	1.00	0.89
IE	Individual	U-MIDAS	1	60	17.31	17.21	17.53	16.09	18.25	18.21	15.91	15.92	16.96
IE	minMSE	U-MIDAS	1	60	0.98	0.99	0.90	1.07	0.93	0.96	1.07	1.07	1.01
IE	AIC	U-MIDAS	1	60	1.01	1.01	1.00	1.00	1.01	1.01	1.01	1.01	1.01
IE	MMA	U-MIDAS	1	60	1.23	1.21	1.27	0.99	0.83	0.83	0.97	0.92	0.92
IE	Mean group	U-MIDAS	1	60	0.95	0.95	0.96	1.03	0.88	0.88	1.01	1.01	0.93
IE	Individual	U-MIDAS	1	76	26.91	26.76	27.03	24.70	26.67	26.64	23.50	23.60	24.32
IE	minMSE	U-MIDAS	1	76	1.00	1.00	0.91	1.09	0.94	0.94	1.16	1.16	1.08
IE	AIC	U-MIDAS	1	76	1.00	1.00	1.00	1.00	1.01	1.01	1.01	1.01	1.01
IE	MMA	U-MIDAS	1	76	1.18	1.16	1.23	0.96	0.90	0.88	0.99	0.99	0.89
IE	Mean group	U-MIDAS	1	76	0.97	0.97	1.00	1.09	0.97	0.97	1.11	1.11	1.05
IT	Individual	U-MIDAS	1	44	1.67	1.66	1.68	1.45	1.40	1.43	1.38	1.30	1.13
IT	minMSE	U-MIDAS	1	44	0.91	0.89	0.81	1.05	1.03	1.02	1.01	1.03	0.98
IT	AIC	U-MIDAS	1	44	0.94	0.93	0.87	1.04	1.02	1.01	0.95	0.95	0.98
IT	MMA	U-MIDAS	1	44	0.87	0.85	0.83	1.10	1.07	1.09	0.93	1.16	1.26
IT	Mean group	U-MIDAS	1	44	0.93	0.94	0.86	1.00	0.99	0.99	0.93	0.97	1.05
IT	Individual	U-MIDAS	1	60	1.18	1.16	1.04	1.06	1.05	1.03	1.09	1.14	1.13
IT	minMSE	U-MIDAS	1	60	0.99	1.01	1.02	1.09	1.01	1.00	0.99	1.01	1.02
IT	AIC	U-MIDAS	1	60	1.04	1.05	1.00	1.00	1.00	0.99	0.98	0.99	1.00
IT	MMA	U-MIDAS	1	60	1.05	0.99	1.02	1.02	1.07	0.99	1.07	1.00	1.01
IT	Mean group	U-MIDAS	1	60	1.01	1.04	1.10	1.08	1.04	1.04	0.97	1.02	0.99
IT	Individual	U-MIDAS	1	76	1.55	1.51	1.43	1.52	1.47	1.46	1.51	1.55	1.62
IT	minMSE	U-MIDAS	1	76	0.99	0.99	1.00	1.02	1.00	1.00	1.00	1.01	1.00

Table OA.7 continued from previous page

					Weekly position								
Country	Averaging	Estimator	h	T	-12	-10	-8	-6	-4	-2	0	$+2$	$+4$
IT	AIC	U-MIDAS	1	76	0.99	0.99	1.00	1.00	1.00	1.00	1.00	1.00	1.00
IT	MMA	U-MIDAS	1	76	1.04	0.99	1.01	1.02	1.09	1.09	1.19	1.05	1.10
IT	Mean group	U-MIDAS	1	76	1.07	1.08	1.11	1.09	1.06	1.08	1.04	1.07	1.01
LU	Individual	U-MIDAS	1	44	3.38	3.58	3.45	3.45	2.20	3.53	3.64	3.21	3.66
LU	minMSE	U-MIDAS	1	44	0.83	0.82	0.64	0.65	0.87	0.84	0.85	0.82	0.82
LU	AIC	U-MIDAS	1	44	0.99	0.99	0.98	1.00	1.00	1.00	1.00	1.00	1.00
LU	MMA	U-MIDAS	1	44	0.65	0.63	0.66	0.81	1.02	0.71	0.59	0.61	0.69
LU	Mean group	U-MIDAS	1	44	0.54	0.51	0.56	0.63	1.02	0.61	0.58	0.62	0.58
LU	Individual	U-MIDAS	1	60	1.48	1.51	2.18	2.12	1.79	1.99	1.91	1.91	2.27
LU	minMSE	U-MIDAS	1	60	0.97	0.96	0.66	0.87	1.01	1.00	0.97	0.99	0.94
LU	AIC	U-MIDAS	1	60	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.99	1.00
LU	MMA	U-MIDAS	1	60	0.87	0.93	0.84	0.75	0.92	0.88	0.80	0.85	1.08
LU	Mean group	U-MIDAS	1	60	0.90	0.89	0.71	0.83	1.05	0.93	0.95	0.88	0.83
LU	Individual	U-MIDAS	1	76	1.43	1.43	1.92	1.72	1.80	1.56	1.49	1.82	2.02
LU	minMSE	U-MIDAS	1	76	0.94	0.90	0.81	1.23	1.25	1.20	1.36	1.17	1.09
LU	AIC	U-MIDAS	1	76	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
LU	MMA	U-MIDAS	1	76	0.91	0.93	0.92	0.80	1.00	0.96	0.90	0.77	0.94
LU	Mean group	U-MIDAS	1	76	0.95	0.94	0.77	1.17	1.22	1.20	1.21	0.99	0.92
PT	Individual	U-MIDAS	1	44	1.37	1.51	1.58	1.43	1.72	1.32	1.52	1.17	1.51
PT	minMSE	U-MIDAS	1	44	1.05	0.99	0.90	0.97	0.92	0.97	0.92	0.95	0.95
PT	AIC	U-MIDAS	1	44	1.02	1.00	1.00	0.94	0.99	0.98	0.92	0.97	0.97
PT	MMA	U-MIDAS	1	44	1.29	1.22	0.93	1.16	0.70	1.04	0.97	1.19	0.79
PT	Mean group	U-MIDAS	1	44	1.08	0.94	0.89	0.91	0.80	0.96	0.88	0.96	0.78
PT	Individual	U-MIDAS	1	60	1.01	1.19	1.14	1.13	1.35	1.02	1.05	0.94	1.11
PT	minMSE	U-MIDAS	1	60	1.02	1.00	1.03	0.98	0.95	1.00	0.95	0.97	0.95
PT	AIC	U-MIDAS	1	60	1.01	1.00	1.00	1.01	1.00	1.01	1.00	0.98	0.99
PT	MMA	U-MIDAS	1	60	1.45	1.19	1.35	1.28	0.97	1.10	1.04	1.05	1.05
PT	Mean group	U-MIDAS	1	60	1.38	1.10	1.22	1.09	0.96	1.15	1.08	1.13	1.06
PT	Individual	U-MIDAS	1	76	1.33	1.17	1.07	1.26	1.27	1.36	1.40	1.10	1.09
PT	minMSE	U-MIDAS	1	76	1.00	0.99	1.00	0.96	0.96	0.98	0.99	0.98	0.98
PT	AIC	U-MIDAS	1	76	1.00	1.00	1.00	1.01	1.01	1.01	0.99	1.00	1.01
PT	MMA	U-MIDAS	1	76	1.12	1.09	1.16	1.11	1.01	1.09	1.04	1.02	1.17
PT	Mean group	U-MIDAS	1	76	1.19	1.17	1.24	1.08	1.10	1.10	1.01	1.10	1.11
UK	Individual	U-MIDAS	1	44	0.62	0.66	0.85	0.45	0.52	0.51	0.49	0.46	0.51
UK	minMSE	U-MIDAS	1	44	0.93	0.92	0.86	1.05	0.93	0.97	0.99	0.96	0.95
UK	AIC	U-MIDAS	1	44	0.84	0.80	0.67	0.89	0.90	0.89	0.91	0.89	0.74
UK	MMA	U-MIDAS	1	44	1.61	1.66	1.15	2.20	1.23	1.25	0.72	0.90	2.86
UK	Mean group	U-MIDAS	1	44	0.88	0.77	0.54	0.95	0.90	1.02	1.18	0.96	1.75

Table OA.7 continued from previous page

					Weekly position								
Country	Averaging	Estimator	h	T	-12	-10	-8	-6	-4	-2	0	$+2$	$+4$
UK	Individual	U-MIDAS	1	60	0.35	0.37	0.33	0.25	0.26	0.28	0.24	0.23	0.25
UK	minMSE	U-MIDAS	1	60	0.89	0.88	0.84	0.91	0.95	0.96	0.94	0.92	0.97
UK	AIC	U-MIDAS	1	60	0.68	0.67	0.94	0.91	0.89	0.90	0.92	0.89	0.90
UK	MMA	U-MIDAS	1	60	2.27	0.57	0.63	0.65	0.58	0.69	0.86	0.62	0.90
UK	Mean group	U-MIDAS	1	60	0.44	0.42	0.55	0.72	1.15	1.15	1.08	0.81	1.17
UK	Individual	U-MIDAS	1	76	0.07	0.08	0.11	0.11	0.09	0.07	0.05	0.06	0.07
UK	minMSE	U-MIDAS	1	76	0.83	0.76	0.85	0.92	0.96	0.92	0.87	0.88	0.94
UK	AIC	U-MIDAS	1	76	0.83	0.81	0.98	0.96	0.99	0.99	0.95	0.92	0.98
UK	MMA	U-MIDAS	1	76	3.40	1.13	1.10	1.00	1.32	1.17	1.69	1.21	1.89
UK	Mean group	U-MIDAS	1	76	0.70	0.60	0.74	0.92	1.28	1.42	2.35	1.59	2.42
AT	Individual	Bridge	1	44	0.64	0.62	0.61	0.62	0.62	0.61	0.58	0.56	0.54
AT	minMSE	Bridge	1	44	0.79	0.77	0.78	0.93	0.94	0.97	0.89	0.91	0.77
AT	AIC	Bridge	1	44	0.85	0.83	0.84	0.98	1.00	1.04	0.96	0.98	0.84
AT	MMA	Bridge	1	44	1.89	1.85	1.91	2.27	2.34	2.48	2.39	2.42	2.06
AT	Mean group	Bridge	1	44	0.83	0.80	0.82	0.95	0.97	1.01	0.93	0.95	0.81
AT	Individual	Bridge	1	60	0.43	0.41	0.39	0.43	0.43	0.42	0.40	0.39	0.38
AT	minMSE	Bridge	1	60	0.68	0.72	0.80	0.84	0.82	0.85	0.84	0.92	0.72
AT	AIC	Bridge	1	60	0.71	0.75	0.84	0.83	0.81	0.85	0.85	0.92	0.72
AT	MMA	Bridge	1	60	0.57	0.61	0.67	1.24	1.27	1.39	1.49	1.64	1.56
AT	Mean group	Bridge	1	60	0.70	0.74	0.83	0.83	0.81	0.85	0.85	0.93	0.73
AT	Individual	Bridge	1	76	0.54	0.53	0.50	0.56	0.57	0.54	0.53	0.52	0.55
AT	minMSE	Bridge	1	76	0.79	0.84	1.13	0.98	0.96	1.11	1.00	1.07	0.88
AT	AIC	Bridge	1	76	0.84	0.90	1.21	0.99	0.96	1.13	1.02	1.09	0.89
AT	MMA	Bridge	1	76	1.37	1.48	2.14	1.55	1.48	1.86	1.70	1.82	1.52
AT	Mean group	Bridge	1	76	0.82	0.87	1.18	0.98	0.95	1.12	1.01	1.08	0.89
BE	Individual	Bridge	1	44	0.97	0.69	0.93	0.56	1.11	0.79	1.09	0.71	1.10
BE	minMSE	Bridge	1	44	0.91	0.76	0.52	0.64	0.43	0.85	0.76	0.78	0.42
BE	AIC	Bridge	1	44	0.86	0.74	0.49	0.59	0.41	0.83	0.74	0.77	0.44
BE	MMA	Bridge	1	44	2.37	1.89	1.87	2.65	1.79	3.34	3.53	3.76	3.31
BE	Mean group	Bridge	1	44	0.91	0.78	0.54	0.80	0.50	0.90	0.91	0.97	0.71
BE	Individual	Bridge	1	60	0.60	0.45	0.55	0.49	0.88	0.49	0.77	0.69	1.70
BE	minMSE	Bridge	1	60	0.91	0.51	0.34	0.56	0.37	0.54	0.58	0.72	0.23
BE	AIC	Bridge	1	60	0.90	0.51	0.33	0.52	0.36	0.53	0.56	0.69	0.23
BE	MMA	Bridge	1	60	1.81	0.91	0.96	1.50	1.00	1.51	2.23	2.15	1.33
BE	Mean group	Bridge	1	60	0.92	0.52	0.34	0.62	0.41	0.55	0.68	0.81	0.34
BE	Individual	Bridge	1	76	0.75	0.64	0.85	0.75	1.19	0.70	0.98	1.00	2.41
BE	minMSE	Bridge	1	76	0.82	0.82	0.40	0.72	0.49	0.66	0.35	0.59	0.19
BE	AIC	Bridge	1	76	0.84	0.84	0.40	0.70	0.49	0.65	0.34	0.58	0.18

Table OA.7 continued from previous page

					Weekly position								
Country	Averaging	Estimator	h	T	-12	-10	-8	-6	-4	-2	0	$+2$	$+4$
BE	MMA	Bridge	1	76	1.18	1.29	0.51	1.60	0.52	1.12	0.31	0.58	0.32
BE	Mean group	Bridge	1	76	0.80	0.81	0.38	0.73	0.49	0.65	0.37	0.62	0.25
DE	Individual	Bridge	1	44	0.92	0.90	0.90	0.92	0.92	0.92	0.90	0.89	0.86
DE	minMSE	Bridge	1	44	0.77	0.74	0.68	0.75	0.92	0.84	1.09	1.07	1.02
DE	AIC	Bridge	1	44	1.15	1.07	0.98	0.99	1.21	1.17	1.51	1.44	1.39
DE	MMA	Bridge	1	44	1.50	1.47	1.37	1.41	1.82	1.69	2.32	2.26	2.13
DE	Mean group	Bridge	1	44	0.79	0.76	0.70	0.75	0.94	0.86	1.12	1.10	1.08
DE	Individual	Bridge	1	60	0.49	0.48	0.48	0.48	0.48	0.48	0.46	0.48	0.48
DE	minMSE	Bridge	1	60	0.61	0.61	0.60	0.64	0.64	0.62	0.69	0.61	0.59
DE	AIC	Bridge	1	60	0.63	0.63	0.62	0.64	0.64	0.62	0.69	0.60	0.57
DE	MMA	Bridge	1	60	0.66	0.68	0.68	1.04	1.05	1.05	1.25	1.06	1.13
DE	Mean group	Bridge	1	60	0.61	0.61	0.60	0.63	0.63	0.62	0.69	0.60	0.59
DE	Individual	Bridge	1	76	0.43	0.43	0.44	0.45	0.46	0.45	0.44	0.47	0.50
DE	minMSE	Bridge	1	76	0.95	0.96	0.81	0.85	0.80	0.78	0.78	0.62	0.62
DE	AIC	Bridge	1	76	1.02	1.03	0.86	0.87	0.81	0.80	0.79	0.63	0.62
DE	MMA	Bridge	1	76	2.12	2.18	1.84	1.48	1.36	1.37	1.30	0.99	1.05
DE	Mean group	Bridge	1	76	0.98	0.99	0.83	0.85	0.80	0.78	0.78	0.62	0.63
EL	Individual	Bridge	1	44	6.27	6.28	6.28	5.95	6.07	6.09	6.01	5.98	5.54
EL	minMSE	Bridge	1	44	0.57	0.56	0.54	0.48	0.33	0.33	0.40	0.41	0.38
EL	AIC	Bridge	1	44	0.55	0.54	0.53	0.52	0.37	0.34	0.45	0.45	0.44
EL	MMA	Bridge	1	44	0.73	0.71	0.70	0.57	0.38	0.37	0.48	0.49	0.48
EL	Mean group	Bridge	1	44	0.52	0.51	0.51	0.48	0.33	0.31	0.40	0.41	0.38
EL	Individual	Bridge	1	60	4.01	4.02	4.03	3.80	3.92	3.95	3.83	3.82	3.53
EL	minMSE	Bridge	1	60	0.51	0.53	0.53	0.46	0.31	0.30	0.35	0.36	0.43
EL	AIC	Bridge	1	60	0.60	0.62	0.62	0.55	0.40	0.38	0.43	0.45	0.53
EL	MMA	Bridge	1	60	0.46	0.47	0.46	0.38	0.27	0.25	0.30	0.31	0.36
EL	Mean group	Bridge	1	60	0.55	0.57	0.57	0.47	0.34	0.32	0.37	0.38	0.44
EL	Individual	Bridge	1	76	0.88	0.87	0.92	0.91	0.96	0.98	0.87	0.85	0.69
EL	minMSE	Bridge	1	76	0.16	0.16	0.17	0.17	0.13	0.12	0.15	0.16	0.17
EL	AIC	Bridge	1	76	0.15	0.16	0.17	0.17	0.13	0.13	0.15	0.16	0.17
EL	MMA	Bridge	1	76	0.25	0.26	0.25	0.24	0.18	0.17	0.22	0.23	0.24
EL	Mean group	Bridge	1	76	0.16	0.17	0.18	0.17	0.13	0.13	0.16	0.16	0.17
ES	Individual	Bridge	1	44	1.58	1.58	1.56	1.43	1.41	1.41	1.37	1.39	1.36
ES	minMSE	Bridge	1	44	0.92	0.91	0.86	0.51	0.64	0.70	0.71	0.74	0.83
ES	AIC	Bridge	1	44	0.92	0.91	0.86	0.51	0.65	0.71	0.72	0.75	0.84
ES	MMA	Bridge	1	44	1.40	1.40	1.33	0.80	1.06	1.13	1.18	1.22	1.34
ES	Mean group	Bridge	1	44	0.91	0.91	0.86	0.51	0.65	0.71	0.72	0.75	0.85
ES	Individual	Bridge	1	60	1.21	1.23	1.21	1.15	1.13	1.14	1.12	1.17	1.16

Table OA.7 continued from previous page

					Weekly position								
Country	Averaging	Estimator	h	T	-12	-10	-8	-6	-4	-2	0	$+2$	$+4$
ES	minMSE	Bridge	1	60	0.87	0.82	0.82	0.78	0.75	0.84	0.88	0.82	0.79
ES	AIC	Bridge	1	60	0.87	0.82	0.81	0.78	0.75	0.83	0.88	0.81	0.78
ES	MMA	Bridge	1	60	0.89	0.84	0.84	0.82	0.80	0.88	0.91	0.84	0.82
ES	Mean group	Bridge	1	60	0.91	0.87	0.86	0.82	0.79	0.88	0.92	0.86	0.83
ES	Individual	Bridge	1	76	1.76	1.77	1.76	1.74	1.72	1.74	1.74	1.79	1.80
ES	minMSE	Bridge	1	76	0.84	0.80	0.85	0.93	0.89	0.91	0.91	0.84	0.85
ES	AIC	Bridge	1	76	0.85	0.81	0.86	0.94	0.91	0.92	0.93	0.85	0.86
ES	MMA	Bridge	1	76	0.71	0.68	0.72	0.79	0.76	0.78	0.78	0.73	0.73
ES	Mean group	Bridge	1	76	0.85	0.81	0.86	0.95	0.91	0.92	0.93	0.85	0.86
FI	Individual	Bridge	1	44	1.78	1.77	1.79	1.91	1.90	1.93	1.94	1.94	1.78
FI	minMSE	Bridge	1	44	0.44	0.46	0.53	0.61	0.72	0.67	0.73	0.77	0.77
FI	AIC	Bridge	1	44	0.54	0.57	0.66	0.66	0.79	0.73	0.79	0.84	0.86
FI	MMA	Bridge	1	44	0.53	0.56	0.65	0.66	0.77	0.71	0.76	0.80	0.99
FI	Mean group	Bridge	1	44	0.43	0.45	0.52	0.58	0.70	0.65	0.70	0.74	0.77
FI	Individual	Bridge	1	60	0.61	0.62	0.64	0.62	0.61	0.65	0.65	0.63	0.60
FI	minMSE	Bridge	1	60	0.45	0.47	0.53	0.58	0.47	0.53	0.60	0.51	0.35
FI	AIC	Bridge	1	60	0.48	0.51	0.55	0.55	0.45	0.51	0.58	0.49	0.35
FI	MMA	Bridge	1	60	0.53	0.56	0.63	0.65	0.54	0.57	0.64	0.55	0.40
FI	Mean group	Bridge	1	60	0.47	0.49	0.54	0.57	0.46	0.52	0.59	0.50	0.35
FI	Individual	Bridge	1	76	0.35	0.35	0.36	0.35	0.35	0.34	0.32	0.33	0.31
FI	minMSE	Bridge	1	76	0.49	0.58	0.54	0.72	0.47	0.55	0.66	0.45	0.30
FI	AIC	Bridge	1	76	0.51	0.62	0.57	0.74	0.49	0.57	0.68	0.48	0.33
FI	MMA	Bridge	1	76	0.77	0.94	0.86	1.09	0.69	0.86	1.06	0.73	0.46
FI	Mean group	Bridge	1	76	0.49	0.59	0.54	0.71	0.47	0.55	0.66	0.45	0.30
FR	Individual	Bridge	1	44	1.02	1.01	0.99	0.96	0.96	0.98	0.96	0.95	0.93
FR	minMSE	Bridge	1	44	0.83	0.84	1.04	0.97	1.02	0.99	0.95	0.95	0.95
FR	AIC	Bridge	1	44	0.84	0.86	1.07	0.99	1.05	1.02	0.98	0.98	0.97
FR	MMA	Bridge	1	44	1.37	1.41	1.82	2.06	2.11	2.05	2.05	2.07	2.15
FR	Mean group	Bridge	1	44	0.86	0.87	1.09	1.01	1.06	1.04	1.00	1.00	1.00
FR	Individual	Bridge	1	60	1.15	1.14	1.12	1.09	1.10	1.12	1.12	1.11	1.10
FR	minMSE	Bridge	1	60	0.95	0.95	1.03	0.98	1.02	0.99	0.97	0.98	0.94
FR	AIC	Bridge	1	60	0.95	0.95	1.04	0.99	1.03	0.99	0.98	0.98	0.95
FR	MMA	Bridge	1	60	0.91	0.92	1.00	1.34	1.41	1.36	1.41	1.44	1.41
FR	Mean group	Bridge	1	60	0.94	0.95	1.03	0.99	1.03	1.00	0.99	0.99	0.95
FR	Individual	Bridge	1	76	1.85	1.83	1.81	1.78	1.79	1.81	1.81	1.79	1.79
FR	minMSE	Bridge	1	76	0.98	0.98	1.08	1.02	1.04	1.02	1.01	1.01	0.98
FR	AIC	Bridge	1	76	0.98	0.98	1.09	1.03	1.05	1.03	1.01	1.02	0.99
FR	MMA	Bridge	1	76	1.22	1.24	1.39	1.33	1.36	1.32	1.29	1.32	1.24

Table OA.7 continued from previous page

					Weekly position								
Country	Averaging	Estimator	h	T	-12	-10	-8	-6	-4	-2	0	$+2$	$+4$
FR	Mean group	Bridge	1	76	0.97	0.98	1.08	1.03	1.05	1.03	1.02	1.02	0.99
IE	Individual	Bridge	1	44	12.74	12.73	12.70	12.47	12.50	12.49	12.44	12.45	12.35
IE	minMSE	Bridge	1	44	0.87	0.88	0.87	0.94	0.92	0.93	1.02	1.01	0.91
IE	AIC	Bridge	1	44	0.85	0.86	0.85	0.91	0.89	0.90	0.98	0.97	0.87
IE	MMA	Bridge	1	44	0.98	0.98	0.98	0.95	0.93	0.94	1.03	1.02	0.92
IE	Mean group	Bridge	1	44	0.88	0.89	0.88	0.94	0.92	0.93	1.02	1.01	0.91
IE	Individual	Bridge	1	60	15.66	15.66	15.62	15.45	15.49	15.49	15.44	15.44	15.29
IE	minMSE	Bridge	1	60	0.94	0.95	0.93	1.00	0.88	0.88	1.02	1.02	0.95
IE	AIC	Bridge	1	60	0.91	0.91	0.89	0.96	0.85	0.85	0.97	0.97	0.90
IE	MMA	Bridge	1	60	0.95	0.96	0.95	1.01	0.89	0.89	1.09	1.09	0.96
IE	Mean group	Bridge	1	60	0.95	0.95	0.94	1.00	0.88	0.88	1.01	1.01	0.94
IE	Individual	Bridge	1	76	25.01	25.01	24.94	24.72	24.77	24.78	24.70	24.70	24.43
IE	minMSE	Bridge	1	76	0.97	0.98	0.96	1.05	0.97	0.97	1.11	1.10	1.07
IE	AIC	Bridge	1	76	0.94	0.94	0.93	1.02	0.94	0.95	1.07	1.06	1.02
IE	MMA	Bridge	1	76	1.03	1.04	1.03	1.16	1.07	1.07	1.22	1.21	1.17
IE	Mean group	Bridge	1	76	0.97	0.98	0.97	1.04	0.96	0.97	1.09	1.09	1.06
IT	Individual	Bridge	1	44	1.33	1.33	1.32	1.30	1.30	1.29	1.28	1.28	1.24
IT	minMSE	Bridge	1	44	0.83	0.84	0.82	0.93	0.95	0.92	0.95	1.01	1.11
IT	AIC	Bridge	1	44	0.86	0.86	0.85	0.97	0.99	0.96	0.99	1.05	1.17
IT	MMA	Bridge	1	44	1.38	1.40	1.39	1.54	1.61	1.58	1.65	1.73	1.92
IT	Mean group	Bridge	1	44	0.89	0.89	0.88	0.98	1.01	0.98	1.01	1.08	1.20
IT	Individual	Bridge	1	60	1.13	1.13	1.12	1.11	1.09	1.08	1.07	1.09	1.06
IT	minMSE	Bridge	1	60	1.01	1.03	1.13	1.09	1.09	1.11	1.03	1.01	0.99
IT	AIC	Bridge	1	60	1.01	1.03	1.13	1.08	1.08	1.10	1.03	1.00	0.98
IT	MMA	Bridge	1	60	1.47	1.51	1.68	1.60	1.63	1.68	1.56	1.47	1.43
IT	Mean group	Bridge	1	60	1.05	1.08	1.18	1.13	1.14	1.16	1.08	1.05	1.02
IT	Individual	Bridge	1	76	1.55	1.55	1.54	1.55	1.54	1.53	1.53	1.54	1.54
IT	minMSE	Bridge	1	76	1.06	1.09	1.14	1.07	1.10	1.11	1.06	1.05	1.00
IT	AIC	Bridge	1	76	1.07	1.10	1.15	1.09	1.11	1.12	1.08	1.07	1.01
IT	MMA	Bridge	1	76	1.53	1.57	1.68	1.54	1.61	1.64	1.58	1.51	1.42
IT	Mean group	Bridge	1	76	1.09	1.12	1.18	1.11	1.13	1.15	1.10	1.09	1.03
LU	Individual	Bridge	1	44	1.76	1.76	1.76	1.77	1.79	1.79	1.80	1.78	1.87
LU	minMSE	Bridge	1	44	0.54	0.51	0.54	0.55	0.87	0.57	0.55	0.60	0.53
LU	AIC	Bridge	1	44	0.50	0.48	0.50	0.51	0.81	0.50	0.48	0.55	0.48
LU	MMA	Bridge	1	44	0.84	0.81	0.85	0.90	1.53	0.93	0.91	1.02	0.92
LU	Mean group	Bridge	1	44	0.53	0.50	0.53	0.55	0.88	0.54	0.52	0.59	0.52
LU	Individual	Bridge	1	60	1.26	1.26	1.26	1.26	1.26	1.26	1.26	1.25	1.28
LU	minMSE	Bridge	1	60	0.87	0.85	0.61	0.68	0.80	0.73	0.76	0.73	0.63

Table OA.7 continued from previous page

					Weekly position								
Country	Averaging	Estimator	h	T	-12	-10	-8	-6	-4	-2	0	$+2$	$+4$
LU	AIC	Bridge	1	60	0.84	0.82	0.58	0.59	0.69	0.63	0.66	0.65	0.56
LU	MMA	Bridge	1	60	1.09	1.07	0.75	0.82	1.00	0.88	0.94	0.93	0.83
LU	Mean group	Bridge	1	60	0.87	0.86	0.61	0.65	0.78	0.70	0.73	0.72	0.62
LU	Individual	Bridge	1	76	1.43	1.43	1.43	1.43	1.42	1.43	1.43	1.43	1.42
LU	minMSE	Bridge	1	76	1.09	1.09	0.82	0.97	0.95	1.05	1.08	0.90	0.82
LU	AIC	Bridge	1	76	0.99	0.99	0.74	0.83	0.80	0.91	0.94	0.78	0.70
LU	MMA	Bridge	1	76	1.16	1.15	0.88	1.12	1.10	1.22	1.28	1.05	0.95
LU	Mean group	Bridge	1	76	1.04	1.04	0.79	0.90	0.87	0.99	1.03	0.84	0.76
PT	Individual	Bridge	1	44	1.21	1.20	1.19	1.15	1.14	1.15	1.13	1.13	1.11
PT	minMSE	Bridge	1	44	0.87	0.78	0.74	0.79	0.65	0.85	0.74	0.95	0.73
PT	AIC	Bridge	1	44	0.90	0.81	0.77	0.84	0.69	0.90	0.78	1.02	0.78
PT	MMA	Bridge	1	44	1.42	1.28	1.23	1.28	1.05	1.37	1.17	1.54	1.11
PT	Mean group	Bridge	1	44	0.91	0.82	0.78	0.84	0.68	0.90	0.77	1.01	0.78
PT	Individual	Bridge	1	60	1.32	1.31	1.29	1.23	1.22	1.24	1.21	1.20	1.19
PT	minMSE	Bridge	1	60	1.24	1.04	1.08	1.02	0.84	1.14	1.10	1.21	1.02
PT	AIC	Bridge	1	60	1.25	1.06	1.09	1.02	0.84	1.13	1.08	1.21	1.01
PT	MMA	Bridge	1	60	1.24	1.08	1.13	1.10	0.89	1.25	1.18	1.35	1.18
PT	Mean group	Bridge	1	60	1.28	1.07	1.11	1.06	0.87	1.17	1.13	1.26	1.06
PT	Individual	Bridge	1	76	1.42	1.41	1.39	1.38	1.38	1.40	1.39	1.36	1.34
PT	minMSE	Bridge	1	76	1.04	1.16	1.25	1.05	1.05	0.99	0.96	1.20	1.19
PT	AIC	Bridge	1	76	1.06	1.19	1.29	1.07	1.06	1.00	0.97	1.22	1.20
PT	MMA	Bridge	1	76	0.82	0.93	1.01	1.27	1.26	1.13	1.10	1.47	1.46
PT	Mean group	Bridge	1	76	1.03	1.15	1.25	1.05	1.05	0.99	0.96	1.20	1.19
UK	Individual	Bridge	1	44	0.42	0.43	0.46	0.33	0.33	0.33	0.32	0.31	0.28
UK	minMSE	Bridge	1	44	0.62	0.59	0.47	0.74	0.60	0.64	0.61	0.63	0.65
UK	AIC	Bridge	1	44	0.63	0.60	0.45	0.75	0.62	0.65	0.62	0.66	0.55
UK	MMA	Bridge	1	44	1.92	1.83	1.48	2.56	2.16	2.24	2.26	2.43	2.76
UK	Mean group	Bridge	1	44	0.67	0.64	0.51	0.83	0.69	0.72	0.72	0.76	0.83
UK	Individual	Bridge	1	60	0.11	0.11	0.12	0.08	0.09	0.09	0.08	0.08	0.08
UK	minMSE	Bridge	1	60	0.28	0.27	0.31	0.33	0.32	0.32	0.34	0.31	0.30
UK	AIC	Bridge	1	60	0.29	0.28	0.32	0.35	0.33	0.33	0.35	0.33	0.31
UK	MMA	Bridge	1	60	0.84	0.81	0.93	1.32	1.27	1.23	1.30	1.31	1.55
UK	Mean group	Bridge	1	60	0.28	0.27	0.31	0.36	0.35	0.35	0.37	0.35	0.35
UK	Individual	Bridge	1	76	0.02	0.02	0.03	0.03	0.03	0.03	0.03	0.03	0.03
UK	minMSE	Bridge	1	76	0.35	0.34	0.32	0.32	0.39	0.43	0.60	0.48	0.43
UK	AIC	Bridge	1	76	0.43	0.39	0.34	0.33	0.39	0.45	0.63	0.51	0.45
UK	MMA	Bridge	1	76	2.36	2.03	1.55	1.80	2.15	2.55	3.45	2.85	2.37
UK	Mean group	Bridge	1	76	0.42	0.39	0.33	0.33	0.39	0.45	0.65	0.53	0.52

Table OA.7 continued from previous page

					Weekly position								
Country	Averaging	Estimator	h	T	-12	-10	-8	-6	-4	-2	0	$+2$	$+4$
AT	Individual	U-MIDAS	2	44	3.21	3.24	3.22	3.43	3.43	3.40	3.43	3.44	3.38
AT	minMSE	U-MIDAS	2	44	1.03	0.98	1.05	0.97	0.97	0.96	0.95	0.96	0.98
AT	AIC	U-MIDAS	2	44	1.03	1.03	0.99	0.97	0.97	0.97	0.95	0.95	0.96
AT	MMA	U-MIDAS	2	44	1.12	1.09	1.07	1.05	1.20	1.15	1.06	1.05	1.03
AT	Mean group	U-MIDAS	2	44	1.03	1.02	0.97	1.01	1.04	1.00	0.99	0.97	1.01
AT	Individual	U-MIDAS	2	60	4.25	4.25	4.18	4.23	4.03	3.88	3.96	3.92	3.96
AT	minMSE	U-MIDAS	2	60	1.01	1.01	1.01	1.06	1.04	1.03	1.03	1.04	1.01
AT	AIC	U-MIDAS	2	60	1.01	1.00	0.95	1.00	1.03	1.03	1.00	1.04	1.00
AT	MMA	U-MIDAS	2	60	0.94	0.99	0.97	0.98	1.08	1.06	1.04	1.04	1.02
AT	Mean group	U-MIDAS	2	60	0.94	0.93	0.93	0.97	1.05	1.04	1.01	1.00	1.02
AT	Individual	U-MIDAS	2	76	7.06	7.05	7.00	6.89	6.66	6.42	6.51	6.46	6.31
AT	minMSE	U-MIDAS	2	76	1.01	1.00	1.00	1.05	1.06	1.04	1.04	1.04	1.03
AT	AIC	U-MIDAS	2	76	0.97	0.97	0.96	1.01	1.04	1.03	0.99	1.01	1.01
AT	MMA	U-MIDAS	2	76	1.01	0.99	0.96	1.00	1.06	1.04	0.98	1.02	1.05
AT	Mean group	U-MIDAS	2	76	0.96	0.96	0.93	1.00	1.07	1.05	1.03	1.02	1.06
BE	Individual	U-MIDAS	2	44	3.53	3.41	3.34	3.58	4.74	3.70	4.70	3.90	4.61
BE	minMSE	U-MIDAS	2	44	1.01	1.00	1.10	0.98	0.98	0.95	0.94	0.98	0.96
BE	AIC	U-MIDAS	2	44	1.02	1.06	0.94	0.98	0.93	0.91	0.73	0.88	0.87
BE	MMA	U-MIDAS	2	44	1.08	1.14	1.09	1.05	1.05	1.02	0.97	1.10	0.80
BE	Mean group	U-MIDAS	2	44	1.05	1.06	0.78	0.91	0.88	0.80	0.74	1.02	0.93
BE	Individual	U-MIDAS	2	60	4.36	5.25	4.04	4.40	4.76	4.31	4.62	5.07	8.70
BE	minMSE	U-MIDAS	2	60	0.97	0.97	0.96	0.98	0.88	0.96	0.93	0.90	0.94
BE	AIC	U-MIDAS	2	60	0.99	1.02	1.01	0.97	0.94	0.99	0.93	0.98	0.65
BE	MMA	U-MIDAS	2	60	1.09	1.02	1.22	0.83	1.17	1.28	0.96	0.87	0.55
BE	Mean group	U-MIDAS	2	60	0.94	0.80	0.93	0.90	1.04	0.78	0.80	0.88	0.56
BE	Individual	U-MIDAS	2	76	7.10	7.73	6.57	6.97	7.20	6.92	7.06	7.66	12.96
BE	minMSE	U-MIDAS	2	76	1.00	0.99	0.99	0.98	1.00	0.97	0.94	0.99	0.92
BE	AIC	U-MIDAS	2	76	1.01	1.01	1.06	0.99	0.97	0.95	0.97	1.00	0.87
BE	MMA	U-MIDAS	2	76	1.01	0.99	0.93	0.92	1.11	0.90	0.61	0.85	0.59
BE	Mean group	U-MIDAS	2	76	0.99	0.93	0.90	0.92	1.03	0.75	0.81	0.94	0.54
DE	Individual	U-MIDAS	2	44	3.06	3.10	3.16	3.21	3.58	3.69	3.40	3.43	3.55
DE	minMSE	U-MIDAS	2	44	1.01	1.03	1.14	0.98	0.95	0.92	0.91	0.97	0.90
DE	AIC	U-MIDAS	2	44	1.10	1.09	0.99	0.97	0.97	0.96	0.97	0.96	0.94
DE	MMA	U-MIDAS	2	44	1.03	1.02	0.92	0.95	1.08	1.02	0.90	0.87	0.90
DE	Mean group	U-MIDAS	2	44	0.98	0.99	0.94	0.95	0.89	0.86	0.90	0.89	0.82
DE	Individual	U-MIDAS	2	60	3.72	3.73	3.88	3.86	3.95	4.00	3.57	3.58	3.72
DE	minMSE	U-MIDAS	2	60	0.93	0.94	0.91	0.93	0.96	0.97	0.99	1.00	0.98
DE	AIC	U-MIDAS	2	60	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00

Table OA.7 continued from previous page

					Weekly position								
Country	Averaging	Estimator	h	T	-12	-10	-8	-6	-4	-2	0	$+2$	$+4$
DE	MMA	U-MIDAS	2	60	0.95	0.86	0.94	0.89	0.87	0.94	0.93	0.95	0.97
DE	Mean group	U-MIDAS	2	60	0.83	0.83	0.83	0.85	0.84	0.85	0.92	0.90	0.85
DE	Individual	U-MIDAS	2	76	5.12	5.16	5.47	5.57	5.84	5.90	5.47	5.49	5.75
DE	minMSE	U-MIDAS	2	76	1.03	1.00	1.03	1.00	0.99	0.99	1.00	1.00	0.98
DE	AIC	U-MIDAS	2	76	1.00	1.00	1.00	1.00	0.99	0.99	0.99	0.99	1.00
DE	MMA	U-MIDAS	2	76	1.02	0.97	0.98	0.94	0.93	0.94	0.96	0.97	0.95
DE	Mean group	U-MIDAS	2	76	1.01	1.00	0.97	0.97	0.95	0.95	0.99	0.99	0.93
EL	Individual	U-MIDAS	2	44	20.41	20.34	20.35	17.22	14.10	14.15	13.75	13.93	14.09
EL	minMSE	U-MIDAS	2	44	0.73	0.72	0.69	0.76	0.83	0.89	0.77	0.75	0.80
EL	AIC	U-MIDAS	2	44	1.00	1.00	1.00	1.00	1.00	1.00	1.05	1.04	1.00
EL	MMA	U-MIDAS	2	44	0.68	0.69	0.67	0.66	0.67	0.66	0.74	0.73	0.66
EL	Mean group	U-MIDAS	2	44	0.51	0.51	0.49	0.56	0.66	0.67	0.71	0.69	0.67
EL	Individual	U-MIDAS	2	60	11.27	11.30	11.86	10.34	9.77	9.88	10.21	10.00	10.57
EL	minMSE	U-MIDAS	2	60	1.02	1.05	0.86	0.89	1.00	0.96	0.74	0.80	0.77
EL	AIC	U-MIDAS	2	60	0.93	0.92	0.86	1.00	1.04	1.04	1.06	1.05	1.07
EL	MMA	U-MIDAS	2	60	0.95	1.02	0.90	0.82	0.86	0.83	0.79	0.84	0.78
EL	Mean group	U-MIDAS	2	60	0.77	0.77	0.70	0.76	0.81	0.81	0.79	0.81	0.73
EL	Individual	U-MIDAS	2	76	12.93	13.10	12.37	11.27	11.62	11.83	13.79	13.59	13.40
EL	minMSE	U-MIDAS	2	76	0.88	0.88	0.93	0.93	0.95	0.92	0.79	0.79	0.79
EL	AIC	U-MIDAS	2	76	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
EL	MMA	U-MIDAS	2	76	0.80	0.93	0.81	0.93	0.91	0.85	0.74	0.87	0.78
EL	Mean group	U-MIDAS	2	76	0.79	0.78	0.81	0.88	0.86	0.85	0.74	0.75	0.76
ES	Individual	U-MIDAS	2	44	7.75	7.88	7.84	7.86	7.73	7.80	7.49	7.67	7.91
ES	minMSE	U-MIDAS	2	44	0.95	0.94	0.93	0.94	0.95	0.95	0.96	0.95	0.95
ES	AIC	U-MIDAS	2	44	0.97	0.97	0.98	0.99	0.99	0.99	0.99	0.99	0.97
ES	MMA	U-MIDAS	2	44	1.05	1.03	1.01	1.04	1.03	1.02	1.09	1.05	0.99
ES	Mean group	U-MIDAS	2	44	0.98	0.98	0.96	0.95	0.94	0.96	1.01	1.00	0.97
ES	Individual	U-MIDAS	2	60	10.74	11.07	10.68	10.79	10.85	10.87	10.52	11.10	10.95
ES	minMSE	U-MIDAS	2	60	0.97	0.94	0.97	0.96	0.97	0.96	0.97	0.96	0.97
ES	AIC	U-MIDAS	2	60	0.98	0.99	1.00	1.00	1.00	1.00	0.99	0.99	0.99
ES	MMA	U-MIDAS	2	60	0.97	0.96	0.97	0.99	0.94	0.94	0.95	0.94	0.97
ES	Mean group	U-MIDAS	2	60	0.94	0.91	0.93	0.91	0.89	0.90	0.92	0.91	0.92
ES	Individual	U-MIDAS	2	76	17.60	18.08	17.49	17.59	17.75	17.83	17.45	18.34	17.76
ES	minMSE	U-MIDAS	2	76	0.97	0.97	0.97	0.97	0.95	0.95	0.97	0.97	0.97
ES	AIC	U-MIDAS	2	76	0.99	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.99
ES	MMA	U-MIDAS	2	76	0.96	0.95	0.93	0.99	0.94	0.95	0.95	0.95	0.97
ES	Mean group	U-MIDAS	2	76	0.95	0.92	0.94	0.92	0.90	0.91	0.92	0.91	0.94
FI	Individual	U-MIDAS	2	44	3.98	3.88	4.43	4.12	4.29	4.32	4.83	4.73	4.14

Table OA.7 continued from previous page

					Weekly position								
Country	Averaging	Estimator	h	T	-12	-10	-8	-6	-4	-2	0	$+2$	$+4$
FI	minMSE	U-MIDAS	2	44	0.77	0.72	0.76	0.83	0.81	0.82	0.79	0.81	0.85
FI	AIC	U-MIDAS	2	44	0.99	1.00	1.00	0.97	0.89	0.93	0.92	0.91	0.94
FI	MMA	U-MIDAS	2	44	0.75	0.79	0.63	0.66	0.84	0.80	0.87	0.80	0.91
FI	Mean group	U-MIDAS	2	44	0.60	0.65	0.57	0.64	0.65	0.66	0.58	0.58	0.66
FI	Individual	U-MIDAS	2	60	1.87	1.95	1.98	2.12	2.29	2.28	2.17	2.10	2.13
FI	minMSE	U-MIDAS	2	60	0.97	0.91	0.99	0.88	0.93	0.88	0.91	0.91	0.89
FI	AIC	U-MIDAS	2	60	0.97	0.99	1.00	1.00	0.95	0.91	0.91	0.92	0.97
FI	MMA	U-MIDAS	2	60	0.99	0.98	0.95	0.84	0.86	1.13	1.00	0.92	0.91
FI	Mean group	U-MIDAS	2	60	0.91	0.88	0.84	0.81	0.79	0.77	0.81	0.82	0.87
FI	Individual	U-MIDAS	2	76	2.33	2.31	2.29	2.64	2.89	2.91	2.70	2.59	2.61
FI	minMSE	U-MIDAS	2	76	1.11	1.08	1.08	0.97	0.96	0.94	0.94	0.95	0.95
FI	AIC	U-MIDAS	2	76	1.00	1.00	1.00	1.00	0.97	0.97	0.98	0.98	1.00
FI	MMA	U-MIDAS	2	76	1.07	1.04	1.06	0.96	0.90	0.95	0.99	0.98	0.96
FI	Mean group	U-MIDAS	2	76	1.06	1.07	1.05	0.95	0.90	0.88	0.94	0.95	0.98
FR	Individual	U-MIDAS	2	44	4.94	4.93	4.72	4.53	4.42	4.49	4.52	4.48	4.26
FR	minMSE	U-MIDAS	2	44	0.92	0.92	0.93	1.01	1.01	1.01	1.01	1.01	1.02
FR	AIC	U-MIDAS	2	44	0.99	0.99	0.98	1.00	1.01	1.01	1.01	1.01	1.01
FR	MMA	U-MIDAS	2	44	0.92	0.93	0.98	1.05	1.06	1.05	1.06	1.03	1.08
FR	Mean group	U-MIDAS	2	44	0.92	0.94	0.96	1.02	1.03	1.03	1.04	1.04	1.06
FR	Individual	U-MIDAS	2	60	6.00	5.98	5.78	5.64	5.58	5.67	5.68	5.64	5.73
FR	minMSE	U-MIDAS	2	60	0.97	0.97	0.99	1.00	1.01	1.01	1.01	1.01	1.01
FR	AIC	U-MIDAS	2	60	1.00	1.00	1.00	1.02	1.02	1.02	1.01	1.02	1.00
FR	MMA	U-MIDAS	2	60	1.01	0.98	1.01	1.04	1.04	1.04	1.14	1.05	1.02
FR	Mean group	U-MIDAS	2	60	0.96	0.97	0.99	1.02	1.03	1.04	1.04	1.03	1.01
FR	Individual	U-MIDAS	2	76	9.80	9.79	9.49	9.35	9.38	9.50	9.46	9.40	9.51
FR	minMSE	U-MIDAS	2	76	1.00	1.00	1.04	1.01	1.01	1.00	1.01	1.01	1.01
FR	AIC	U-MIDAS	2	76	1.00	1.00	1.00	1.02	1.01	1.01	1.01	1.01	1.00
FR	MMA	U-MIDAS	2	76	1.01	0.99	1.02	1.03	1.02	1.03	1.09	1.03	1.02
FR	Mean group	U-MIDAS	2	76	1.00	1.00	1.02	1.04	1.04	1.05	1.05	1.04	1.03
IE	Individual	U-MIDAS	2	44	19.15	19.15	15.23	18.21	17.19	17.07	16.90	16.71	16.63
IE	minMSE	U-MIDAS	2	44	0.85	0.86	1.00	0.90	0.93	0.91	0.93	0.94	0.78
IE	AIC	U-MIDAS	2	44	0.96	0.95	0.94	1.00	1.00	1.00	0.99	0.99	0.99
IE	MMA	U-MIDAS	2	44	0.86	0.87	0.93	0.89	0.89	0.89	0.99	1.01	0.96
IE	Mean group	U-MIDAS	2	44	0.73	0.73	0.90	0.75	0.79	0.79	0.80	0.80	0.81
IE	Individual	U-MIDAS	2	60	19.89	19.88	17.15	20.29	20.49	20.17	19.38	19.17	19.22
IE	minMSE	U-MIDAS	2	60	0.91	0.91	1.16	0.87	0.93	0.94	0.96	0.97	0.85
IE	AIC	U-MIDAS	2	60	0.97	0.97	0.96	0.99	1.00	1.00	1.01	1.01	1.00
IE	MMA	U-MIDAS	2	60	1.07	1.04	1.11	0.99	1.05	1.09	1.14	1.19	1.20

Table OA.7 continued from previous page

					Weekly position								
Country	Averaging	Estimator	h	T	-12	-10	-8	-6	-4	-2	0	$+2$	$+4$
IE	Mean group	U-MIDAS	2	60	0.89	0.89	1.02	0.86	0.83	0.84	0.87	0.88	0.90
IE	Individual	U-MIDAS	2	76	30.23	30.24	26.23	30.53	31.61	31.19	29.75	29.48	29.40
IE	minMSE	U-MIDAS	2	76	0.95	0.96	1.09	0.93	0.98	1.01	0.99	0.99	0.86
IE	AIC	U-MIDAS	2	76	0.97	0.97	0.95	0.99	1.00	1.00	1.00	1.00	1.00
IE	MMA	U-MIDAS	2	76	1.06	1.06	1.14	1.03	1.06	1.07	1.10	1.15	1.17
IE	Mean group	U-MIDAS	2	76	0.93	0.94	1.07	0.91	0.87	0.87	0.91	0.92	0.95
IT	Individual	U-MIDAS	2	44	4.42	4.40	4.20	4.17	4.12	4.21	4.38	4.37	4.43
IT	minMSE	U-MIDAS	2	44	0.93	0.94	0.96	0.96	0.98	0.98	0.97	0.97	0.94
IT	AIC	U-MIDAS	2	44	0.99	1.00	0.97	1.00	1.02	1.01	0.99	0.98	0.96
IT	MMA	U-MIDAS	2	44	0.97	0.97	1.00	1.02	1.09	1.06	0.98	0.96	0.96
IT	Mean group	U-MIDAS	2	44	1.03	1.04	1.07	1.07	1.10	1.09	1.05	1.06	1.00
IT	Individual	U-MIDAS	2	60	5.02	4.98	4.98	5.09	4.87	4.89	4.94	4.98	4.92
IT	minMSE	U-MIDAS	2	60	0.99	1.00	0.99	1.01	1.01	1.01	1.00	1.01	1.00
IT	AIC	U-MIDAS	2	60	1.06	1.08	1.03	0.99	1.01	1.00	1.00	1.01	1.00
IT	MMA	U-MIDAS	2	60	0.99	0.96	1.00	1.01	0.97	0.98	1.04	1.00	1.01
IT	Mean group	U-MIDAS	2	60	1.07	1.08	1.08	1.05	1.08	1.08	1.06	1.08	1.06
IT	Individual	U-MIDAS	2	76	7.95	7.89	7.88	8.01	7.87	7.91	7.90	7.94	7.90
IT	minMSE	U-MIDAS	2	76	1.01	1.01	1.01	1.02	1.02	1.01	1.02	1.01	1.01
IT	AIC	U-MIDAS	2	76	1.01	1.02	1.00	1.04	1.01	1.01	1.00	1.00	1.00
IT	MMA	U-MIDAS	2	76	1.02	1.02	1.02	1.02	1.02	1.01	1.03	1.00	1.02
IT	Mean group	U-MIDAS	2	76	1.10	1.10	1.10	1.09	1.09	1.09	1.08	1.10	1.08
LU	Individual	U-MIDAS	2	44	5.11	5.39	5.17	4.42	5.13	3.92	4.00	4.27	4.33
LU	minMSE	U-MIDAS	2	44	0.63	0.70	0.72	0.85	0.78	0.83	0.87	0.82	0.75
LU	AIC	U-MIDAS	2	44	0.96	0.95	0.97	1.01	0.99	1.00	0.99	1.00	0.99
LU	MMA	U-MIDAS	2	44	0.71	0.61	0.66	0.71	0.71	0.84	0.74	0.72	0.73
LU	Mean group	U-MIDAS	2	44	0.54	0.51	0.53	0.62	0.54	0.70	0.68	0.63	0.64
LU	Individual	U-MIDAS	2	60	3.54	3.57	3.32	3.51	3.33	3.12	2.67	2.74	3.58
LU	minMSE	U-MIDAS	2	60	0.81	0.81	0.84	0.87	0.84	0.88	0.97	0.98	0.82
LU	AIC	U-MIDAS	2	60	0.99	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
LU	MMA	U-MIDAS	2	60	0.98	0.95	0.95	0.96	0.97	0.99	0.94	0.98	0.82
LU	Mean group	U-MIDAS	2	60	0.74	0.73	0.77	0.72	0.73	0.77	0.91	0.89	0.73
LU	Individual	U-MIDAS	2	76	4.83	4.78	4.17	4.13	4.18	4.13	3.69	3.69	4.25
LU	minMSE	U-MIDAS	2	76	0.76	0.75	0.84	0.87	0.85	0.89	0.95	0.92	0.86
LU	AIC	U-MIDAS	2	76	0.79	0.82	0.86	1.00	1.00	1.00	1.00	1.00	1.00
LU	MMA	U-MIDAS	2	76	0.92	0.91	0.97	1.00	1.00	0.97	0.93	0.97	0.83
LU	Mean group	U-MIDAS	2	76	0.72	0.72	0.81	0.80	0.77	0.77	0.87	0.87	0.78
PT	Individual	U-MIDAS	2	44	6.44	6.25	6.18	5.97	5.95	6.05	5.92	5.91	6.02
PT	minMSE	U-MIDAS	2	44	0.98	1.00	0.97	0.98	0.98	0.99	1.01	1.02	0.99

Table OA.7 continued from previous page

					Weekly position								
Country	Averaging	Estimator	h	T	-12	-10	-8	-6	-4	-2	0	$+2$	$+4$
PT	AIC	U-MIDAS	2	44	1.06	1.08	1.05	1.04	1.02	1.03	1.03	1.03	1.04
PT	MMA	U-MIDAS	2	44	0.96	1.00	0.99	1.06	1.09	1.11	1.19	1.16	1.06
PT	Mean group	U-MIDAS	2	44	0.94	0.98	1.00	1.04	1.03	1.10	1.13	1.08	1.06
PT	Individual	U-MIDAS	2	60	7.07	6.79	6.68	7.14	7.34	7.22	7.14	7.15	7.04
PT	minMSE	U-MIDAS	2	60	1.01	1.00	1.00	1.00	0.99	1.01	1.01	1.00	1.01
PT	AIC	U-MIDAS	2	60	1.26	1.26	1.24	1.14	1.06	1.07	1.00	1.00	1.00
PT	MMA	U-MIDAS	2	60	1.11	1.16	1.25	1.17	1.04	1.12	1.17	1.08	1.12
PT	Mean group	U-MIDAS	2	60	1.10	1.16	1.19	1.11	1.04	1.15	1.15	1.10	1.12
PT	Individual	U-MIDAS	2	76	12.44	11.90	11.91	12.25	12.34	12.68	12.57	12.04	11.58
PT	minMSE	U-MIDAS	2	76	1.01	1.01	1.00	1.00	1.00	1.00	1.00	1.00	1.01
PT	AIC	U-MIDAS	2	76	1.13	1.13	1.12	1.01	1.01	1.01	1.00	1.00	1.00
PT	MMA	U-MIDAS	2	76	1.01	0.97	1.04	0.96	1.01	1.02	1.01	0.99	1.02
PT	Mean group	U-MIDAS	2	76	1.02	1.07	1.06	1.04	1.02	1.07	1.06	1.05	1.08
UK	Individual	U-MIDAS	2	44	0.95	0.95	0.96	0.69	0.77	0.70	0.63	0.67	0.85
UK	minMSE	U-MIDAS	2	44	0.84	0.85	0.83	0.99	0.93	0.92	0.95	0.93	0.89
UK	AIC	U-MIDAS	2	44	0.94	0.90	0.82	0.76	0.82	0.85	0.85	0.81	0.67
UK	MMA	U-MIDAS	2	44	0.95	0.78	0.86	1.17	1.36	1.22	1.72	1.80	1.17
UK	Mean group	U-MIDAS	2	44	0.68	0.66	0.61	0.80	0.64	0.71	0.92	0.79	0.58
UK	Individual	U-MIDAS	2	60	0.46	0.45	0.41	0.27	0.39	0.37	0.35	0.37	0.32
UK	minMSE	U-MIDAS	2	60	0.72	0.78	0.85	0.87	0.88	0.88	0.89	0.87	0.85
UK	AIC	U-MIDAS	2	60	0.40	0.38	0.29	0.67	0.73	0.72	0.67	0.65	0.96
UK	MMA	U-MIDAS	2	60	0.57	0.68	0.81	0.69	0.41	1.44	1.15	0.46	0.62
UK	Mean group	U-MIDAS	2	60	0.36	0.35	0.46	0.64	0.46	0.45	0.43	0.40	0.56
UK	Individual	U-MIDAS	2	76	0.11	0.09	0.09	0.08	0.09	0.07	0.07	0.08	0.10
UK	minMSE	U-MIDAS	2	76	0.89	0.89	0.87	0.89	0.85	0.87	0.82	0.76	0.87
UK	AIC	U-MIDAS	2	76	0.86	0.85	0.75	0.80	0.80	0.83	0.82	0.81	0.98
UK	MMA	U-MIDAS	2	76	0.77	1.83	2.46	1.51	1.03	2.09	1.94	1.05	1.22
UK	Mean group	U-MIDAS	2	76	0.54	0.69	0.96	1.04	0.78	0.87	0.63	0.53	0.83
AT	Individual	Bridge	2	44	3.38	3.38	3.37	3.36	3.36	3.35	3.35	3.33	3.31
AT	minMSE	Bridge	2	44	1.04	1.03	1.04	0.98	0.97	0.98	0.97	0.96	0.98
AT	AIC	Bridge	2	44	1.06	1.05	1.05	1.00	0.99	1.00	0.99	0.99	1.00
AT	MMA	Bridge	2	44	1.37	1.36	1.35	1.28	1.28	1.30	1.28	1.28	1.30
AT	Mean group	Bridge	2	44	1.05	1.04	1.04	0.98	0.98	0.99	0.98	0.97	0.99
AT	Individual	Bridge	2	60	4.21	4.21	4.18	4.22	4.23	4.19	4.17	4.16	4.14
AT	minMSE	Bridge	2	60	0.98	0.98	0.99	1.00	1.05	1.08	1.05	1.06	1.04
AT	AIC	Bridge	2	60	0.99	0.99	1.00	1.00	1.05	1.08	1.06	1.07	1.05
AT	MMA	Bridge	2	60	0.94	0.94	0.96	1.08	1.14	1.16	1.14	1.16	1.13
AT	Mean group	Bridge	2	60	0.99	0.99	1.00	1.00	1.05	1.08	1.06	1.07	1.05

Table OA.7 continued from previous page

					Weekly position								
Country	Averaging	Estimator	h	T	-12	-10	-8	-6	-4	-2	0	$+2$	$+4$
AT	Individual	Bridge	2	76	6.88	6.88	6.85	6.90	6.91	6.86	6.84	6.83	6.81
AT	minMSE	Bridge	2	76	0.97	0.97	0.97	1.00	1.03	1.07	1.05	1.06	1.08
AT	AIC	Bridge	2	76	0.98	0.98	0.98	1.00	1.04	1.07	1.06	1.06	1.09
AT	MMA	Bridge	2	76	1.12	1.12	1.13	1.15	1.19	1.23	1.22	1.23	1.26
AT	Mean group	Bridge	2	76	0.97	0.98	0.98	1.00	1.04	1.07	1.06	1.06	1.09
BE	Individual	Bridge	2	44	3.63	3.48	3.59	3.39	3.75	3.58	3.88	3.53	3.94
BE	minMSE	Bridge	2	44	1.01	1.00	1.00	0.95	0.79	0.91	0.76	0.89	0.73
BE	AIC	Bridge	2	44	1.00	1.00	0.97	0.96	0.77	0.90	0.74	0.89	0.69
BE	MMA	Bridge	2	44	1.20	1.16	1.32	1.10	1.18	1.20	0.81	1.28	0.84
BE	Mean group	Bridge	2	44	0.99	0.99	0.93	0.95	0.77	0.87	0.72	0.89	0.66
BE	Individual	Bridge	2	60	4.33	4.20	3.41	4.32	4.17	3.94	4.11	4.33	5.63
BE	minMSE	Bridge	2	60	0.96	0.78	0.83	0.95	0.85	0.86	0.81	0.84	0.41
BE	AIC	Bridge	2	60	0.97	0.79	0.85	0.96	0.86	0.88	0.83	0.84	0.38
BE	MMA	Bridge	2	60	0.99	0.80	0.83	0.90	0.80	0.80	0.81	0.82	0.34
BE	Mean group	Bridge	2	60	0.97	0.79	0.83	0.95	0.85	0.87	0.82	0.84	0.36
BE	Individual	Bridge	2	76	7.05	6.95	6.42	7.15	6.84	6.64	6.70	7.10	8.31
BE	minMSE	Bridge	2	76	0.98	0.89	1.00	1.00	0.94	0.95	0.93	0.92	0.52
BE	AIC	Bridge	2	76	0.98	0.90	1.02	1.01	0.95	0.97	0.94	0.93	0.52
BE	MMA	Bridge	2	76	1.13	1.04	1.19	1.15	1.09	1.13	1.13	1.06	0.64
BE	Mean group	Bridge	2	76	0.98	0.90	1.01	1.00	0.95	0.96	0.93	0.92	0.51
DE	Individual	Bridge	2	44	3.05	3.05	3.04	3.05	3.04	3.05	3.03	3.02	3.02
DE	minMSE	Bridge	2	44	1.01	0.99	0.97	0.95	0.85	0.83	0.89	0.88	0.85
DE	AIC	Bridge	2	44	1.18	1.14	1.12	1.07	0.95	0.95	1.03	1.00	0.97
DE	MMA	Bridge	2	44	1.35	1.33	1.31	1.28	1.15	1.11	1.21	1.19	1.17
DE	Mean group	Bridge	2	44	1.01	1.00	0.98	0.95	0.85	0.83	0.90	0.88	0.86
DE	Individual	Bridge	2	60	3.39	3.40	3.40	3.40	3.40	3.41	3.37	3.37	3.39
DE	minMSE	Bridge	2	60	0.89	0.89	0.86	0.86	0.84	0.83	0.93	0.92	0.89
DE	AIC	Bridge	2	60	0.90	0.90	0.86	0.87	0.85	0.84	0.93	0.93	0.90
DE	MMA	Bridge	2	60	0.89	0.89	0.86	0.98	0.96	0.95	1.06	1.05	1.01
DE	Mean group	Bridge	2	60	0.89	0.89	0.86	0.86	0.85	0.84	0.93	0.92	0.89
DE	Individual	Bridge	2	76	5.32	5.32	5.33	5.34	5.34	5.34	5.31	5.31	5.35
DE	minMSE	Bridge	2	76	1.03	1.03	0.97	0.96	0.91	0.90	0.97	0.97	0.93
DE	AIC	Bridge	2	76	1.05	1.05	0.99	0.97	0.92	0.91	0.98	0.98	0.94
DE	MMA	Bridge	2	76	1.24	1.23	1.16	1.14	1.09	1.08	1.17	1.16	1.11
DE	Mean group	Bridge	2	76	1.04	1.03	0.97	0.96	0.92	0.91	0.97	0.97	0.93
EL	Individual	Bridge	2	44	9.77	9.78	9.77	9.65	9.68	9.68	9.68	9.68	9.66
EL	minMSE	Bridge	2	44	0.40	0.40	0.40	0.56	0.68	0.68	0.70	0.69	0.68
EL	AIC	Bridge	2	44	0.47	0.47	0.47	0.55	0.68	0.68	0.70	0.69	0.68

Table OA.7 continued from previous page

					Weekly position								
Country	Averaging	Estimator	h	T	-12	-10	-8	-6	-4	-2	0	$+2$	$+4$
EL	MMA	Bridge	2	44	0.43	0.43	0.43	0.64	0.78	0.80	0.82	0.80	0.79
EL	Mean group	Bridge	2	44	0.44	0.44	0.44	0.54	0.66	0.65	0.67	0.66	0.66
EL	Individual	Bridge	2	60	8.30	8.29	8.29	8.14	8.16	8.17	8.18	8.19	8.16
EL	minMSE	Bridge	2	60	0.72	0.71	0.68	0.75	0.80	0.79	0.77	0.78	0.74
EL	AIC	Bridge	2	60	0.77	0.76	0.73	0.81	0.86	0.85	0.82	0.84	0.79
EL	MMA	Bridge	2	60	0.73	0.73	0.69	0.80	0.85	0.84	0.81	0.83	0.78
EL	Mean group	Bridge	2	60	0.74	0.74	0.70	0.78	0.83	0.82	0.80	0.81	0.77
EL	Individual	Bridge	2	76	9.52	9.51	9.49	9.45	9.47	9.47	9.52	9.52	9.49
EL	minMSE	Bridge	2	76	0.77	0.76	0.81	0.87	0.85	0.83	0.71	0.73	0.73
EL	AIC	Bridge	2	76	0.78	0.77	0.81	0.89	0.86	0.85	0.73	0.74	0.75
EL	MMA	Bridge	2	76	0.87	0.86	0.91	1.00	0.97	0.95	0.82	0.83	0.84
EL	Mean group	Bridge	2	76	0.78	0.77	0.82	0.88	0.86	0.84	0.73	0.74	0.75
ES	Individual	Bridge	2	44	8.17	8.16	8.15	7.97	7.95	7.98	7.94	7.97	7.94
ES	minMSE	Bridge	2	44	1.00	0.98	0.99	0.98	0.99	0.99	1.02	1.00	0.97
ES	AIC	Bridge	2	44	1.00	0.99	0.99	0.99	1.00	0.99	1.03	1.01	0.98
ES	MMA	Bridge	2	44	0.99	0.97	0.98	0.96	0.98	0.97	1.01	0.99	0.96
ES	Mean group	Bridge	2	44	0.99	0.98	0.98	0.98	0.99	0.98	1.02	1.00	0.97
ES	Individual	Bridge	2	60	10.19	10.24	10.20	10.13	10.10	10.12	10.08	10.19	10.15
ES	minMSE	Bridge	2	60	0.95	0.92	0.95	0.94	0.93	0.93	0.96	0.92	0.93
ES	AIC	Bridge	2	60	0.95	0.92	0.95	0.94	0.94	0.94	0.96	0.92	0.93
ES	MMA	Bridge	2	60	0.88	0.85	0.88	0.88	0.87	0.87	0.90	0.85	0.86
ES	Mean group	Bridge	2	60	0.95	0.92	0.96	0.95	0.94	0.94	0.97	0.92	0.93
ES	Individual	Bridge	2	76	16.76	16.82	16.78	16.72	16.68	16.72	16.67	16.81	16.78
ES	minMSE	Bridge	2	76	0.95	0.92	0.95	0.95	0.94	0.93	0.95	0.91	0.94
ES	AIC	Bridge	2	76	0.95	0.93	0.96	0.95	0.94	0.94	0.96	0.91	0.94
ES	MMA	Bridge	2	76	0.92	0.90	0.93	0.89	0.88	0.88	0.90	0.86	0.89
ES	Mean group	Bridge	2	76	0.95	0.92	0.95	0.95	0.94	0.94	0.95	0.91	0.94
FI	Individual	Bridge	2	44	2.76	2.77	2.76	2.68	2.68	2.68	2.67	2.66	2.69
FI	minMSE	Bridge	2	44	0.70	0.72	0.63	0.64	0.61	0.61	0.54	0.55	0.63
FI	AIC	Bridge	2	44	0.90	0.90	0.79	0.67	0.64	0.64	0.57	0.58	0.66
FI	MMA	Bridge	2	44	0.84	0.85	0.75	0.75	0.61	0.72	0.64	0.66	0.76
FI	Mean group	Bridge	2	44	0.69	0.71	0.62	0.63	0.61	0.60	0.54	0.55	0.63
FI	Individual	Bridge	2	60	1.78	1.78	1.77	1.76	1.76	1.75	1.74	1.74	1.74
FI	minMSE	Bridge	2	60	0.96	0.92	0.90	0.80	0.75	0.75	0.78	0.81	0.80
FI	AIC	Bridge	2	60	0.96	0.92	0.90	0.83	0.77	0.77	0.81	0.83	0.82
FI	MMA	Bridge	2	60	0.88	0.84	0.83	1.01	0.93	0.94	0.98	1.01	1.02
FI	Mean group	Bridge	2	60	0.96	0.92	0.90	0.82	0.76	0.76	0.80	0.83	0.81
FI	Individual	Bridge	2	76	2.48	2.47	2.47	2.46	2.46	2.46	2.46	2.46	2.44

Table OA.7 continued from previous page

					Weekly position								
Country	Averaging	Estimator	h	T	-12	-10	-8	-6	-4	-2	0	$+2$	$+4$
FI	minMSE	Bridge	2	76	1.09	1.09	1.10	0.93	0.85	0.85	0.91	0.95	0.94
FI	AIC	Bridge	2	76	1.10	1.11	1.11	0.95	0.87	0.86	0.93	0.97	0.96
FI	MMA	Bridge	2	76	1.33	1.34	1.35	1.18	1.09	1.08	1.16	1.20	1.21
FI	Mean group	Bridge	2	76	1.09	1.10	1.10	0.94	0.86	0.86	0.92	0.96	0.95
FR	Individual	Bridge	2	44	4.49	4.49	4.47	4.47	4.47	4.49	4.48	4.47	4.44
FR	minMSE	Bridge	2	44	0.91	0.91	0.95	0.99	1.01	1.00	0.99	1.00	1.04
FR	AIC	Bridge	2	44	0.92	0.92	0.96	1.00	1.03	1.01	1.01	1.01	1.06
FR	MMA	Bridge	2	44	1.03	1.03	1.07	1.23	1.26	1.24	1.24	1.25	1.32
FR	Mean group	Bridge	2	44	0.92	0.92	0.96	1.00	1.02	1.01	1.00	1.01	1.06
FR	Individual	Bridge	2	60	5.98	5.97	5.94	5.93	5.94	5.96	5.96	5.94	5.91
FR	minMSE	Bridge	2	60	1.00	1.00	1.03	1.05	1.06	1.05	1.05	1.05	1.03
FR	AIC	Bridge	2	60	1.00	1.00	1.03	1.05	1.06	1.05	1.05	1.05	1.04
FR	MMA	Bridge	2	60	0.97	0.97	1.01	1.13	1.15	1.13	1.13	1.14	1.12
FR	Mean group	Bridge	2	60	1.00	1.00	1.03	1.05	1.06	1.05	1.05	1.05	1.03
FR	Individual	Bridge	2	76	9.91	9.90	9.88	9.85	9.87	9.90	9.89	9.87	9.84
FR	minMSE	Bridge	2	76	1.01	1.01	1.04	1.05	1.05	1.04	1.04	1.05	1.03
FR	AIC	Bridge	2	76	1.02	1.02	1.04	1.06	1.05	1.04	1.05	1.05	1.04
FR	MMA	Bridge	2	76	1.13	1.13	1.17	1.19	1.19	1.17	1.18	1.19	1.17
FR	Mean group	Bridge	2	76	1.01	1.01	1.04	1.05	1.05	1.04	1.05	1.05	1.03
IE	Individual	Bridge	2	44	13.28	13.29	13.27	13.32	13.33	13.33	13.33	13.33	13.29
IE	minMSE	Bridge	2	44	0.70	0.70	0.88	0.74	0.78	0.78	0.79	0.80	0.80
IE	AIC	Bridge	2	44	0.69	0.69	0.87	0.73	0.77	0.78	0.78	0.79	0.79
IE	MMA	Bridge	2	44	0.70	0.70	0.88	0.82	0.87	0.87	0.88	0.89	0.90
IE	Mean group	Bridge	2	44	0.71	0.71	0.89	0.74	0.78	0.79	0.80	0.81	0.81
IE	Individual	Bridge	2	60	16.47	16.47	16.45	16.40	16.42	16.41	16.41	16.41	16.36
IE	minMSE	Bridge	2	60	0.84	0.84	0.97	0.83	0.82	0.84	0.87	0.88	0.88
IE	AIC	Bridge	2	60	0.83	0.83	0.96	0.81	0.80	0.81	0.85	0.86	0.85
IE	MMA	Bridge	2	60	0.83	0.83	0.95	0.84	0.83	0.85	0.91	0.92	0.89
IE	Mean group	Bridge	2	60	0.85	0.85	0.99	0.84	0.83	0.84	0.87	0.88	0.88
IE	Individual	Bridge	2	76	26.03	26.03	26.01	25.95	25.96	25.96	25.95	25.95	25.87
IE	minMSE	Bridge	2	76	0.88	0.88	1.01	0.88	0.85	0.86	0.90	0.91	0.91
IE	AIC	Bridge	2	76	0.87	0.87	1.00	0.86	0.83	0.84	0.88	0.89	0.89
IE	MMA	Bridge	2	76	0.90	0.90	1.04	0.93	0.90	0.91	0.95	0.96	0.97
IE	Mean group	Bridge	2	76	0.89	0.89	1.02	0.88	0.85	0.86	0.90	0.91	0.91
IT	Individual	Bridge	2	44	4.21	4.21	4.21	4.21	4.20	4.20	4.20	4.20	4.19
IT	minMSE	Bridge	2	44	0.98	0.99	1.04	1.04	1.05	1.03	0.99	0.99	0.97
IT	AIC	Bridge	2	44	1.00	1.01	1.06	1.06	1.07	1.05	1.01	1.01	1.00
IT	MMA	Bridge	2	44	1.20	1.21	1.27	1.40	1.41	1.38	1.32	1.33	1.32

Table OA.7 continued from previous page

					Weekly position								
Country	Averaging	Estimator	h	T	-12	-10	-8	-6	-4	-2	0	$+2$	$+4$
IT	Mean group	Bridge	2	44	1.01	1.02	1.07	1.07	1.08	1.06	1.02	1.02	1.01
IT	Individual	Bridge	2	60	5.12	5.13	5.12	5.12	5.11	5.11	5.10	5.12	5.10
IT	minMSE	Bridge	2	60	1.06	1.07	1.07	1.04	1.09	1.08	1.07	1.07	1.08
IT	AIC	Bridge	2	60	1.07	1.08	1.08	1.05	1.09	1.09	1.08	1.07	1.08
IT	MMA	Bridge	2	60	1.27	1.28	1.28	1.26	1.31	1.31	1.29	1.29	1.31
IT	Mean group	Bridge	2	60	1.08	1.09	1.09	1.06	1.11	1.10	1.09	1.09	1.10
IT	Individual	Bridge	2	76	8.20	8.20	8.20	8.21	8.20	8.20	8.20	8.21	8.20
IT	minMSE	Bridge	2	76	1.07	1.08	1.08	1.06	1.08	1.08	1.08	1.07	1.08
IT	AIC	Bridge	2	76	1.08	1.09	1.09	1.07	1.09	1.08	1.09	1.08	1.08
IT	MMA	Bridge	2	76	1.26	1.27	1.27	1.26	1.28	1.27	1.27	1.27	1.28
IT	Mean group	Bridge	2	76	1.09	1.10	1.10	1.08	1.10	1.09	1.10	1.09	1.10
LU	Individual	Bridge	2	44	2.78	2.78	2.78	2.77	2.77	2.76	2.76	2.77	2.77
LU	minMSE	Bridge	2	44	0.58	0.55	0.57	0.63	0.54	0.71	0.69	0.65	0.64
LU	AIC	Bridge	2	44	0.52	0.50	0.52	0.61	0.52	0.68	0.67	0.63	0.62
LU	MMA	Bridge	2	44	0.69	0.66	0.69	0.79	0.72	0.92	0.90	0.85	0.84
LU	Mean group	Bridge	2	44	0.55	0.52	0.54	0.61	0.53	0.69	0.68	0.64	0.63
LU	Individual	Bridge	2	60	2.67	2.68	2.68	2.67	2.66	2.67	2.66	2.67	2.66
LU	minMSE	Bridge	2	60	0.79	0.79	0.85	0.72	0.75	0.80	0.94	0.92	0.71
LU	AIC	Bridge	2	60	0.74	0.74	0.79	0.73	0.77	0.83	0.97	0.94	0.72
LU	MMA	Bridge	2	60	0.77	0.77	0.83	0.74	0.78	0.83	0.97	0.95	0.73
LU	Mean group	Bridge	2	60	0.75	0.75	0.80	0.72	0.76	0.81	0.95	0.93	0.71
LU	Individual	Bridge	2	76	3.60	3.60	3.60	3.60	3.60	3.60	3.60	3.60	3.59
LU	minMSE	Bridge	2	76	0.80	0.81	0.92	0.85	0.84	0.85	0.95	0.95	0.83
LU	AIC	Bridge	2	76	0.76	0.76	0.87	0.88	0.87	0.88	0.99	0.99	0.86
LU	MMA	Bridge	2	76	0.76	0.77	0.88	0.86	0.84	0.86	0.96	0.96	0.84
LU	Mean group	Bridge	2	76	0.75	0.76	0.87	0.84	0.83	0.84	0.94	0.95	0.82
PT	Individual	Bridge	2	44	6.22	6.21	6.21	6.18	6.18	6.21	6.21	6.18	6.17
PT	minMSE	Bridge	2	44	0.97	1.00	1.01	1.03	1.04	1.02	1.05	1.04	1.02
PT	AIC	Bridge	2	44	0.99	1.02	1.03	1.05	1.05	1.04	1.06	1.06	1.04
PT	MMA	Bridge	2	44	0.99	1.02	1.03	1.05	1.05	1.04	1.07	1.06	1.04
PT	Mean group	Bridge	2	44	0.98	1.01	1.02	1.05	1.05	1.04	1.06	1.06	1.04
PT	Individual	Bridge	2	60	8.25	8.23	8.23	8.20	8.19	8.26	8.26	8.21	8.18
PT	minMSE	Bridge	2	60	1.17	1.22	1.24	1.15	1.12	1.15	1.16	1.15	1.16
PT	AIC	Bridge	2	60	1.18	1.23	1.25	1.16	1.12	1.15	1.17	1.16	1.17
PT	MMA	Bridge	2	60	1.08	1.13	1.15	1.07	1.04	1.06	1.07	1.07	1.09
PT	Mean group	Bridge	2	60	1.18	1.23	1.25	1.16	1.13	1.15	1.17	1.16	1.18
PT	Individual	Bridge	2	76	12.91	12.89	12.89	12.90	12.89	12.96	12.96	12.91	12.87
PT	minMSE	Bridge	2	76	1.05	1.09	1.09	1.06	1.05	1.03	1.04	1.08	1.12

Table OA.7 continued from previous page

					Weekly position								
Country	Averaging	Estimator	h	T	-12	-10	-8	-6	-4	-2	0	$+2$	$+4$
PT	AIC	Bridge	2	76	1.06	1.10	1.10	1.07	1.06	1.04	1.05	1.09	1.13
PT	MMA	Bridge	2	76	1.02	1.06	1.06	1.11	1.11	1.08	1.09	1.13	1.18
PT	Mean group	Bridge	2	76	1.05	1.10	1.10	1.06	1.06	1.03	1.04	1.08	1.12
UK	Individual	Bridge	2	44	0.42	0.42	0.44	0.42	0.43	0.42	0.41	0.42	0.45
UK	minMSE	Bridge	2	44	0.43	0.43	0.43	0.57	0.50	0.56	0.60	0.57	0.46
UK	AIC	Bridge	2	44	0.44	0.44	0.43	0.58	0.51	0.57	0.61	0.58	0.45
UK	MMA	Bridge	2	44	1.28	1.29	1.29	1.74	1.55	1.72	1.87	1.78	1.48
UK	Mean group	Bridge	2	44	0.46	0.46	0.46	0.61	0.55	0.61	0.66	0.62	0.51
UK	Individual	Bridge	2	60	0.08	0.08	0.08	0.10	0.11	0.10	0.10	0.10	0.11
UK	minMSE	Bridge	2	60	0.19	0.19	0.20	0.34	0.25	0.25	0.26	0.25	0.31
UK	AIC	Bridge	2	60	0.20	0.21	0.22	0.36	0.26	0.26	0.27	0.26	0.31
UK	MMA	Bridge	2	60	0.68	0.70	0.77	1.07	0.75	0.78	0.79	0.77	0.93
UK	Mean group	Bridge	2	60	0.21	0.21	0.23	0.35	0.25	0.26	0.27	0.26	0.30
UK	Individual	Bridge	2	76	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03
UK	minMSE	Bridge	2	76	0.29	0.36	0.35	0.41	0.39	0.43	0.39	0.37	0.36
UK	AIC	Bridge	2	76	0.32	0.40	0.37	0.43	0.41	0.47	0.45	0.41	0.38
UK	MMA	Bridge	2	76	1.83	2.25	2.16	2.47	2.49	2.84	2.96	2.54	2.10
UK	Mean group	Bridge	2	76	0.32	0.40	0.38	0.42	0.40	0.45	0.44	0.40	0.37

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