Supplemental Appendix for "Macroeconomic and Financial Uncertainty Measures in a Big Data Environment"

Weijia Peng[1], Norman R. Swanson[2], Xiye Yang[2], Chun Yao[3]

[1]Sacred Heart University, [2]Rutgers University and [3]Barclays

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Abstract

This Supplemental Appendix contains a more detailed description of the state space modeling framework used in the paper, followed by a discussion of the methods used to address temporal aggregation of our stock and flow variables. Thereafter, supplemental tables are collected. These tables summarize various forecast accuracy and model confidence set results for a variety of "target variables" that are not included in the main paper (Tables A1a-B6B). These target variables include IP, PAY, CPI, PCE, SI, and HS. Additional tabulated results are also included for 12- and 24-month forecast horizons, for the HS variable (Tables RR1-RR3). Longer horizon forecasting results for the other variables are available upon request from the authors.

* Weijia Peng, Department of Finance, Jack Welch College of Business & Technology, Sacred Heart University, 5151 Park Avenue Fairfield, CT 06825, USA, pengw@sacredheart.edu; Norman R. Swanson, Department of Economics, Rutgers University, 75 Hamilton Street, New Brunswick, NJ 08901, USA, nswanson@economics.rutgers.edu; Xiye Yang, Department of Economics, Rutgers University, 75 Hamilton Street, New Brunswick, NJ 08901, USA, xiyeyang@economics.rutgers.edu; Chun Yao, US Economics Research, Barclays, 745 Seventh Avenue, New York, NY 10019, USA, chunyao.economics@gmail.com.
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1 Further notes on the state space model used in the main paper

We begin by providing details on our state space modeling setup and our factor estimation procedure. State-space modeling and Kalman factor have been extensively discussed in literature (see e.g. Anderson & Moore (2012), Cargnoni et al. (1997), Prado & West (2010), West & Harrison (1997). Since our setup involves mixed frequency input signals, missing values can occur in the signal vector y_t. Despite this, the state equation will continue to update the state variable based on the state equation alone, assuming no new information in the signal equation. Therefore, the estimation of this state space model with mixed frequency signals is similar to the universal frequency case, with some accommodation made for missing values from lower frequency variables.

Let y_t^* denote a mixed-frequency dataset and let the corresponding signal vector be denoted by $y_t = [y_t^d, y_t^{2d}, y_t^{3d}, y_t^w]'$. In the univariate frequency setup, we have $y_t^* = y_t$, whereas in the mixed frequency setup, we have $y_t^* = M_t y_t$, where the elements of the matrix M_t are 0 for missing values in the signal vector and 1 for non-missing values. The estimation procedure for the mixed-frequency model is similar to the univariate scenario. Specifically, we let S_t be a $m \times q$ vector of state variables, and for $t = 1, \cdots, T$, the state space model can be compactly expressed as:

$$y_t^* = H^* S_t \tag{1.1}$$

$$S_{t+1} = AS_t + B\eta_t, \tag{1.2}$$

where $\eta_t \overset{i.i.d.}{\sim} N(0, Q)$. When observation y_t becomes available in the standard state space model, the joint distribution between $y_t - E(y_t|y_{t-1})$ and S_t updates $S_{t|t}$, where we use the notation "$|t$" to denote conditional expectation with respect to the filtration at period t. The state equation then yields S_{t+1}. By incorporating the mapping from y_t to y_t^*, we can apply the estimation procedure used in the standard state space model to our mixed-frequency dataset. More specifically, we have

$$y_t^* = M_t y_t, \quad H^* = M_t H_t. \tag{1.3}$$

Then, similar to the standard state space model, we obtain the following joint distribution:

$$\begin{pmatrix} S_t \\ y_t^* - E(y_t^*|y_{t-1}^*) \end{pmatrix} \sim N\left[\begin{pmatrix} S_{t|t-1} \\ 0 \end{pmatrix}, \begin{pmatrix} P_t H^{*'} & P_t H^{*'} \\ P_t H^{*'} & V_t \end{pmatrix} \right], \tag{1.4}$$

where P_t denotes the variance of S_t given y_{t-1}^*, and V_t denotes the variance of $y_t^* - E(y_t^*|y_{t-1}^*)$.

(Refer to Anderson & Moore (2012) for a detailed derivation of the mean, covariance, and variance in the above discussion.) From the joint distribution of these variables, we obtain:

$$\alpha_{t|t} = S_t + P_t H^{*'} F_t^{-1}[y_t^* - E(y_t^*|y_{t-1}^*)] \tag{1.5}$$

$$P_{t|t} = P_t + P_t H^{*'} F_t^{-1} H P_t^{'}. \tag{1.6}$$

According to the state equation, we can then forecast the next step state vector as:

$$\alpha_{t+1} = A\alpha_{t|t} \tag{1.7}$$

$$P_{t+1} = AP_tA' + BQB' \tag{1.8}$$

Alternatively, when y_t has missing values due to different updating frequencies, the state vector will not update and instead adheres to the following law of motion:

$$\alpha_{t+1} = A\alpha_t \tag{1.9}$$

$$P_{t+1} = AP_tA' + BQB'. \tag{1.10}$$

To match our monthly forecasting experiment of macroeconomic variables, we perform a model and factor re-estimation every month. Sequentially updating initial parameters with values from the previous month's estimation as prior. As an example, consider the setup for our volatility factors (MFV), where matrices H and A can be expressed as follows[1]:

$$H = \begin{pmatrix} \beta_1 & 0 & 0 & 0 & 1 & 0 & 0 & 0 \\ 0 & \beta_2 & 0 & 0 & 0 & 1 & 0 & 0 \\ 0 & 0 & \beta_3 & 0 & 0 & 0 & 1 & 0 \\ 0 & 0 & 0 & \beta_4 & 0 & 0 & 0 & 1 \end{pmatrix} \tag{1.11}$$

[1]Details about the MFV state space model and parameter matrices are given in Section 2.3 of the paper.

$$A = \begin{pmatrix} \rho & 0 & 0 & 0 & 0 & 0 & 0 & 0 \\ \rho & \psi^1_{t+1} & 0 & 0 & 0 & 0 & 0 & 0 \\ \rho & 0 & \psi^2_{t+1} & 0 & 0 & 0 & 0 & 0 \\ \rho & 0 & 0 & \psi^3_{t+1} & 0 & 0 & 0 & 0 \\ 0 & 0 & 0 & 0 & \eta_1 & 0 & 0 & 0 \\ 0 & 0 & 0 & 0 & 0 & \eta_2 & 0 & 0 \\ 0 & 0 & 0 & 0 & 0 & 0 & \eta_3 & 0 \\ 0 & 0 & 0 & 0 & 0 & 0 & 0 & \eta_4 \end{pmatrix} \tag{1.12}$$

Matrices H and A involve several parameters of interest that need to be estimated, namely β_1, β_2, β_3, β_4, ρ, η_1, η_2, η_3, and η_4. To estimate these parameters and extract the factor, we use the following procedure:

1) Estimate the state space model using the initial k months of data with respect to equation (1) to (10), where k is set to 36 in our study, and initial parameters $\beta_1^{(0)}$, $\beta_2^{(0)}$, $\beta_3^{(0)}$, $\beta_4^{(0)}$, $\rho^{(0)}$, $\eta_1^{(0)}$, $\eta_2^{(0)}$, $\eta_3^{(0)}$, $\eta_4^{(0)}$.

2) For months $k+1, k+2, \cdots, k+i, \cdots$, where $i = 1, 2, \cdots, m$ and $k+m$ denotes the last month of sample data, we re-estimate the parameters after each month using priors based on the previous round:

a) set $\beta_1^{(i)}$, $\beta_2^{(i)}$, $\beta_3^{(i)}$, $\beta_4^{(i)}$, $\rho^{(i)}$, $\eta_1^{(i)}$, $\eta_2^{(i)}$, $\eta_3^{(i)}$, $\eta_4^{(i)}$ to $\hat{\beta}_1^{(i-1)}$, $\hat{\beta}_2^{(i-1)}$, $\hat{\beta}_3^{(i-1)}$, $\hat{\beta}_4^{(i-1)}$, $\hat{\rho}^{(i-1)}$, $\hat{\eta}_1^{(i-1)}$, $\hat{\eta}_2^{(i-1)}$, $\hat{\eta}_3^{(i-1)}$, $\hat{\eta}_4^{(i-1)}$, where the parameters with $(i-1)$ notation represent estimated values from the previous round of estimation

b) estimate parameter values via BFGS algorithm

c) extract the common factor MF_t^{vol} using the Kalman smoother

2 Temporal Aggregation

The temporal aggregation of variables of different frequencies and the stock and flow features of the variables that we examine have been discussed in previous research, such as Aruoba et al. (2009a) and Aruoba et al. (2009b). It is important to address these issues in the specification of our state space models.

We first differentiate between flow and stock variables and consider their impact on our state space models. Flow variables are accumulated within each period, while stock variables reflect quantities measured at a particular point in time. When the state space model is evolving at a higher frequency than the flow variable, accumulated values can result in regular shocks to the state

variable. For instance, if the state space model is evolving at a daily frequency, and we observe a monthly flow variable, its accumulated values over the past 30 days will result in a shock to the state variable each time a new value is updated. To account for this, proper incorporation of flow variable observations into the system is necessary for accurate estimation of the latent factors.

For stock variables, this complication does not arise. The observed value for a stock variable can simply be expressed as a function of the current state variable and the stochastic disturbance term. As an example, let F_t denote the state variable at time t, and let the stock variable be y_t^s, then:

$$y_t^s = \beta F_t + u_t, \tag{2.1}$$

where F_t is state variable, and u_t is a stochastic disturbance term.

On the other hand, and as discussed above, the value of flow variables reflects the aggregated value through each time period. Thus, flow variable y_t^f can be defined as follows:

$$y_t^f = \sum_{i=0}^{K_j-1} y_{t-i}^f, \tag{2.2}$$

where indices i and j denote the i^{th} time point within the j^{th} observational interval, and K_j is the length of the interval between two observational time points (i.e., time points for which observations are available - namely, between the $(j-1)^{th}$ and j^{th} time points). Since the value of flow variable is inter-temporally accumulated over a given period of time, one straightforward way to handle inter-temporal aggregation is by defining a state vector that sums all lags of states within each period. For example, a monthly flow variable in a daily state space model can be specified as:

$$y_t^f = \beta(F_t + F_{t-1} + F_{t-2} + \cdots + F_{t-m}) + u_t, \tag{2.3}$$

where F_t, F_{t-1},$\cdots$, F_{t-m} are state variable components, and u_t is a stochastic disturbance term.

However, given that our state space is evolving at a daily frequency, and the lowest frequency flow variable is quarterly real GDP, this approach will result in the specification of a very large state variable with more than 90 lag terms, and a large number of parameters to be estimated, causing excessive calculation and convergence issues. For this reason, we instead implement the aggregated states approach of Aruoba et al. (2009b) in order to account for flow variables in our system. Namely, we define

$$y_t^f = \beta C_t + \gamma y_{t-M}^f + w_t, \tag{2.4}$$

where C_t is a latent state variable defined specifically for flow variables, M is the observational lag

length, and the w_t are serially uncorrelated error terms. Here, C_t sums over its past values within the observational period of the flow variables. Namely,

$$C_{t+1} = \psi_{t+1} C_t + \rho F_t, \tag{2.5}$$

where

$$\psi_t = \begin{cases} 0, & \text{if } t \text{ is the first observation of the period} \\ 1, & \text{otherwise,} \end{cases}$$

and where ψ_t is an indicator that controls for the observational frequency of the flow variable. Hence, if a flow variable is updated at time t, then the value of C_{t+1} will be refreshed to be $0 + \rho F_t$, while if a flow variable is not updated at time t, then $C_{t+1} = C_t + \rho F_t$, which includes its past value in the sum.

Table A1A: Ex-Ante Relative MSFEs for Industrial Production (Sample 1: 2006:1 - 2018:12)[1]

Model	Forecast horizon					
	1-month	2-month	3-month	4-month	5-month	6-month
rolling window size = 36						
AR	1.000	1.000	1.000	1.000	1.000	1.000
MMF	1.013	1.003^{**}	0.979^{***}	**1.01**	1.199^{***}	1.022
RV	1.007^{*}	0.958^{***}	1.089	1.225^{***}	1.089^{***}	1^{***}
TRV	1.009^{*}	0.966^{***}	1.112^{**}	1.215^{***}	1.084^{***}	$\mathbf{0.997^{***}}$
BPV	0.999^{***}	0.953^{***}	1.069	1.225^{***}	1.1^{***}	1.005
JV	2.902^{***}	2.798^{***}	2.289^{***}	1.902^{***}	1.828^{***}	1.816^{***}
CMRV1	1.004^{*}	1.05	1.043	1.155^{***}	1.08^{***}	1.074^{***}
CMTRV1	$\mathbf{0.987^{***}}$	1.059^{***}	1.031^{***}	1.032^{***}	1.081^{***}	1.071^{***}
CMBPV1	1.005^{*}	1.046	1.042	1.152^{***}	1.085^{***}	1.074^{***}
CMJV1	1.043	1.112^{***}	1.097^{***}	1.064^{***}	1.021	1.103^{***}
CMRV2	1.026	1.114^{***}	1.034^{***}	1.019	1.09^{***}	1.037^{***}
CMTRV2	1.013	1.053^{***}	1.037^{***}	1.046^{***}	1.031	1.071^{***}
CMBPV2	1.024	1.082^{***}	1.052^{***}	1.025	1.059^{***}	1.047^{***}
CMJV2	1.053	1.004^{*}	1.048	1.036	$\mathbf{0.973^{***}}$	1.089^{***}
VRV	1.028	1.108^{**}	1.037	1.038	1.045^{***}	1.055^{***}
VTRV	1.03	1.106^{*}	1.025	1.045	1.046^{***}	1.052^{***}
VBPV	1.028	1.109^{*}	1.046	1.035	1.046^{***}	1.058^{***}
VJV	1.123	1.024	0.984^{***}	1.017	1.028^{***}	1.025
MRV	1.107	1.045	1.219^{***}	1.284^{***}	1.335^{***}	1.133^{***}
MTRV	1.11	1.06	1.234^{***}	1.285^{***}	1.339^{***}	1.134^{***}
MBPV	1.104	1.034	1.198^{***}	1.292^{***}	1.338^{***}	1.132^{***}
MJV	1.337^{***}	1.481^{***}	1.32^{***}	1.275^{***}	1.455^{***}	1.36^{***}
MVRV	1.164^{***}	0.957^{***}	$\mathbf{0.952^{***}}$	1.04	1.226^{***}	1.06
MVTRV	1.169^{***}	0.957^{***}	0.959^{***}	1.043	1.219^{***}	1.056
MVBPV	1.158^{***}	0.97^{***}	0.953^{***}	1.041	1.228^{***}	1.062
MVJV	1.13^{***}	$\mathbf{0.939^{***}}$	0.973^{***}	1.047	1.209^{***}	1.066
rolling window size = 72						
AR	1.000	1.000	1.000	1.000	1.000	1.000
MMF	$\mathbf{0.954^{***}}$	1.014	0.945^{***}	0.956^{***}	0.993^{***}	0.949^{***}
RV	1.068^{*}	1.028	1.022	1.029	1.012	0.99^{***}
TRV	1.079^{***}	1.051	1.032	1.028	1.012	0.982^{***}
BPV	1.07^{*}	1.031	1.029	1.034	1.014	0.992^{***}
JV	2.524^{***}	1.877^{***}	1.647^{***}	1.751^{***}	1.396^{***}	1.197^{***}
CMRV1	1.039^{***}	1.012	0.951^{***}	1.018	0.967^{***}	1.008
CMTRV1	1.157^{***}	1.013	1.004^{*}	1.063	1.052	1.102^{***}
CMBPV1	1.037^{***}	1.012	0.94^{***}	1.02	0.966^{***}	1.009
CMJV1	1.042^{***}	1.013	0.976^{***}	0.97^{***}	0.958^{***}	0.995^{***}
CMRV2	1.213^{***}	$\mathbf{0.985^{***}}$	0.955^{***}	1.059	1.005^{*}	1.084^{***}
CMTRV2	1.12^{***}	1.085^{***}	1.057	1.059	1.097^{***}	1.128^{***}
CMBPV2	1.144^{***}	1.063	1.015	1.045	1.038	1.097^{***}
CMJV2	0.992^{***}	1.01	1.006	0.939^{***}	0.963^{***}	0.98^{***}
VRV	1.016	1.039	0.992^{***}	0.936^{***}	0.987^{***}	0.995^{***}
VTRV	1.012	1.035	0.994^{***}	0.941^{***}	0.984^{***}	0.992^{***}
VBPV	1.019	1.044	0.995^{***}	0.935^{***}	0.989^{***}	0.995^{***}
VJV	0.991^{***}	1.005	0.976^{***}	0.991^{***}	0.959^{***}	0.99^{***}
MRV	1.045	1.042	0.957^{***}	0.995^{***}	1.002^{**}	0.955^{***}
MTRV	1.057	1.042	0.967^{***}	0.992^{***}	1.003^{**}	0.955^{***}
MBPV	1.05	1.037	0.959^{***}	0.998^{***}	1.004^{**}	0.956^{***}
MJV	1.416^{***}	1.136^{***}	1.038	1.153^{***}	1.134^{***}	1.072
MVRV	0.965^{***}	1.068	0.892^{***}	$\mathbf{0.924^{***}}$	$\mathbf{0.956^{***}}$	$\mathbf{0.912^{***}}$
MVTRV	0.957^{***}	1.058	0.899^{***}	0.94^{***}	0.957^{***}	0.913^{***}
MVBPV	0.964^{***}	1.071	$\mathbf{0.89^{***}}$	0.925^{***}	0.956^{***}	0.912^{***}
MVJV	0.987^{***}	0.998^{***}	0.947^{***}	0.96^{***}	0.958^{***}	0.915^{***}

[1] See notes to Tables 3A and 3B.

Table A1B: Ex-Ante Relative MSFEs for Industrial Production (Sample 2: 2009:1 - 2018:12)[1]

Model	Forecast horizon					
	1-month	2-month	3-month	4-month	5-month	6-month
rolling window size = 36						
AR	1.000	1.000	1.000	1.000	1.000	1.000
MMF	1.01	1.016	0.989^{***}	1.055	1.333^{***}	1.08
RV	0.956^{***}	0.936^{***}	1.106	1.294^{***}	1.143^{***}	0.976^{***}
TRV	0.959^{***}	0.948^{***}	1.14	1.302^{***}	1.136^{***}	$\mathbf{0.975^{***}}$
BPV	0.949^{***}	0.93^{***}	1.075	1.293^{***}	1.155^{***}	0.98^{***}
JV	3.349^{***}	3.542^{***}	2.762^{***}	2.353^{***}	2.272^{***}	2.203^{***}
CMRV1	1.017	1.089	1.063	1.252^{***}	1.136^{***}	1.09
CMTRV1	$\mathbf{0.931^{***}}$	1.1^{***}	1.043^{***}	1.037^{*}	1.104^{***}	1.104^{***}
CMBPV1	1.013	1.082	1.059	1.243^{***}	1.141^{***}	1.09
CMJV1	1.043	1.159^{***}	1.144^{***}	1.108^{***}	1.036	1.119^{***}
CMRV2	0.958^{***}	1.223^{***}	1.047^{***}	**1.018**	1.123^{***}	1.044^{*}
CMTRV2	0.967^{***}	1.089^{***}	1.051^{***}	1.073^{***}	1.024	1.114^{***}
CMBPV2	0.957^{***}	1.133^{***}	1.082^{***}	1.033	1.08^{***}	1.06^{***}
CMJV2	1.071	0.989^{***}	1.091^{**}	1.076^{***}	$\mathbf{0.975^{***}}$	1.083^{***}
VRV	1.049	1.119	1.055	1.02	1.083^{***}	1.07^{***}
VTRV	1.052	1.116	1.037	1.031	1.085^{***}	1.066^{***}
VBPV	1.05	1.121	1.066	1.018	1.086^{***}	1.074^{***}
VJV	1.151	1.001^{**}	0.985^{***}	1.039	1.043^{***}	1.017
MRV	1.084	1.041	1.266^{***}	1.444^{***}	1.515^{***}	1.193^{***}
MTRV	1.091	1.059	1.284^{***}	1.442^{***}	1.521^{***}	1.192^{***}
MBPV	1.078	1.023	1.255^{***}	1.453^{***}	1.518^{***}	1.189^{***}
MJV	1.515^{***}	1.772^{***}	1.458^{***}	1.443^{***}	1.644^{***}	1.554^{***}
MVRV	1.184^{**}	0.948^{***}	$\mathbf{0.956^{***}}$	1.096	1.381^{***}	1.135
MVTRV	1.192^{**}	0.948^{***}	0.965^{***}	1.099	1.371^{***}	1.129
MVBPV	1.176^{*}	0.948^{***}	0.959^{***}	1.097	1.385^{***}	1.138
MVJV	1.147^{***}	$\mathbf{0.876^{***}}$	0.963^{***}	1.12^{**}	1.344^{***}	1.14
rolling window size = 72						
AR	1.000	1.000	1.000	1.000	1.000	1.000
MMF	$\mathbf{0.95^{***}}$	0.976^{***}	0.98^{***}	0.986^{***}	1.049	$\mathbf{0.938^{***}}$
RV	0.999^{***}	0.963^{***}	1.019	1.029	0.973^{***}	0.968^{***}
TRV	0.993^{***}	$\mathbf{0.962^{***}}$	1.021	1.024	0.97^{***}	0.966^{***}
BPV	1.003^{*}	0.966^{***}	1.028	1.032	0.973^{***}	0.967^{***}
JV	1.208^{**}	1.199^{*}	1.248^{***}	1.24^{***}	1.155	1.143
CMRV1	1.092^{***}	1.039	1.058^{***}	1.102^{***}	0.986^{***}	0.993^{***}
CMTRV1	1.015	0.994^{***}	1.007	1.013^{***}	0.996^{***}	0.985^{***}
CMBPV1	1.092^{***}	1.04^{*}	1.051^{*}	1.105^{***}	0.986^{***}	0.994^{***}
CMJV1	1.061^{**}	1.015	1.053^{***}	1.028^{*}	$\mathbf{0.962^{***}}$	0.992^{***}
CMRV2	1.016	1.008	0.99^{***}	1.019	0.969^{***}	0.991^{***}
CMTRV2	1.024	0.997^{***}	0.997^{***}	1.018^{***}	0.967^{***}	0.992^{***}
CMBPV2	1.018	0.996^{***}	0.995^{***}	1.006	0.967^{***}	0.97^{***}
CMJV2	0.994^{***}	0.99^{***}	1.047^{***}	1.003^{*}	0.97^{***}	0.988^{***}
VRV	1.055^{***}	1.065	1.075^{**}	$\mathbf{0.963^{***}}$	1.003	1.017
VTRV	1.049^{***}	1.059	1.064	0.969^{***}	1^{***}	1.016
VBPV	1.059^{***}	1.073	1.083^{***}	0.963^{***}	1.006	1.018
VJV	0.973^{***}	0.994^{***}	1.019	1.014	0.967^{***}	1.007
MRV	0.962^{***}	0.983^{***}	1.016	1.048	1.052	0.961^{***}
MTRV	0.958^{***}	0.983^{***}	1.017	1.046	1.052	0.961^{***}
MBPV	0.966^{***}	0.983^{***}	1.019	1.049	1.053	0.961^{***}
MJV	0.963^{***}	1.029	1.03	1.051	1.096^{*}	1.029
MVRV	0.959^{***}	1.075	0.974^{***}	0.989^{***}	1.037	0.939^{***}
MVTRV	0.956^{***}	1.069	0.978^{***}	0.988^{***}	1.042	0.939^{***}
MVBPV	0.959^{***}	1.08	$\mathbf{0.972^{***}}$	0.99^{***}	1.037	0.939^{***}
MVJV	0.983^{***}	0.974^{***}	1.013	1.021	1.068	0.938^{***}

[1] See notes to Tables 3A and 3B.

Table A1C: Ex-Ante Directional Accuracy Rate for Industrial Production (Sample 1: 2006:1 - 2018:12)[1]

Model	Forecast horizon					
	1-month	2-month	3-month	4-month	5-month	6-month
rolling window size = 36						
AR	69.6%	70.9%	57% *	70.9%	73.4%	57%
MMF	67.1% ***	72.2% ***	64.6% ***	65.8% ***	72.2% ***	59.5%
RV	68.4% ***	68.4% ***	60.8% ***	68.4% ***	70.9% ***	55.7% **
TRV	68.4% ***	68.4% ***	60.8% ***	68.4% ***	70.9% ***	57%
BPV	68.4% ***	68.4% ***	62% ***	69.6% ***	72.2% ***	55.7%
JV	58.2% ***	64.6% ***	58.2% **	65.8% ***	62% ***	58.2%
CMRV1	69.6% *	70.9% ***	63.3% ***	68.4% ***	69.6% ***	57% *
CMTRV1	68.4% ***	**73.4% *** **	64.6% ***	65.8% ***	72.2% ***	57%
CMBPV1	69.6% ***	70.9% ***	63.3% ***	68.4% ***	69.6% ***	57%
CMJV1	**72.2% *** **	70.9% ***	63.3% ***	69.6% ***	70.9% ***	55.7%
CMRV2	67.1% ***	70.9% ***	63.3% ***	65.8% ***	68.4% ***	55.7%
CMTRV2	67.1% ***	73.4% ***	64.6% ***	64.6% ***	72.2% ***	55.7%
CMBPV2	67.1% ***	72.2% ***	**65.8% *** **	64.6% ***	69.6% ***	57%
CMJV2	70.9% ***	72.2% ***	60.8% **	68.4% ***	73.4% ***	59.5%
VRV	70.9% ***	67.1% ***	62% ***	69.6% ***	68.4% ***	55.7% **
VTRV	70.9% ***	67.1% ***	62% ***	69.6% ***	68.4% ***	55.7%
VBPV	70.9% ***	67.1% ***	62% ***	69.6% ***	68.4% ***	57%
VJV	72.2% ***	72.2% ***	60.8% ***	68.4% ***	70.9% ***	62%
MRV	65.8% ***	64.6% ***	63.3% ***	68.4% ***	70.9% ***	**64.6% ** **
MTRV	65.8% ***	64.6% ***	63.3% ***	68.4% ***	70.9% ***	63.3% ***
MBPV	65.8% ***	64.6% ***	63.3% ***	68.4% ***	70.9% ***	63.3% ***
MJV	69.6% ***	67.1% ***	60.8% ***	**72.2% *** **	69.6% ***	60.8% ***
MVRV	60.8% ***	68.4% ***	63.3% ***	70.9% ***	**74.7% *** **	59.5% **
MVTRV	60.8% **	68.4% ***	62% ***	70.9% ***	73.4% ***	59.5% **
MVBPV	60.8% **	68.4% ***	64.6% ***	70.9% ***	74.7% ***	59.5% **
MVJV	63.3% **	72.2% ***	64.6% ***	67.1% ***	70.9% ***	60.8% **
rolling window size = 72						
AR	**75.9%**	68.4%	60.8%	70.9%	67.1%	53.2%
MMF	70.9% ***	67.1% ***	64.6% **	72.2% ***	70.9% ***	62%
RV	65.8% ***	69.6% ***	63.3% ***	67.1% ***	70.9% ***	58.2% ***
TRV	65.8% ***	68.4% ***	62% ***	67.1% ***	70.9% ***	58.2% *
BPV	65.8% ***	**70.9% *** **	63.3% ***	67.1% ***	70.9% ***	58.2% *
JV	64.6% ***	60.8% ***	60.8% ***	58.2% ***	74.7% ***	**65.8% * **
CMRV1	73.4% ***	67.1% ***	64.6% ***	70.9% **	69.6% ***	51.9% ***
CMTRV1	70.9% ***	70.9% ***	67.1% ***	67.1% ***	67.1% ***	55.7%
CMBPV1	73.4% ***	67.1% ***	67.1% ***	70.9% ***	69.6% ***	53.2%
CMJV1	73.4% ***	68.4% ***	62% ***	69.6% ***	68.4% ***	54.4%
CMRV2	70.9% ***	70.9% ***	68.4% ***	64.6% ***	69.6% ***	55.7%
CMTRV2	69.6% ***	68.4% ***	67.1% ***	67.1% ***	67.1% ***	54.4%
CMBPV2	72.2% ***	69.6% ***	**69.6% *** **	65.8% ***	68.4% ***	54.4%
CMJV2	74.7% ***	64.6% ***	59.5% ***	72.2% ***	67.1% ***	54.4%
VRV	73.4% ***	67.1% ***	64.6% **	68.4% ***	68.4% ***	55.7%
VTRV	73.4% ***	67.1% ***	65.8% ***	68.4% ***	68.4% ***	55.7%
VBPV	73.4% ***	67.1% ***	64.6% ***	69.6% ***	69.6% ***	55.7%
VJV	73.4% ***	69.6% ***	58.2% ***	70.9% ***	70.9% ***	54.4%
MRV	63.3% ***	68.4% ***	63.3% **	77.2% ***	72.2% ***	60.8%
MTRV	63.3% ***	65.8% ***	64.6% ***	77.2% ***	70.9% ***	60.8% **
MBPV	63.3% ***	69.6% ***	63.3% ***	77.2% ***	73.4% ***	60.8% **
MJV	65.8% ***	64.6% ***	55.7% ***	68.4% ***	**75.9% *** **	55.7% **
MVRV	67.1% ***	68.4% ***	64.6% **	**78.5% *** **	69.6% ***	63.3%
MVTRV	67.1% ***	65.8% ***	65.8% ***	78.5% ***	69.6% ***	63.3% ***
MVBPV	67.1% ***	67.1% ***	64.6% ***	78.5% ***	69.6% ***	63.3% ***
MVJV	70.9% ***	67.1% ***	63.3% ***	72.2% ***	70.9% ***	63.3% ***

[1] See notes to Tables 3A and 3B.

Table A1D: Ex-Ante Directional Accuracy Rate for Industrial Production (Sample 2: 2009:1 - 2018:12)[1]

Model	Forecast horizon					
	1-month	2-month	3-month	4-month	5-month	6-month
rolling window size = 36						
AR	67.4%	72.1%	55.8%	69.8%	74.4%	53.5%
MMF	65.1%***	72.1%***	65.1%	67.4%***	79.1%***	58.1%
RV	62.8%**	67.4%***	60.5%***	67.4%***	76.7%***	55.8%
TRV	62.8%**	67.4%***	60.5%***	67.4%***	76.7%***	55.8%
BPV	62.8%**	67.4%***	62.8%***	69.8%***	76.7%***	55.8%
JV	46.5%**	58.1%***	53.5%***	58.1%***	65.1%***	53.5%
CMRV1	67.4%	72.1%*	**67.4%***	65.1%	69.8%**	55.8%
CMTRV1	**72.1%*****	74.4%***	60.5%***	67.4%**	74.4%***	53.5%
CMBPV1	67.4%***	72.1%***	67.4%*	65.1%***	69.8%***	55.8%
CMJV1	67.4%***	74.4%***	62.8%***	67.4%**	72.1%***	53.5%
CMRV2	69.8%***	67.4%***	58.1%**	67.4%***	69.8%***	53.5%
CMTRV2	69.8%***	72.1%***	60.5%	65.1%***	74.4%***	48.8%
CMBPV2	69.8%***	69.8%***	58.1%*	65.1%**	69.8%***	53.5%
CMJV2	72.1%***	**76.7%*****	60.5%	67.4%**	74.4%***	58.1%
VRV	67.4%***	65.1%***	62.8%*	69.8%***	69.8%***	53.5%
VTRV	67.4%***	65.1%**	62.8%**	69.8%***	69.8%***	53.5%
VBPV	67.4%***	65.1%**	62.8%**	69.8%***	69.8%***	55.8%
VJV	72.1%***	74.4%**	62.8%**	69.8%***	72.1%***	60.5%
MRV	62.8%***	65.1%***	60.5%***	69.8%***	79.1%***	**65.1%***
MTRV	62.8%**	65.1%**	60.5%***	69.8%***	79.1%***	62.8%**
MBPV	62.8%**	65.1%**	60.5%***	69.8%***	79.1%***	62.8%**
MJV	62.8%**	65.1%**	58.1%***	69.8%***	76.7%***	55.8%**
MVRV	60.5%***	69.8%***	65.1%***	**76.7%*****	**86%*****	60.5%
MVTRV	60.5%*	69.8%***	62.8%***	76.7%***	83.7%***	60.5%*
MVBPV	60.5%*	69.8%***	67.4%***	76.7%***	86%***	60.5%*
MVJV	58.1%*	76.7%***	62.8%***	69.8%***	79.1%***	65.1%*
rolling window size = 72						
AR	**74.4%**	72.1%	62.8%	69.8%	76.7%	53.5%
MMF	72.1%***	**74.4%*****	62.8%**	74.4%***	76.7%***	65.1%
RV	69.8%***	69.8%***	**67.4%*****	72.1%***	72.1%***	55.8%**
TRV	69.8%***	69.8%***	65.1%***	72.1%***	72.1%***	55.8%
BPV	69.8%***	72.1%***	67.4%***	72.1%***	72.1%***	55.8%
JV	74.4%***	67.4%***	67.4%***	67.4%***	**81.4%*****	**67.4%**
CMRV1	69.8%***	69.8%***	62.8%***	69.8%***	76.7%***	53.5%***
CMTRV1	74.4%***	72.1%***	67.4%**	69.8%***	74.4%***	60.5%
CMBPV1	69.8%***	69.8%***	65.1%***	69.8%***	76.7%***	53.5%*
CMJV1	72.1%***	74.4%***	65.1%***	69.8%***	76.7%***	55.8%
CMRV2	74.4%***	72.1%***	67.4%***	69.8%***	76.7%***	58.1%
CMTRV2	74.4%***	72.1%***	67.4%***	69.8%***	76.7%***	58.1%
CMBPV2	74.4%***	72.1%***	67.4%***	69.8%***	76.7%***	58.1%
CMJV2	74.4%***	72.1%***	60.5%***	69.8%***	76.7%***	55.8%
VRV	72.1%***	69.8%***	67.4%**	72.1%***	74.4%***	55.8%
VTRV	72.1%***	69.8%***	67.4%***	72.1%***	74.4%***	55.8%
VBPV	72.1%***	69.8%***	67.4%***	72.1%***	76.7%***	55.8%
VJV	72.1%***	74.4%***	62.8%***	69.8%***	79.1%***	55.8%
MRV	67.4%***	69.8%***	62.8%***	**76.7%*****	76.7%***	65.1%
MTRV	67.4%***	67.4%***	62.8%***	76.7%***	76.7%***	65.1%**
MBPV	67.4%***	69.8%***	62.8%***	76.7%***	76.7%***	65.1%**
MJV	74.4%***	62.8%***	62.8%***	74.4%***	79.1%***	58.1%**
MVRV	67.4%***	69.8%**	65.1%***	74.4%***	76.7%***	65.1%
MVTRV	67.4%***	69.8%***	65.1%***	76.7%***	76.7%***	65.1%**
MVBPV	67.4%***	67.4%***	65.1%***	74.4%***	76.7%***	65.1%**
MVJV	69.8%***	74.4%***	62.8%***	72.1%***	76.7%***	65.1%**

[1] See notes to Tables 3A and 3B.

Table A2A: Ex-Ante Relative MSFEs for Nonfarm Payroll Employment (Sample 1: 2006:1 - 2018:12)[1]

Model	Forecast horizon					
	1-month	2-month	3-month	4-month	5-month	6-month
rolling window size = 36						
AR	1.000	1.000	1.000	1.000	1.000	1.000
MMF	0.977^{***}	1.151^{***}	$\mathbf{0.978^{***}}$	0.992^{***}	$\mathbf{0.956^{***}}$	1.037
RV	1.124^{***}	1.07^{**}	1.183^{***}	1.249^{***}	1.196^{***}	1.287^{***}
TRV	1.128^{***}	1.075^{***}	1.189^{***}	1.256^{***}	1.206^{***}	1.292^{***}
BPV	1.113^{***}	1.063^{*}	1.174^{***}	1.244^{***}	1.184^{***}	1.281^{***}
JV	3.043^{***}	3.937^{***}	4.257^{***}	3.569^{***}	2.547^{***}	2.539^{***}
CMRV1	1.012^{*}	1.065	1.039^{*}	1.058^{***}	1.048^{***}	1.104^{***}
CMTRV1	0.992^{***}	1.134^{***}	1.059^{***}	$\mathbf{0.926^{***}}$	0.978^{***}	1.033
CMBPV1	1.002^{***}	1.066	1.037^{*}	1.055^{***}	1.043^{***}	1.096^{***}
CMJV1	1.026	1.04	1.102^{***}	1.033	1.076^{***}	1.07^{***}
CMRV2	$\mathbf{0.912^{***}}$	1.042	1.024	0.939^{***}	0.973^{***}	1.064^{***}
CMTRV2	0.92^{***}	1.032	1.029	0.964^{***}	0.972^{***}	1.043^{**}
CMBPV2	0.968^{***}	1.073	1.072^{***}	0.938^{***}	0.974^{***}	1.016
CMJV2	1.032	1.035	1.086^{***}	1.05	1.021	1.043
VRV	1.046	1.028	1.023	1.118^{***}	1.124^{***}	1.046
VTRV	1.044	1.029	1.022	1.12^{***}	1.129^{***}	1.051
VBPV	1.046	**1.024**	1.021	1.116^{***}	1.121^{***}	1.04
VJV	0.951^{***}	1.064^{***}	1.113^{***}	1.085^{***}	1.06^{***}	$\mathbf{1.01^{*}}$
MRV	1.146	1.459^{***}	1.207^{***}	1.157^{***}	1.094^{***}	1.134^{***}
MTRV	1.16	1.468^{***}	1.213^{***}	1.164^{***}	1.101^{***}	1.134^{***}
MBPV	1.133	1.455^{***}	1.197^{***}	1.153^{***}	1.092^{***}	1.144^{***}
MJV	1.333^{***}	1.697^{***}	1.637^{***}	1.481^{***}	1.316^{***}	1.275^{***}
MVRV	1.054	1.256^{***}	1.09^{**}	1.095^{***}	1.019	1.061
MVTRV	1.052	1.257^{***}	1.083^{*}	1.102^{***}	1.027	1.061
MVBPV	1.05	1.255^{***}	1.088^{**}	1.102^{***}	1.018	1.066
MVJV	1.059	1.139^{***}	1.048	1.173^{***}	0.96^{***}	1.035
rolling window size = 72						
AR	1.000	1.000	1.000	1.000	1.000	1.000
MMF	$\mathbf{0.832^{***}}$	0.996^{***}	0.93^{***}	0.803^{***}	0.872^{***}	0.718^{***}
RV	1.068	1.096	1.183^{*}	0.926^{***}	0.841^{***}	$\mathbf{0.678^{***}}$
TRV	1.107^{*}	1.16^{**}	1.266^{***}	0.997^{***}	0.898^{***}	0.703^{***}
BPV	1.065	1.097	1.189^{*}	0.934^{***}	0.848^{***}	0.681^{***}
JV	5.114^{***}	7.589^{***}	10.525^{***}	9.278^{***}	9.378^{***}	7.462^{***}
CMRV1	0.912^{***}	0.976^{***}	0.96^{***}	0.824^{***}	0.898^{***}	0.934^{***}
CMTRV1	1.071	1.322^{***}	1.44^{***}	1.269^{***}	1.46^{***}	1.496^{***}
CMBPV1	0.908^{***}	0.983^{***}	0.927^{***}	0.798^{***}	0.903^{***}	0.938^{***}
CMJV1	0.916^{***}	0.989^{***}	0.981^{***}	0.867^{***}	0.91^{***}	0.96^{***}
CMRV2	1.038	1.182^{***}	1.229^{***}	0.991^{***}	1.309^{***}	1.229^{***}
CMTRV2	0.989^{***}	1.112	1.341^{***}	1.197^{***}	1.384^{***}	1.552^{***}
CMBPV2	0.965^{***}	1.204^{***}	1.293^{***}	1.181^{***}	1.372^{***}	1.456^{***}
CMJV2	1.016	0.953^{***}	1.047	0.917^{***}	0.982^{***}	0.948^{***}
VRV	0.951^{***}	0.94^{***}	0.863^{***}	0.797^{***}	0.789^{***}	0.752^{***}
VTRV	0.957^{***}	$\mathbf{0.931^{***}}$	0.866^{***}	$\mathbf{0.795^{***}}$	0.798^{***}	0.744^{***}
VBPV	0.954^{***}	0.934^{***}	0.869^{***}	0.799^{***}	$\mathbf{0.788^{***}}$	0.754^{***}
VJV	0.91^{***}	0.988^{***}	$\mathbf{0.837^{***}}$	0.866^{***}	0.918^{***}	0.831^{***}
MRV	0.982^{***}	1.12	0.999^{***}	0.8^{***}	0.873^{***}	0.818^{***}
MTRV	1.001^{***}	1.142	1.01^{*}	0.804^{***}	0.884^{***}	0.834^{***}
MBPV	0.986^{***}	1.124	0.996^{***}	0.801^{***}	0.874^{***}	0.82^{***}
MJV	1.254^{***}	1.572^{***}	1.379^{***}	1.031	1.124^{*}	0.87^{***}
MVRV	0.955^{***}	1.011^{*}	0.995^{***}	0.864^{***}	0.866^{***}	0.792^{***}
MVTRV	0.95^{***}	1.015^{*}	0.996^{***}	0.864^{***}	0.862^{***}	0.802^{***}
MVBPV	0.955^{***}	1.011^{*}	0.996^{***}	0.867^{***}	0.866^{***}	0.795^{***}
MVJV	0.878^{***}	1.001^{***}	0.963^{***}	0.848^{***}	0.883^{***}	0.76^{***}

[1] See notes to Tables 3A and 3B.

Table A2B: Ex-Ante Relative MSFEs for Nonfarm Payroll Employment (Sample 2: 2009:1 - 2018:12)[1]

Model	Forecast horizon					
	1-month	2-month	3-month	4-month	5-month	6-month
rolling window size = 36						
AR	1.000	1.000	1.000	1.000	1.000	1.000
MMF	1.035	1.282^{***}	1^{***}	1.025	$\mathbf{0.993}^{***}$	1.119
RV	1.232^{***}	1.134^{***}	1.168^{***}	1.2^{***}	1.194^{***}	1.375^{***}
TRV	1.236^{***}	1.135^{***}	1.177^{***}	1.21^{***}	1.205^{***}	1.381^{***}
BPV	1.216^{***}	1.123^{***}	1.156^{***}	1.193^{***}	1.188^{***}	1.366^{***}
JV	3.307^{***}	4.678^{***}	5.391^{***}	4.468^{***}	3.081^{***}	3.221^{***}
CMRV1	1.007^{**}	1.178^{**}	$\mathbf{0.996}^{***}$	1.022	1.103^{***}	1.129^{***}
CMTRV1	0.957^{***}	1.219^{***}	1.023	$\mathbf{0.91}^{***}$	1.018	1.037
CMBPV1	0.997^{***}	1.174^{**}	0.996^{***}	1.027^{**}	1.096^{***}	1.122^{***}
CMJV1	1.111	1.165^{***}	1.034	0.966^{***}	1.156^{***}	1.082^{***}
CMRV2	$\mathbf{0.828}^{***}$	1.069^{***}	1.003^{**}	0.946^{***}	1.016	1.027
CMTRV2	0.844^{***}	1.042	1.002^{**}	0.968^{***}	0.999^{***}	1.022
CMBPV2	0.912^{***}	1.091^{***}	1.043	0.924^{***}	1.008	1.02
CMJV2	1.034	1.091^{***}	1.027	1.005^{**}	1.032^{*}	$\mathbf{0.994}^{***}$
VRV	1.087	1.064	1.021	1.046^{***}	1.14^{***}	1.022
VTRV	1.088	1.065	1.019	1.047^{***}	1.146^{***}	1.03
VBPV	1.084	1.062	1.019	1.047^{***}	1.134^{***}	1.011^{*}
VJV	0.956^{***}	**1.04**	1.18^{***}	1.02	1.039	1.015^{*}
MRV	1.272	1.687^{***}	1.174^{***}	1.173^{***}	1.154^{***}	1.265^{***}
MTRV	1.288	1.698^{***}	1.18^{***}	1.179^{***}	1.165^{***}	1.266^{***}
MBPV	1.251	1.677^{***}	1.157^{***}	1.168^{***}	1.148^{***}	1.282^{***}
MJV	1.325^{***}	1.934^{***}	1.835^{***}	1.681^{***}	1.542^{***}	1.478^{***}
MVRV	1.187	1.413^{***}	1.085	1.17^{***}	1.073	1.135^{*}
MVTRV	1.181	1.411^{***}	1.084	1.179^{***}	1.084	1.136^{*}
MVBPV	1.182	1.413^{***}	1.086	1.183^{***}	1.068	1.145^{***}
MVJV	1.125	1.255^{***}	1.028	1.256^{***}	1.005^{**}	1.076
rolling window size = 72						
AR	1.000	1.000	1.000	1.000	1.000	1.000
MMF	0.949^{***}	1.304^{***}	1.201^{***}	1.095^{***}	0.968^{***}	1.031
RV	1.041	1.061	1.027	0.993^{***}	1.016	1.025
TRV	1.047	1.064	1.032	0.996^{***}	1.018	1.026
BPV	1.036	1.057	1.023	0.994^{***}	1.017	1.027
JV	1.999^{***}	2.128^{***}	2.324^{***}	1.744^{***}	1.452^{***}	1.445^{***}
CMRV1	0.912^{***}	1.148^{***}	1.013	0.972^{***}	1.001^{*}	0.97^{***}
CMTRV1	1.005^{**}	1.232^{***}	1.042	0.963^{***}	1.005	1.027^{***}
CMBPV1	0.911^{***}	1.153^{***}	1.017	0.973^{***}	1.003	0.971^{***}
CMJV1	0.928^{***}	1.154^{***}	1.005^{*}	0.974^{***}	0.997^{***}	0.971^{***}
CMRV2	0.922^{***}	1.157^{***}	$\mathbf{0.975}^{***}$	0.987^{***}	0.996^{***}	1.013
CMTRV2	$\mathbf{0.864}^{***}$	1.079^{***}	1.018	1.011	1.009	1.025^{***}
CMBPV2	0.884^{***}	1.136^{***}	1.054	0.965^{***}	0.992^{***}	1.008
CMJV2	0.993^{***}	$\mathbf{1.048}^{*}$	1.007	$\mathbf{0.957}^{***}$	0.978^{***}	0.994^{***}
VRV	1.006^{*}	1.082^{***}	1.079^{***}	0.977^{***}	0.979^{***}	0.955^{***}
VTRV	1.019	1.082^{***}	1.074^{***}	0.978^{***}	0.982^{***}	$\mathbf{0.953}^{***}$
VBPV	1.007	1.082^{***}	1.086^{***}	0.978^{***}	0.982^{***}	0.954^{***}
VJV	0.927^{***}	1.056^{***}	1.019	0.988^{***}	1.003^{**}	0.99^{***}
MRV	1.065	1.344^{***}	1.213^{***}	1.117^{***}	$\mathbf{0.902}^{***}$	1.038
MTRV	1.066	1.344^{***}	1.212^{***}	1.113^{***}	0.902^{***}	1.037
MBPV	1.07	1.344^{***}	1.202^{***}	1.119^{***}	0.903^{***}	1.041
MJV	1.022	1.413^{***}	1.168	1.145^{***}	1.002^{**}	1.11^{***}
MVRV	1.144	1.315^{***}	1.294^{***}	1.237^{***}	0.911^{***}	1.027
MVTRV	1.13	1.314^{***}	1.293^{***}	1.237^{***}	0.906^{***}	1.029
MVBPV	1.145	1.314^{***}	1.299^{***}	1.245^{***}	0.913^{***}	1.03
MVJV	0.993^{***}	1.315^{***}	1.195^{***}	1.159^{***}	0.919^{***}	1^{***}

[1] See notes to Tables 3A and 3B.

Table A2C: Ex-Ante Directional Accuracy Rate for Nonfarm Payroll Employment (Sample 1: 2006:1 - 2018:12)[1]

Model	Forecast horizon					
	1-month	2-month	3-month	4-month	5-month	6-month
rolling window size = 36						
AR	77.2%***	78.5%***	70.9%***	67.1%***	72.2%***	74.7%***
MMF	73.4%***	74.7%***	68.4%***	**72.2%*** **	**75.9%*** **	74.7%***
RV	74.7%***	73.4%***	70.9%***	64.6%***	67.1%***	68.4%***
TRV	74.7%***	73.4%***	70.9%***	63.3%***	67.1%***	68.4%***
BPV	75.9%***	73.4%***	70.9%***	64.6%***	67.1%***	68.4%***
JV	65.8%***	58.2%*	63.3%***	62%***	59.5%**	64.6%***
CMRV1	74.7%***	75.9%***	69.6%***	64.6%***	68.4%***	70.9%***
CMTRV1	73.4%***	77.2%***	68.4%***	68.4%***	73.4%***	74.7%***
CMBPV1	74.7%***	75.9%***	70.9%***	64.6%***	68.4%***	70.9%***
CMJV1	69.6%***	74.7%***	67.1%***	65.8%***	65.8%***	72.2%***
CMRV2	73.4%***	77.2%***	68.4%***	67.1%***	73.4%***	**75.9%*** **
CMTRV2	75.9%***	**81%*** **	70.9%***	68.4%***	72.2%***	72.2%***
CMBPV2	74.7%***	74.7%***	68.4%***	67.1%***	74.7%***	75.9%***
CMJV2	70.9%***	75.9%***	67.1%***	64.6%***	70.9%***	75.9%***
VRV	72.2%***	78.5%***	69.6%***	64.6%***	65.8%***	73.4%***
VTRV	72.2%***	78.5%***	69.6%***	64.6%***	67.1%***	73.4%***
VBPV	72.2%***	78.5%***	69.6%***	64.6%***	67.1%***	73.4%***
VJV	73.4%***	75.9%***	69.6%***	64.6%***	72.2%***	74.7%***
MRV	73.4%***	73.4%***	68.4%***	69.6%***	73.4%***	69.6%***
MTRV	73.4%***	74.7%***	67.1%***	69.6%***	73.4%***	68.4%***
MBPV	73.4%***	73.4%***	68.4%***	69.6%***	73.4%***	69.6%***
MJV	77.2%***	67.1%***	68.4%***	68.4%***	73.4%***	68.4%***
MVRV	73.4%***	73.4%***	68.4%***	69.6%***	75.9%***	70.9%***
MVTRV	73.4%***	73.4%***	68.4%***	68.4%***	75.9%***	70.9%***
MVBPV	74.7%***	73.4%***	69.6%***	68.4%***	75.9%***	70.9%***
MVJV	**78.5%*** **	77.2%***	**72.2%*** **	72.2%***	74.7%***	70.9%***
rolling window size = 72						
AR	75.9%***	64.6%***	67.1%***	64.6%***	63.3%***	62%***
MMF	78.5%***	74.7%***	69.6%***	74.7%***	70.9%***	**79.7%*** **
RV	73.4%***	65.8%***	68.4%***	63.3%***	**73.4%*** **	79.7%***
TRV	69.6%***	65.8%***	68.4%***	63.3%***	69.6%***	79.7%***
BPV	72.2%***	65.8%***	68.4%***	63.3%***	72.2%***	79.7%***
JV	62%***	59.5%***	59.5%**	58.2%**	67.1%***	67.1%***
CMRV1	74.7%***	75.9%***	70.9%***	69.6%***	65.8%***	63.3%***
CMTRV1	65.8%***	70.9%***	67.1%***	60.8%**	59.5%**	58.2%**
CMBPV1	75.9%***	74.7%***	69.6%***	69.6%***	64.6%***	64.6%***
CMJV1	73.4%***	74.7%***	68.4%***	68.4%***	67.1%***	62%***
CMRV2	69.6%***	73.4%***	67.1%***	65.8%***	59.5%**	59.5%**
CMTRV2	69.6%***	73.4%***	67.1%***	62%**	59.5%**	59.5%**
CMBPV2	72.2%***	72.2%***	68.4%***	64.6%***	59.5%**	58.2%**
CMJV2	72.2%***	75.9%***	68.4%***	70.9%***	69.6%***	65.8%***
VRV	75.9%***	**77.2%*** **	67.1%***	70.9%***	73.4%***	67.1%***
VTRV	**79.7%*** **	77.2%***	67.1%***	72.2%***	72.2%***	68.4%***
VBPV	77.2%***	77.2%***	67.1%***	69.6%***	73.4%***	67.1%***
VJV	75.9%***	68.4%***	69.6%***	67.1%***	65.8%***	69.6%***
MRV	77.2%***	70.9%***	73.4%***	74.7%***	69.6%***	77.2%***
MTRV	75.9%***	70.9%***	73.4%***	74.7%***	69.6%***	75.9%***
MBPV	77.2%***	70.9%***	73.4%***	74.7%***	69.6%***	77.2%***
MJV	77.2%***	68.4%***	**77.2%*** **	72.2%***	69.6%***	74.7%***
MVRV	77.2%***	77.2%***	70.9%***	74.7%***	70.9%***	75.9%***
MVTRV	77.2%***	77.2%***	70.9%***	**77.2%*** **	70.9%***	75.9%***
MVBPV	77.2%***	77.2%***	69.6%***	74.7%***	70.9%***	75.9%***
MVJV	77.2%***	73.4%***	69.6%***	74.7%***	70.9%***	78.5%***

[1] See notes to Tables 3A and 3B.

Table A2D: Ex-Ante Directional Accuracy Rate for Nonfarm Payroll Employment (Sample 2: 2009:1 - 2018:12)[1]

Model	Forecast horizon					
	1-month	2-month	3-month	4-month	5-month	6-month
rolling window size = 36						
AR	**83.7%*****	**86%*****	**72.1%*****	**69.8%*****	76.7%***	79.1%***
MMF	76.7%***	79.1%***	69.8%***	72.1%***	**76.7%*****	74.4%***
RV	81.4%***	76.7%***	67.4%***	67.4%***	72.1%***	72.1%***
TRV	81.4%***	76.7%***	67.4%***	67.4%***	72.1%***	72.1%***
BPV	83.7%***	76.7%***	67.4%***	67.4%***	72.1%***	72.1%***
JV	67.4%***	53.5%	58.1%	58.1%	60.5%*	62.8%**
CMRV1	76.7%***	79.1%***	69.8%***	67.4%***	69.8%***	74.4%***
CMTRV1	79.1%***	81.4%***	69.8%***	67.4%***	76.7%***	79.1%***
CMBPV1	76.7%***	79.1%***	69.8%***	67.4%***	72.1%***	74.4%***
CMJV1	72.1%***	81.4%***	67.4%***	69.8%***	69.8%***	76.7%***
CMRV2	81.4%***	81.4%***	69.8%***	65.1%**	76.7%***	79.1%***
CMTRV2	81.4%***	81.4%***	69.8%***	65.1%**	76.7%***	76.7%***
CMBPV2	81.4%***	79.1%***	69.8%***	65.1%**	79.1%***	79.1%***
CMJV2	74.4%***	83.7%***	69.8%***	67.4%***	76.7%***	**81.4%*****
VRV	72.1%***	83.7%***	67.4%***	65.1%**	69.8%***	79.1%***
VTRV	72.1%***	83.7%***	67.4%***	65.1%**	72.1%***	81.4%***
VBPV	72.1%***	86%***	67.4%***	65.1%**	72.1%***	79.1%***
VJV	74.4%***	83.7%***	69.8%***	67.4%***	79.1%***	79.1%***
MRV	74.4%***	76.7%***	69.8%***	69.8%***	74.4%***	69.8%***
MTRV	74.4%***	79.1%***	67.4%***	69.8%***	74.4%***	69.8%***
MBPV	74.4%***	76.7%***	69.8%***	69.8%***	74.4%***	69.8%***
MJV	81.4%***	69.8%***	62.8%**	65.1%**	74.4%***	65.1%**
MVRV	74.4%***	79.1%***	69.8%***	67.4%***	76.7%***	69.8%***
MVTRV	74.4%***	79.1%***	69.8%***	67.4%***	76.7%***	69.8%***
MVBPV	74.4%***	79.1%***	72.1%***	67.4%***	76.7%***	69.8%***
MVJV	79.1%***	79.1%***	72.1%***	69.8%***	**81.4%*****	72.1%***
rolling window size = 72						
AR	81.4%***	79.1%***	79.1%***	69.8%***	72.1%***	76.7%***
MMF	79.1%***	76.7%***	74.4%***	72.1%***	**79.1%*****	81.4%***
RV	81.4%***	76.7%***	76.7%***	67.4%***	76.7%***	**83.7%*****
TRV	81.4%***	76.7%***	76.7%***	67.4%***	76.7%***	83.7%***
BPV	81.4%***	76.7%***	76.7%***	67.4%***	76.7%***	83.7%***
JV	69.8%***	65.1%***	62.8%**	62.8%**	79.1%***	74.4%***
CMRV1	83.7%***	83.7%***	**81.4%*****	72.1%***	72.1%***	76.7%***
CMTRV1	74.4%***	79.1%***	74.4%***	67.4%***	69.8%***	76.7%***
CMBPV1	83.7%***	83.7%***	81.4%***	72.1%***	69.8%***	76.7%***
CMJV1	81.4%***	**86%*****	81.4%***	72.1%***	74.4%***	76.7%***
CMRV2	83.7%***	83.7%***	74.4%***	69.8%***	67.4%***	76.7%***
CMTRV2	79.1%***	83.7%***	76.7%***	69.8%***	67.4%***	76.7%***
CMBPV2	**86%*****	81.4%***	76.7%***	72.1%***	69.8%***	76.7%***
CMJV2	81.4%***	83.7%***	79.1%***	**74.4%*****	79.1%***	79.1%***
VRV	79.1%***	76.7%***	74.4%***	72.1%***	79.1%***	79.1%***
VTRV	79.1%***	76.7%***	74.4%***	72.1%***	79.1%***	81.4%***
VBPV	81.4%***	76.7%***	74.4%***	72.1%***	79.1%***	79.1%***
VJV	76.7%***	76.7%***	76.7%***	72.1%***	76.7%***	81.4%***
MRV	79.1%***	72.1%***	76.7%***	72.1%***	79.1%***	79.1%***
MTRV	79.1%***	72.1%***	76.7%***	72.1%***	79.1%***	79.1%***
MBPV	79.1%***	72.1%***	76.7%***	72.1%***	79.1%***	79.1%***
MJV	83.7%***	72.1%***	79.1%***	72.1%***	79.1%***	76.7%***
MVRV	79.1%***	81.4%***	72.1%***	72.1%***	79.1%***	79.1%***
MVTRV	79.1%***	81.4%***	72.1%***	74.4%***	79.1%***	79.1%***
MVBPV	79.1%***	81.4%***	72.1%***	72.1%***	79.1%***	79.1%***
MVJV	76.7%***	76.7%***	72.1%***	74.4%***	79.1%***	81.4%***

[1] See notes to Tables 3A and 3B.

Table A3A: Ex-Ante Relative MSFEs for Consumer Price Index (Sample 1: 2006:1 - 2018:12)[1]

Model	Forecast horizon					
	1-month	2-month	3-month	4-month	5-month	6-month
rolling window size = 36						
AR	1.000	1.000	1.000	1.000	1.000	1.000
MMF	1.09^{***}	1.028	1.013	1.046	1.122^{***}	1.221^{***}
RV	1.127^{***}	1.152^{***}	1.181^{***}	1.223^{***}	1.096^{***}	1.17^{***}
TRV	1.127^{***}	1.16^{***}	1.191^{***}	1.226^{***}	1.104^{***}	1.18^{***}
BPV	1.133^{***}	1.148^{***}	1.171^{***}	1.213^{***}	1.09^{***}	1.16^{***}
JV	1.893^{***}	1.891^{***}	1.976^{***}	2.112^{***}	2.523^{***}	3.048^{***}
CMRV1	1.138^{***}	1.078^{***}	1.013	1.235^{***}	0.916^{***}	1.05
CMTRV1	1.162^{***}	1.085^{***}	1.038^{***}	1.045	0.942^{***}	1.065^{***}
CMBPV1	1.137^{***}	1.066^{***}	1.058	1.251^{***}	0.914^{***}	1.048
CMJV1	1.088^{***}	1.064^{***}	1.014	1.003^{**}	0.907^{***}	1.112^{***}
CMRV2	1.106^{***}	1.07^{***}	1.008	1.044	$\mathbf{0.904^{***}}$	1.078^{***}
CMTRV2	1.106^{***}	1.08^{***}	1.005	1.078^{***}	0.982^{***}	1.074^{***}
CMBPV2	1.137^{***}	1.071^{***}	1.02	1.036	0.922^{***}	1.103^{***}
CMJV2	1.031^{***}	1.026^{***}	$\mathbf{0.995^{***}}$	$\mathbf{0.972^{***}}$	0.943^{***}	1.075^{***}
VRV	1.037^{***}	1.077^{**}	1.034	0.996^{***}	0.992^{***}	1.029
VTRV	1.038^{***}	1.078^{***}	1.034	1.001^{***}	0.989^{***}	1.03
VBPV	1.037^{***}	1.081^{***}	1.031	0.996^{***}	0.993^{***}	**1.024**
VJV	$\mathbf{1.025^{***}}$	$\mathbf{0.998^{***}}$	1.052^{***}	0.998^{***}	1.001^{**}	1.086^{***}
MRV	1.138^{***}	1.078^{***}	1.142^{***}	1.071	1.258^{***}	1.399^{***}
MTRV	1.14^{***}	1.083^{***}	1.147^{***}	1.074	1.269^{***}	1.407^{***}
MBPV	1.181^{***}	1.104^{***}	1.133^{***}	1.072	1.257^{***}	1.391^{***}
MJV	1.416^{***}	1.266^{***}	1.316^{***}	1.287^{***}	1.587^{***}	1.79^{***}
MVRV	1.09^{***}	1.079^{***}	1.003^{**}	1.089^{*}	1.244^{***}	1.316^{***}
MVTRV	1.093^{***}	1.08^{***}	1.004^{**}	1.088	1.248^{***}	1.329^{***}
MVBPV	1.089^{***}	1.075^{**}	1.002^{**}	1.091^{*}	1.239^{***}	1.312^{***}
MVJV	1.09^{***}	1.085^{***}	1.018	1.058	1.268^{***}	1.302^{***}
rolling window size = 72						
AR	1.000	1.000	1.000	1.000	1.000	1.000
MMF	1.01	1.013	1.047^{***}	1.009	0.989^{***}	1.045^{***}
RV	1.036	1.083^{***}	1.084^{***}	1.039	1.015	1.01
TRV	1.037	1.083^{***}	1.083^{***}	1.04	1.015	1.003^{*}
BPV	1.036	1.085^{***}	1.085^{***}	1.04	1.016	1.011
JV	1.086	1.116^{***}	1.144^{***}	1.152^{***}	1.146^{***}	1.153^{***}
CMRV1	$\mathbf{0.98^{***}}$	1.006	1.018	$\mathbf{0.993^{***}}$	0.985^{***}	1.028^{***}
CMTRV1	1.03^{***}	1.025^{***}	1.013	1.02^{***}	0.984^{***}	1.018
CMBPV1	0.98^{***}	1.006	1.018	0.993^{***}	0.984^{***}	1.029^{***}
CMJV1	0.983^{***}	1.007	1.016	1.009	0.981^{***}	1.013^{***}
CMRV2	1.014^{***}	1.034^{***}	1.013^{***}	0.995^{***}	$\mathbf{0.949^{***}}$	1.035^{***}
CMTRV2	1.007	$\mathbf{1^{***}}$	1.018^{***}	1.013	1.009	1.042^{***}
CMBPV2	1.008	1.025^{***}	**1.007**	1.013	0.972^{***}	1.056^{***}
CMJV2	0.985^{***}	1.023^{***}	1.031^{***}	1.019^{**}	1.005	$\mathbf{1.001^{**}}$
VRV	0.989^{***}	1.028^{*}	1.031^{*}	1.019	0.985^{***}	1.02^{***}
VTRV	0.989^{***}	1.03^{**}	1.028	1.019	0.986^{***}	1.02^{***}
VBPV	0.989^{***}	1.028^{*}	1.031	1.018	0.986^{***}	1.02^{***}
VJV	0.994^{***}	1.023^{***}	1.041^{***}	1.012	1^{***}	1.037^{***}
MRV	1.068^{***}	1.085^{***}	1.109^{***}	1.033	1.018	1.09^{***}
MTRV	1.069^{***}	1.083^{***}	1.114^{***}	1.031	1.021	1.093^{***}
MBPV	1.068^{***}	1.094^{***}	1.109^{***}	1.031	1.009	1.092^{***}
MJV	1.124^{***}	1.143^{***}	1.277^{***}	1.249^{***}	1.148^{***}	1.178^{***}
MVRV	1.026	1.043^{*}	1.058^{***}	1.027	0.981^{***}	1.047^{***}
MVTRV	1.026	1.039	1.057^{***}	1.027	0.978^{***}	1.043^{***}
MVBPV	1.026	1.044^{*}	1.057^{***}	1.031^{*}	0.983^{***}	1.048^{***}
MVJV	1.016	1.035	1.048^{***}	1.053^{***}	1.005^{*}	1.008

[1] See notes to Tables 3A and 3B.

Table A3B: Ex-Ante Relative MSFEs for Consumer Price Index (Sample 2: 2009:1 - 2018:12)[1]

Model	Forecast horizon					
	1-month	2-month	3-month	4-month	5-month	6-month
rolling window size = 36						
AR	1.000	1.000	1.000	1.000	1.000	1.000
MMF	1.107^{***}	1.046	1.113^{**}	1.127^{**}	1.166^{***}	1.211^{***}
RV	1.175^{***}	1.207^{***}	1.238^{***}	1.29^{***}	1.2^{***}	1.213^{***}
TRV	1.172^{***}	1.216^{***}	1.249^{***}	1.293^{***}	1.212^{***}	1.227^{***}
BPV	1.183^{***}	1.2^{***}	1.224^{***}	1.274^{***}	1.191^{***}	1.198^{***}
JV	1.862^{***}	1.52^{***}	1.799^{***}	2.138^{***}	2.905^{***}	3.411^{***}
CMRV1	1.16^{***}	1.071	1.004^{**}	1.314	$\mathbf{0.954^{***}}$	1.105^{***}
CMTRV1	1.179^{***}	1.053^{***}	1.023	1.068	1.02	1.052^{***}
CMBPV1	1.156^{***}	1.063	1.072	1.339	0.954^{***}	1.1^{***}
CMJV1	1.074^{***}	1.052^{*}	1.007	$\mathbf{0.946^{***}}$	0.962^{***}	1.193^{***}
CMRV2	1.101^{***}	1.045	0.988^{***}	1.061	0.956^{***}	1.072^{***}
CMTRV2	1.107^{***}	1.037	$\mathbf{0.986^{***}}$	1.103^{***}	1.046	1.061^{***}
CMBPV2	1.138^{***}	1.02	1.018	1.051	0.996^{***}	1.11^{***}
CMJV2	$\mathbf{1.015^{***}}$	1.001^{**}	0.995^{***}	0.952^{***}	0.987^{***}	1.127^{***}
VRV	1.049^{***}	1.079	1.045	1.006^{*}	1.013	1.05
VTRV	1.051^{***}	1.078	1.045	1.01	1.015	1.056
VBPV	1.051^{***}	1.083	1.044	1.004^{*}	1.015	**1.043**
VJV	1.025^{***}	$\mathbf{0.988^{***}}$	1.043^{***}	1.03	1.047^{***}	1.13^{***}
MRV	1.194^{***}	1.107^{***}	1.275^{***}	1.156^{***}	1.336^{***}	1.446^{***}
MTRV	1.197^{***}	1.112^{***}	1.282^{***}	1.162^{***}	1.346^{***}	1.457^{***}
MBPV	1.257^{***}	1.147^{***}	1.262^{***}	1.153^{***}	1.333^{***}	1.434^{***}
MJV	1.347^{***}	1.191^{***}	1.361^{***}	1.408^{***}	1.833^{***}	2.031^{***}
MVRV	1.084	1.11^{***}	1.085	1.165^{***}	1.302^{***}	1.336^{***}
MVTRV	1.087	1.111^{***}	1.086	1.167^{***}	1.306^{***}	1.356^{***}
MVBPV	1.083	1.105^{***}	1.083	1.167^{***}	1.294^{***}	1.328^{***}
MVJV	1.117^{**}	1.1^{***}	1.107^{***}	1.149^{***}	1.386^{***}	1.328^{***}
rolling window size = 72						
AR	1.000	1.000	1.000	1.000	1.000	1.000
MMF	1.001^{*}	1.011	1.049^{***}	0.99^{***}	0.954^{***}	1.028
RV	1.036	1.106^{***}	1.099^{*}	1.052	1.021	0.997^{***}
TRV	1.038	1.106^{***}	1.099^{*}	1.053	1.021	$\mathbf{0.995^{***}}$
BPV	1.037	1.108^{***}	1.101^{**}	1.054	1.023	0.998^{***}
JV	1.089	1.139	1.147^{*}	1.162^{**}	1.176^{***}	1.139^{*}
CMRV1	$\mathbf{0.97^{***}}$	0.998^{***}	1.005	0.992^{***}	0.999^{***}	1.029^{***}
CMTRV1	1.052^{***}	1.011^{***}	0.992^{***}	1.013	0.996^{***}	1.016
CMBPV1	0.97^{***}	0.999^{***}	1.005	0.992^{***}	0.999^{***}	1.031^{***}
CMJV1	0.977^{***}	0.999^{***}	1.009	1.009	0.991^{***}	1.005
CMRV2	1.022^{***}	1.029^{***}	0.992^{***}	$\mathbf{0.983^{***}}$	$\mathbf{0.946^{***}}$	1.039
CMTRV2	1.018^{***}	$\mathbf{0.993^{***}}$	0.999^{***}	0.999^{***}	1.036	1.058^{***}
CMBPV2	1.016^{***}	1.014^{***}	$\mathbf{0.985^{***}}$	0.993^{***}	0.978^{***}	1.078^{***}
CMJV2	0.973^{***}	1.019	1.011	1.022	1.009	0.995^{***}
VRV	0.977^{***}	1.031	1.042	1.022	0.992^{***}	1.021^{***}
VTRV	0.977^{***}	1.032	1.039	1.022	0.993^{***}	1.021^{***}
VBPV	0.976^{***}	1.031	1.043	1.022	0.993^{***}	1.021^{***}
VJV	0.983^{***}	1.02	1.032^{***}	1.007	0.999^{***}	1.044^{***}
MRV	1.088^{***}	1.116^{***}	1.146^{***}	1.048^{*}	1.031	1.089^{***}
MTRV	1.091^{***}	1.118^{***}	1.154^{***}	1.041	1.034	1.092^{***}
MBPV	1.087^{***}	1.13^{***}	1.145^{***}	1.043	1.021	1.09^{***}
MJV	1.166^{***}	1.175^{***}	1.284^{***}	1.229^{***}	1.17^{***}	1.173^{***}
MVRV	1.02	1.058	1.067^{***}	0.998^{***}	0.975^{***}	1.04^{***}
MVTRV	1.02	1.055	1.07^{***}	0.996^{***}	0.975^{***}	1.038^{***}
MVBPV	1.021	1.059	1.065^{***}	0.997^{***}	0.979^{***}	1.043^{***}
MVJV	1.01	1.039	1.065^{***}	1.006	0.983^{***}	1.031

[1] See notes to Tables 3A and 3B.

Table A3C: Ex-Ante Directional Accuracy Rate for Consumer Price Index (Sample 1: 2006:1 - 2018:12)[1]

Model	Forecast horizon					
	1-month	2-month	3-month	4-month	5-month	6-month
rolling window size = 36						
AR	**72.2%*****	75.9%***	**81%*****	79.7%***	78.5%***	**77.2%*****
MMF	65.8%***	**81%*****	75.9%***	73.4%***	74.7%***	74.7%***
RV	65.8%***	69.6%***	70.9%***	69.6%***	**82.3%*****	73.4%***
TRV	63.3%***	69.6%***	69.6%***	69.6%***	82.3%***	73.4%***
BPV	64.6%***	69.6%***	70.9%***	69.6%***	82.3%***	73.4%***
JV	60.8%**	62%***	60.8%**	64.6%***	65.8%***	63.3%***
CMRV1	69.6%***	70.9%***	78.5%***	81%***	82.3%***	72.2%***
CMTRV1	65.8%***	77.2%***	79.7%***	81%***	79.7%***	72.2%***
CMBPV1	69.6%***	72.2%***	78.5%***	**83.5%*****	82.3%***	72.2%***
CMJV1	68.4%***	69.6%***	77.2%***	79.7%***	82.3%***	73.4%***
CMRV2	69.6%***	78.5%***	78.5%***	82.3%***	82.3%***	72.2%***
CMTRV2	67.1%***	77.2%***	81%***	78.5%***	78.5%***	72.2%***
CMBPV2	67.1%***	81%***	79.7%***	82.3%***	81%***	72.2%***
CMJV2	69.6%***	74.7%***	78.5%***	81%***	77.2%***	70.9%***
VRV	72.2%***	72.2%***	74.7%***	78.5%***	78.5%***	77.2%***
VTRV	72.2%***	72.2%***	74.7%***	78.5%***	79.7%***	77.2%***
VBPV	70.9%***	72.2%***	74.7%***	78.5%***	78.5%***	75.9%***
VJV	68.4%***	74.7%***	77.2%***	79.7%***	78.5%***	75.9%***
MRV	65.8%***	74.7%***	70.9%***	78.5%***	78.5%***	72.2%***
MTRV	67.1%***	74.7%***	70.9%***	78.5%***	78.5%***	72.2%***
MBPV	65.8%***	74.7%***	72.2%***	78.5%***	79.7%***	72.2%***
MJV	59.5%**	69.6%***	68.4%***	69.6%***	70.9%***	70.9%***
MVRV	69.6%***	74.7%***	73.4%***	78.5%***	73.4%***	74.7%***
MVTRV	68.4%***	74.7%***	72.2%***	77.2%***	73.4%***	74.7%***
MVBPV	69.6%***	74.7%***	73.4%***	78.5%***	73.4%***	73.4%***
MVJV	72.2%***	74.7%***	72.2%***	75.9%***	73.4%***	68.4%***
rolling window size = 72						
AR	68.4%***	77.2%***	**79.7%*****	75.9%***	74.7%***	74.7%***
MMF	68.4%***	79.7%***	77.2%***	75.9%***	77.2%***	73.4%***
RV	65.8%***	74.7%***	73.4%***	77.2%***	79.7%***	72.2%***
TRV	65.8%***	74.7%***	73.4%***	75.9%***	79.7%***	73.4%***
BPV	65.8%***	74.7%***	73.4%***	75.9%***	79.7%***	73.4%***
JV	67.1%***	69.6%***	72.2%***	73.4%***	75.9%***	74.7%***
CMRV1	68.4%***	77.2%***	78.5%***	75.9%***	77.2%***	72.2%***
CMTRV1	67.1%***	78.5%***	79.7%***	75.9%***	77.2%***	73.4%***
CMBPV1	68.4%***	77.2%***	78.5%***	75.9%***	77.2%***	72.2%***
CMJV1	**69.6%*****	78.5%***	78.5%***	77.2%***	75.9%***	73.4%***
CMRV2	68.4%***	74.7%***	79.7%***	**78.5%*****	77.2%***	74.7%***
CMTRV2	69.6%***	77.2%***	78.5%***	77.2%***	77.2%***	75.9%***
CMBPV2	67.1%***	78.5%***	79.7%***	77.2%***	77.2%***	74.7%***
CMJV2	69.6%***	79.7%***	79.7%***	74.7%***	74.7%***	73.4%***
VRV	69.6%***	**81%*****	78.5%***	75.9%***	78.5%***	73.4%***
VTRV	69.6%***	81%***	78.5%***	75.9%***	78.5%***	73.4%***
VBPV	69.6%***	79.7%***	78.5%***	75.9%***	78.5%***	73.4%***
VJV	69.6%***	79.7%***	79.7%***	74.7%***	77.2%***	73.4%***
MRV	63.3%***	73.4%***	73.4%***	73.4%***	**81%*****	74.7%***
MTRV	63.3%***	73.4%***	73.4%***	74.7%***	81%***	74.7%***
MBPV	63.3%***	72.2%***	73.4%***	74.7%***	81%***	74.7%***
MJV	60.8%***	72.2%***	75.9%***	70.9%***	81%***	**78.5%*****
MVRV	68.4%***	74.7%***	78.5%***	75.9%***	77.2%***	72.2%***
MVTRV	68.4%***	75.9%***	77.2%***	75.9%***	77.2%***	72.2%***
MVBPV	68.4%***	77.2%***	78.5%***	77.2%***	75.9%***	72.2%***
MVJV	68.4%***	77.2%***	75.9%***	74.7%***	75.9%***	77.2%***

[1] See notes to Tables 3A and 3B.

Table A3D: Ex-Ante Directional Accuracy Rate for Consumer Price Index (Sample 2: 2009:1 - 2018:12)[1]

Model	Forecast horizon					
	1-month	2-month	3-month	4-month	5-month	6-month
rolling window size = 36						
AR	**72.1%*****	74.4%***	**81.4%*****	**79.1%*****	79.1%***	76.7%***
MMF	62.8%**	**81.4%*****	72.1%***	69.8%***	76.7%***	**79.1%*****
RV	58.1%**	67.4%***	72.1%***	62.8%***	**81.4%*****	74.4%***
TRV	55.8%*	67.4%***	72.1%***	62.8%***	81.4%***	74.4%***
BPV	55.8%*	67.4%***	72.1%***	62.8%***	81.4%***	74.4%***
JV	60.5%*	62.8%**	65.1%***	58.1%*	62.8%**	67.4%***
CMRV1	69.8%***	69.8%***	79.1%***	76.7%***	81.4%***	69.8%***
CMTRV1	62.8%**	72.1%***	81.4%***	79.1%***	74.4%***	74.4%***
CMBPV1	69.8%***	69.8%***	79.1%***	76.7%***	81.4%***	69.8%***
CMJV1	67.4%***	72.1%***	79.1%***	76.7%***	76.7%***	69.8%***
CMRV2	69.8%***	72.1%***	79.1%***	79.1%***	79.1%***	74.4%***
CMTRV2	65.1%***	76.7%***	81.4%***	79.1%***	74.4%***	74.4%***
CMBPV2	65.1%***	76.7%***	81.4%***	79.1%***	74.4%***	74.4%***
CMJV2	67.4%***	76.7%***	81.4%***	79.1%***	74.4%***	72.1%***
VRV	72.1%***	72.1%***	79.1%***	74.4%***	79.1%***	74.4%***
VTRV	72.1%***	72.1%***	79.1%***	74.4%***	79.1%***	74.4%***
VBPV	69.8%***	72.1%***	79.1%***	74.4%***	79.1%***	74.4%***
VJV	67.4%***	74.4%***	81.4%***	76.7%***	79.1%***	74.4%***
MRV	60.5%**	74.4%***	69.8%***	74.4%***	81.4%***	74.4%***
MTRV	62.8%***	74.4%***	69.8%***	74.4%***	81.4%***	74.4%***
MBPV	60.5%**	74.4%***	72.1%***	74.4%***	81.4%***	74.4%***
MJV	55.8%	67.4%***	65.1%**	62.8%**	67.4%***	72.1%***
MVRV	72.1%***	76.7%***	74.4%***	74.4%***	74.4%***	79.1%***
MVTRV	69.8%***	76.7%***	72.1%***	72.1%***	74.4%***	79.1%***
MVBPV	72.1%***	76.7%***	74.4%***	74.4%***	74.4%***	79.1%***
MVJV	69.8%***	76.7%***	69.8%***	69.8%***	74.4%***	67.4%***
rolling window size = 72						
AR	69.8%***	**81.4%*****	**83.7%*****	69.8%***	72.1%***	76.7%***
MMF	69.8%***	81.4%***	81.4%***	**74.4%*****	79.1%***	74.4%***
RV	65.1%***	69.8%***	74.4%***	72.1%***	79.1%***	69.8%***
TRV	65.1%***	69.8%***	74.4%***	69.8%***	79.1%***	72.1%***
BPV	65.1%***	69.8%***	74.4%***	69.8%***	79.1%***	72.1%***
JV	69.8%***	62.8%**	72.1%***	72.1%***	**81.4%*****	79.1%***
CMRV1	69.8%***	76.7%***	83.7%***	69.8%***	74.4%***	72.1%***
CMTRV1	69.8%***	79.1%***	83.7%***	69.8%***	74.4%***	74.4%***
CMBPV1	69.8%***	76.7%***	83.7%***	69.8%***	74.4%***	72.1%***
CMJV1	72.1%***	79.1%***	83.7%***	72.1%***	72.1%***	74.4%***
CMRV2	69.8%***	76.7%***	83.7%***	74.4%***	74.4%***	76.7%***
CMTRV2	72.1%***	76.7%***	83.7%***	72.1%***	74.4%***	74.4%***
CMBPV2	69.8%***	79.1%***	83.7%***	72.1%***	74.4%***	74.4%***
CMJV2	72.1%***	81.4%***	83.7%***	69.8%***	72.1%***	74.4%***
VRV	**74.4%*****	81.4%***	81.4%***	69.8%***	76.7%***	74.4%***
VTRV	74.4%***	81.4%***	81.4%***	69.8%***	76.7%***	74.4%***
VBPV	74.4%***	79.1%***	81.4%***	69.8%***	76.7%***	74.4%***
VJV	72.1%***	79.1%***	83.7%***	69.8%***	76.7%***	72.1%***
MRV	65.1%***	69.8%***	76.7%***	67.4%***	79.1%***	74.4%***
MTRV	65.1%***	69.8%***	76.7%***	69.8%***	79.1%***	74.4%***
MBPV	65.1%***	67.4%***	76.7%***	69.8%***	79.1%***	74.4%***
MJV	58.1%**	69.8%***	81.4%***	65.1%***	79.1%***	**81.4%*****
MVRV	69.8%***	72.1%***	81.4%***	72.1%***	79.1%***	74.4%***
MVTRV	69.8%***	72.1%***	81.4%***	72.1%***	79.1%***	74.4%***
MVBPV	69.8%***	74.4%***	81.4%***	74.4%***	76.7%***	74.4%***
MVJV	69.8%***	79.1%***	79.1%***	69.8%***	79.1%***	79.1%***

[1] See notes to Tables 3A and 3B.

Table A4A: Ex-Ante Relative MSFEs for Personal Consumption Expenditures (Sample 1: 2006:1 - 2018:12)[1]

Model	Forecast horizon					
	1-month	2-month	3-month	4-month	5-month	6-month
rolling window size = 36						
AR	1.000	1.000	1.000	1.000	1.000	1.000
MMF	1.156^{***}	1.041	1.074	1.063	0.986^{***}	1.111
RV	1.096^{***}	1.03	1.044	1.036	1.055	1.17^{***}
TRV	1.119^{***}	1.029	1.047	1.043	1.07	1.182^{***}
BPV	1.093^{***}	1.031	1.044	1.034	1.052	1.162^{***}
JV	2.033^{***}	1.702^{***}	1.654^{***}	1.889^{***}	2.573^{***}	2.674^{***}
CMRV1	1.041^{***}	1.004	1.091^{***}	1.016	0.953^{***}	1.075
CMTRV1	1.048^{***}	1.04	1.098^{***}	1.064^{***}	1.028	0.982^{***}
CMBPV1	1.03	$\mathbf{1}^{***}$	1.088^{***}	1.019	0.954^{***}	1.078
CMJV1	1.062^{***}	1.005	1.025	0.997^{***}	0.98^{***}	0.974^{***}
CMRV2	**1.008**	1.03	1.083^{***}	1.027^{***}	1.005	0.998^{***}
CMTRV2	1.031^{***}	1.04	1.098^{***}	1.057^{***}	1.059^{***}	1.001^{***}
CMBPV2	1.043^{*}	1.072^{***}	1.106^{***}	1.035^{***}	1.031	0.995^{***}
CMJV2	1.035	1.011	1.024	$\mathbf{0.986}^{***}$	0.957^{***}	$\mathbf{0.973}^{***}$
VRV	1.044^{*}	1.047^{***}	1.048^{*}	1.067^{***}	0.945^{***}	1.055
VTRV	1.043	1.05^{***}	1.043	1.069^{***}	0.946^{***}	1.055
VBPV	1.044^{*}	1.046^{***}	1.052^{**}	1.069^{***}	0.947^{***}	1.06
VJV	1.022	1.029^{**}	**1.02**	1.019	$\mathbf{0.943}^{***}$	1.045
MRV	1.3^{***}	1.082^{**}	1.089	1.111	1.045	1.24^{***}
MTRV	1.31^{***}	1.079^{**}	1.102^{***}	1.117	1.051	1.241^{***}
MBPV	1.305^{***}	1.084^{***}	1.102^{**}	1.113	1.044	1.239^{***}
MJV	1.528^{***}	1.205^{***}	1.339^{***}	1.329^{***}	1.47^{***}	1.573^{***}
MVRV	1.185^{***}	1.101^{***}	1.146^{***}	1.076	1.01^{*}	1.154
MVTRV	1.191^{***}	1.091^{**}	1.151^{***}	1.075	1.012^{*}	1.15
MVBPV	1.181^{***}	1.105^{***}	1.145^{***}	1.079	1.001^{***}	1.158
MVJV	1.203^{***}	1.071	1.181^{***}	1.124	0.992^{***}	1.186^{***}
rolling window size = 72						
AR	1.000	1.000	1.000	1.000	1.000	1.000
MMF	1.034	1.044	1.015	1.043	0.998^{***}	$\mathbf{0.952}^{***}$
RV	1.099^{***}	1.141^{***}	1.161^{***}	1.196^{***}	1.142^{***}	1.201^{***}
TRV	1.101^{***}	1.142^{***}	1.16^{***}	1.196^{***}	1.146^{***}	1.205^{***}
BPV	1.101^{***}	1.142^{***}	1.162^{***}	1.195^{***}	1.14^{***}	1.191^{***}
JV	1.304^{***}	1.376^{***}	1.424^{***}	1.58^{***}	1.629^{***}	1.586^{***}
CMRV1	1.029^{***}	1.021	1.069^{***}	1.045^{***}	1.005	1.012
CMTRV1	0.988^{***}	1.049^{***}	1.054^{***}	1.041^{***}	1.002^{**}	0.988^{***}
CMBPV1	1.026^{**}	1.02	1.07^{***}	1.033^{***}	1.006	1.013
CMJV1	1.025^{*}	1.019	1.027^{***}	1.029	0.955^{***}	1.014
CMRV2	0.996^{***}	1.067^{***}	1.054^{***}	1.031^{**}	1.004	0.972^{***}
CMTRV2	0.995^{***}	**1.008**	1.079^{***}	1.055^{***}	1.031^{***}	1.012
CMBPV2	$\mathbf{0.977}^{***}$	1.063^{***}	1.061^{***}	1.031^{***}	1.029^{*}	0.987^{***}
CMJV2	1.028	1.038^{***}	1.047^{***}	1.048^{***}	1.03	1.014
VRV	1.069^{***}	1.086^{***}	1.07^{***}	1.089^{***}	1.029	1.098^{***}
VTRV	1.069^{***}	1.089^{***}	1.067^{***}	1.087^{***}	1.029	1.097^{***}
VBPV	1.068^{***}	1.086^{***}	1.068^{***}	1.089^{***}	1.026	1.098^{***}
VJV	1.08	1.058^{***}	1.069^{***}	1.046^{***}	1.087^{***}	1.022
MRV	1.086^{***}	1.115^{***}	1.046^{*}	1.064^{***}	0.994^{***}	0.985^{***}
MTRV	1.089^{***}	1.113^{***}	1.044	1.057^{***}	0.995^{***}	0.987^{***}
MBPV	1.086^{***}	1.115^{***}	1.045^{*}	1.064^{***}	0.993^{***}	0.986^{***}
MJV	1.164^{***}	1.156^{***}	1.106^{***}	1.184^{***}	1.182^{***}	1.175^{***}
MVRV	1.032	1.047^{*}	$\mathbf{0.991}^{***}$	1.028	0.969^{***}	0.96^{***}
MVTRV	1.034	1.047^{*}	0.993^{***}	**1.025**	0.966^{***}	0.956^{***}
MVBPV	1.032	1.047^{*}	0.991^{***}	1.028	$\mathbf{0.948}^{***}$	0.965^{***}
MVJV	1.029	1.029	1.009	1.046^{***}	0.976^{***}	0.96^{***}

[1] See notes on Tables 3A and 3B.

Table A4B: Ex-Ante Relative MSFEs for Personal Consumption Expenditures (Sample 2: 2009:1 - 2018:12)[1]

Model	Forecast horizon					
	1-month	2-month	3-month	4-month	5-month	6-month
rolling window size = 36						
AR	1.000	1.000	1.000	1.000	1.000	1.000
MMF	1.172^{***}	1.013	1.095	1.063	0.994^{***}	1.153
RV	1.115^{**}	1.055^{**}	1.092^{***}	1.101^{***}	1.158^{***}	1.331^{***}
TRV	1.15^{***}	1.064^{***}	1.099^{***}	1.108^{***}	1.175^{***}	1.346^{***}
BPV	1.113^{***}	1.054^{**}	1.092^{***}	1.096^{***}	1.146^{***}	1.315^{***}
JV	2.274^{***}	1.581^{***}	1.583^{***}	1.871^{***}	3.079^{***}	3.348^{***}
CMRV1	1.037	0.989^{***}	1.102^{***}	1.033^{***}	1.04^{***}	1.094
CMTRV1	1.046^{***}	0.997^{***}	1.059^{**}	1.063^{***}	1.033	$\mathbf{0.962^{***}}$
CMBPV1	1.025	0.985^{***}	1.103^{***}	1.035^{***}	1.041^{***}	1.092
CMJV1	1.061	1.003^{*}	1.034^{*}	1.02	1.083^{**}	1.051
CMRV2	$\mathbf{0.992^{***}}$	$\mathbf{0.977^{***}}$	1.065^{***}	1.022	1.009	0.976^{***}
CMTRV2	1.004	1.005^{*}	1.07^{***}	1.042^{***}	1.095^{***}	0.996^{***}
CMBPV2	1.003^{*}	1.043	1.074^{***}	1.029	1.047	0.968^{***}
CMJV2	1.02	0.997^{***}	**1.011**	**1.016**	1.02	1.087
VRV	1.058	1.03	1.105^{***}	1.067^{***}	$\mathbf{0.992^{***}}$	1.114
VTRV	1.057	1.034^{*}	1.097^{***}	1.07^{***}	0.994^{***}	1.114
VBPV	1.058	1.031	1.108^{***}	1.069^{***}	0.992^{***}	1.113^{*}
VJV	1.043	0.991^{***}	1.045^{***}	1.016	1.011	1.116
MRV	1.384^{***}	1.102^{**}	1.147^{***}	1.192^{***}	1.122^{**}	1.374^{***}
MTRV	1.403^{***}	1.102^{***}	1.152^{***}	1.2^{***}	1.129^{***}	1.375^{***}
MBPV	1.389^{***}	1.103^{**}	1.147^{***}	1.194^{***}	1.119^{*}	1.371^{***}
MJV	1.696^{***}	1.205^{***}	1.441^{***}	1.421^{***}	1.649^{***}	1.825^{***}
MVRV	1.147^{**}	1.093	1.143	1.108	1.077	1.249
MVTRV	1.154^{***}	1.08	1.15	1.108	1.08	1.243
MVBPV	1.144^{**}	1.1	1.142	1.109	1.074	1.254^{*}
MVJV	1.16^{***}	1.049	1.23^{***}	1.098	1.024	1.343^{***}
rolling window size = 72						
AR	1.000	1.000	1.000	1.000	1.000	1.000
MMF	1^{***}	1.017	0.966^{***}	0.968^{***}	0.941^{***}	$\mathbf{0.858^{***}}$
RV	0.983^{***}	1^{***}	1.068^{***}	1.148^{***}	1.171^{***}	1.289^{***}
TRV	0.982^{***}	1.001^{**}	1.07^{***}	1.153^{***}	1.179^{***}	1.295^{***}
BPV	0.984^{***}	1^{***}	1.067^{***}	1.145^{***}	1.167^{***}	1.274^{***}
JV	1.133^{**}	1.177^{***}	1.307^{***}	1.494^{***}	1.73^{***}	1.747^{***}
CMRV1	1.023^{***}	0.999^{***}	1.056^{***}	1.015	0.995^{***}	1.017
CMTRV1	0.993^{***}	1.023	1.018^{*}	0.993^{***}	0.955^{***}	0.967^{***}
CMBPV1	1.019^{***}	0.997^{***}	1.05^{***}	0.998^{***}	0.995^{***}	1.018
CMJV1	1.018	1.008	1.004	0.994^{***}	0.919^{***}	1.017
CMRV2	0.993^{***}	1.034	1.03^{***}	0.996^{***}	0.967^{***}	0.941^{***}
CMTRV2	0.988^{***}	$\mathbf{0.994^{***}}$	1.04^{***}	0.996^{***}	1.007	1.002^{**}
CMBPV2	0.98^{***}	1.05	1.025^{***}	0.983^{***}	0.99^{***}	0.969^{***}
CMJV2	0.99^{***}	1.015	1.019	1.008	1.036	1.021
VRV	1.045^{***}	1.052^{***}	1.031^{***}	1.083^{***}	1.026	1.146^{***}
VTRV	1.044^{***}	1.052^{***}	1.029	1.082^{***}	1.027	1.146^{***}
VBPV	1.043^{***}	1.054^{***}	1.028^{**}	1.085^{***}	1.023	1.146^{***}
VJV	1.101	1.014	1.073^{***}	1.005	1.111^{***}	1.023
MRV	0.998^{***}	1.051	0.995^{***}	1.039	0.968^{***}	0.94^{***}
MTRV	1^{***}	1.053	1^{***}	1.041	0.971^{***}	0.94^{***}
MBPV	0.998^{***}	1.049	0.994^{***}	1.039	0.967^{***}	0.94^{***}
MJV	1.047	1.114^{***}	1.126^{***}	1.196^{***}	1.151^{***}	1.123^{**}
MVRV	0.993^{***}	1.006	$\mathbf{0.934^{***}}$	0.963^{***}	0.922^{***}	0.903^{***}
MVTRV	0.993^{***}	1.006	0.936^{***}	0.963^{***}	0.921^{***}	0.898^{***}
MVBPV	0.993^{***}	1.005^{*}	0.934^{***}	$\mathbf{0.962^{***}}$	$\mathbf{0.894^{***}}$	0.906^{***}
MVJV	$\mathbf{0.979^{***}}$	1.009	0.957^{***}	0.996^{***}	0.908^{***}	0.963^{***}

[1] See notes to Tables 3A and 3B.

Table A4C: Ex-Ante Directional Accuracy Rate for Personal Consumption Expenditures (Sample 1: 2006:1 - 2018:12)[1]

Model	Forecast horizon					
	1-month	2-month	3-month	4-month	5-month	6-month
rolling window size = 36						
AR	**75.9%*****	68.4%***	72.2%***	**81%*****	72.2%***	70.9%***
MMF	73.4%***	70.9%***	73.4%***	78.5%***	72.2%***	**72.2%*****
RV	74.7%***	70.9%***	72.2%***	73.4%***	74.7%***	67.1%***
TRV	75.9%***	70.9%***	72.2%***	73.4%***	72.2%***	68.4%***
BPV	73.4%***	70.9%***	72.2%***	73.4%***	**77.2%*****	67.1%***
JV	63.3%***	64.6%***	67.1%***	59.5%**	67.1%***	64.6%***
CMRV1	73.4%***	69.6%***	73.4%***	79.7%***	74.7%***	69.6%***
CMTRV1	70.9%***	68.4%***	**74.7%*****	74.7%***	74.7%***	68.4%***
CMBPV1	73.4%***	69.6%***	73.4%***	79.7%***	74.7%***	69.6%***
CMJV1	69.6%***	70.9%***	73.4%***	81%***	74.7%***	70.9%***
CMRV2	72.2%***	67.1%***	72.2%***	77.2%***	75.9%***	69.6%***
CMTRV2	73.4%***	70.9%***	70.9%***	78.5%***	73.4%***	72.2%***
CMBPV2	72.2%***	67.1%***	72.2%***	75.9%***	77.2%***	69.6%***
CMJV2	70.9%***	69.6%***	72.2%***	77.2%***	74.7%***	65.8%***
VRV	73.4%***	68.4%***	72.2%***	73.4%***	72.2%***	70.9%***
VTRV	73.4%***	68.4%***	72.2%***	73.4%***	72.2%***	70.9%***
VBPV	72.2%***	67.1%***	72.2%***	74.7%***	72.2%***	70.9%***
VJV	72.2%***	68.4%***	72.2%***	79.7%***	74.7%***	70.9%***
MRV	73.4%***	73.4%***	70.9%***	73.4%***	75.9%***	63.3%***
MTRV	73.4%***	**74.7%*****	70.9%***	72.2%***	75.9%***	63.3%***
MBPV	73.4%***	73.4%***	72.2%***	73.4%***	77.2%***	63.3%***
MJV	65.8%***	68.4%***	68.4%***	72.2%***	72.2%***	65.8%***
MVRV	72.2%***	72.2%***	72.2%***	77.2%***	68.4%***	69.6%***
MVTRV	72.2%***	70.9%***	72.2%***	77.2%***	68.4%***	70.9%***
MVBPV	70.9%***	72.2%***	72.2%***	77.2%***	68.4%***	69.6%***
MVJV	68.4%***	69.6%***	73.4%***	74.7%***	70.9%***	65.8%***
rolling window size = 72						
AR	75.9%***	69.6%***	70.9%***	**78.5%*****	67.1%***	**72.2%*****
MMF	70.9%***	69.6%***	69.6%***	77.2%***	69.6%***	70.9%***
RV	74.7%***	69.6%***	69.6%***	73.4%***	72.2%***	67.1%***
TRV	73.4%***	69.6%***	68.4%***	73.4%***	70.9%***	67.1%***
BPV	74.7%***	69.6%***	69.6%***	73.4%***	72.2%***	67.1%***
JV	64.6%***	65.8%***	69.6%***	70.9%***	63.3%***	64.6%***
CMRV1	74.7%***	69.6%***	69.6%***	78.5%***	69.6%***	69.6%***
CMTRV1	**77.2%*****	69.6%***	72.2%***	77.2%***	70.9%***	68.4%***
CMBPV1	74.7%***	**70.9%*****	69.6%***	77.2%***	69.6%***	69.6%***
CMJV1	74.7%***	70.9%***	72.2%***	78.5%***	68.4%***	68.4%***
CMRV2	74.7%***	70.9%***	73.4%***	77.2%***	72.2%***	68.4%$^{***}_{ss}$
CMTRV2	77.2%***	69.6%***	69.6%***	77.2%***	69.6%***	72.2%***
CMBPV2	77.2%***	70.9%***	72.2%***	75.9%***	70.9%***	69.6%***
CMJV2	73.4%***	68.4%***	70.9%***	77.2%***	67.1%***	70.9%***
VRV	75.9%***	68.4%***	**74.7%*****	75.9%***	68.4%***	69.6%***
VTRV	75.9%***	68.4%***	74.7%***	75.9%***	68.4%***	69.6%***
VBPV	75.9%***	68.4%***	74.7%***	75.9%***	68.4%***	69.6%***
VJV	74.7%***	65.8%***	73.4%***	77.2%***	67.1%***	72.2%***
MRV	70.9%***	69.6%***	70.9%***	73.4%***	74.7%***	67.1%***
MTRV	70.9%***	69.6%***	70.9%***	70.9%***	**75.9%*****	69.6%***
MBPV	70.9%***	69.6%***	70.9%***	73.4%***	74.7%***	67.1%***
MJV	70.9%***	68.4%***	72.2%***	72.2%***	72.2%***	65.8%***
MVRV	72.2%***	68.4%***	67.1%***	75.9%***	69.6%***	70.9%***
MVTRV	72.2%***	69.6%***	68.4%***	75.9%***	69.6%***	70.9%***
MVBPV	72.2%***	68.4%***	67.1%***	75.9%***	70.9%***	70.9%***
MVJV	72.2%***	67.1%***	69.6%***	70.9%***	72.2%***	65.8%***

[1] See notes to Table 3A and 3B.

Table A4D: Ex-Ante Directional Accuracy Rate for Personal Consumption Expenditures (Sample 2: 2009:1 - 2018:12)[1]

Model	Forecast horizon					
	1-month	2-month	3-month	4-month	5-month	6-month
rolling window size = 36						
AR	**81.4%*****	65.1%**	65.1%***	**79.1%*****	69.8%***	67.4%***
MMF	76.7%***	69.8%***	67.4%***	74.4%***	67.4%***	**72.1%*****
RV	79.1%***	67.4%***	62.8%**	67.4%***	72.1%***	55.8%
TRV	79.1%***	67.4%***	62.8%**	67.4%***	72.1%***	58.1%*
BPV	76.7%***	67.4%***	62.8%**	67.4%***	74.4%***	55.8%
JV	62.8%**	60.5%*	62.8%**	55.8%	69.8%***	62.8%***
CMRV1	79.1%***	67.4%***	65.1%***	76.7%***	74.4%***	65.1%**
CMTRV1	74.4%***	65.1%**	**72.1%*****	72.1%***	76.7%***	65.1%**
CMBPV1	79.1%***	67.4%***	65.1%***	76.7%***	74.4%***	65.1%**
CMJV1	74.4%***	67.4%***	65.1%***	76.7%***	74.4%***	67.4%***
CMRV2	76.7%***	65.1%**	65.1%**	74.4%***	**79.1%*****	67.4%***
CMTRV2	79.1%***	67.4%***	65.1%**	76.7%***	72.1%***	72.1%***
CMBPV2	76.7%***	62.8%**	67.4%***	74.4%***	79.1%***	69.8%***
CMJV2	76.7%***	65.1%**	62.8%**	72.1%***	76.7%***	60.5%*
VRV	76.7%***	65.1%**	65.1%***	69.8%***	72.1%***	65.1%***
VTRV	76.7%***	65.1%**	65.1%***	69.8%***	72.1%***	65.1%***
VBPV	74.4%***	62.8%**	65.1%***	72.1%***	72.1%***	65.1%***
VJV	74.4%***	65.1%**	62.8%**	76.7%***	74.4%***	67.4%***
MRV	74.4%***	69.8%***	65.1%**	67.4%***	76.7%***	55.8%
MTRV	74.4%***	**72.1%*****	65.1%**	65.1%**	76.7%***	55.8%
MBPV	74.4%***	69.8%***	67.4%***	67.4%***	79.1%***	55.8%
MJV	65.1%**	65.1%**	58.1%	69.8%***	72.1%***	62.8%**
MVRV	74.4%***	72.1%***	69.8%***	74.4%***	67.4%***	67.4%***
MVTRV	74.4%***	69.8%***	69.8%***	74.4%***	67.4%***	69.8%***
MVBPV	72.1%***	72.1%***	69.8%***	74.4%***	67.4%***	67.4%***
MVJV	69.8%***	67.4%***	67.4%***	72.1%***	67.4%***	62.8%**
rolling window size = 72						
AR	79.1%***	65.1%**	65.1%**	76.7%***	65.1%***	69.8%***
MMF	72.1%***	**69.8%*****	65.1%**	**79.1%*****	69.8%***	**72.1%*****
RV	79.1%***	69.8%***	65.1%***	72.1%***	69.8%***	60.5%**
TRV	76.7%***	69.8%***	62.8%**	72.1%***	69.8%***	60.5%**
BPV	79.1%***	69.8%***	65.1%***	72.1%***	69.8%***	60.5%**
JV	67.4%***	65.1%**	67.4%***	67.4%***	62.8%***	65.1%***
CMRV1	79.1%***	67.4%***	62.8%**	76.7%***	69.8%***	62.8%**
CMTRV1	**81.4%*****	65.1%**	67.4%***	74.4%***	72.1%***	62.8%**
CMBPV1	79.1%***	69.8%***	62.8%**	74.4%***	69.8%***	62.8%**
CMJV1	79.1%***	67.4%***	67.4%***	76.7%***	67.4%***	62.8%**
CMRV2	79.1%***	69.8%***	67.4%***	72.1%***	72.1%***	65.1%**
CMTRV2	81.4%***	65.1%**	62.8%**	74.4%***	69.8%***	69.8%***
CMBPV2	81.4%***	67.4%***	67.4%***	72.1%***	72.1%***	65.1%**
CMJV2	76.7%***	65.1%**	67.4%***	76.7%***	65.1%***	65.1%***
VRV	81.4%***	65.1%**	**69.8%*****	72.1%***	67.4%***	62.8%**
VTRV	81.4%***	65.1%**	69.8%***	72.1%***	67.4%***	62.8%**
VBPV	81.4%***	65.1%**	69.8%***	72.1%***	67.4%***	62.8%**
VJV	79.1%***	62.8%**	69.8%***	76.7%***	65.1%***	69.8%***
MRV	72.1%***	69.8%***	67.4%***	69.8%***	**76.7%*****	62.8%**
MTRV	72.1%***	69.8%***	67.4%***	65.1%**	76.7%***	62.8%**
MBPV	72.1%***	69.8%***	67.4%***	69.8%***	76.7%***	62.8%**
MJV	76.7%***	69.8%***	67.4%***	67.4%***	72.1%***	65.1%***
MVRV	74.4%***	67.4%***	60.5%*	76.7%***	69.8%***	69.8%***
MVTRV	74.4%***	69.8%***	62.8%**	76.7%***	69.8%***	69.8%***
MVBPV	74.4%***	67.4%***	60.5%*	76.7%***	72.1%***	69.8%***
MVJV	74.4%***	65.1%**	65.1%**	67.4%***	74.4%***	62.8%**

[1] See notes to Tables 3A and 3B.

Table A5A: Ex-Ante Relative MSFEs for Consumer Sentiment Index (Sample 1: 2006:1 - 2018:12)[1]

Model	Forecast horizon					
	1-month	2-month	3-month	4-month	5-month	6-month
rolling window size = 36						
AR	1.000	1.000	1.000	1.000	1.000	1.000
MMF	1.041^{**}	1.166^{***}	1.053^{***}	**1.022**	1.07^{***}	1.029^{*}
RV	1.162^{***}	1.082^{***}	1.156^{***}	1.227^{***}	1.422^{***}	1.335^{***}
TRV	1.175^{***}	1.085^{***}	1.165^{***}	1.239^{***}	1.437^{***}	1.347^{***}
BPV	1.179^{***}	1.084^{***}	1.173^{***}	1.223^{***}	1.413^{***}	1.338^{***}
JV	1.797^{***}	1.727^{***}	1.994^{***}	2.254^{***}	2.802^{***}	2.606^{***}
CMRV1	1.138^{***}	1.094^{***}	1.051^{***}	1.025	1.156^{***}	1.04
CMTRV1	1.049^{*}	1.121^{***}	1.118^{***}	1.077^{***}	1.094^{***}	1.027
CMBPV1	1.137^{***}	1.1^{***}	1.05^{***}	1.025	1.162^{***}	1.02
CMJV1	1.097^{***}	1.048^{***}	1.057^{***}	1.03	1.209^{***}	0.998^{***}
CMRV2	1.033	1.146^{***}	1.092^{***}	1.06^{***}	1.105^{***}	1.035
CMTRV2	1.059^{***}	1.096^{***}	1.097^{***}	1.081^{***}	**1.012**	1.07^{***}
CMBPV2	1.041	1.157^{***}	1.119^{***}	1.069^{***}	1.099^{***}	1.014
CMJV2	1.042^{***}	$\mathbf{0.998^{***}}$	1.053^{***}	1.037^{*}	1.205^{***}	$\mathbf{0.965^{***}}$
VRV	1.094^{***}	1.048^{***}	$\mathbf{1.028^{***}}$	1.044	1.258^{***}	1.07^{***}
VTRV	1.084^{***}	1.048^{***}	1.028^{***}	1.046	1.259^{***}	1.069^{***}
VBPV	1.099^{***}	1.039^{***}	1.028^{***}	1.042	1.258^{***}	1.071^{***}
VJV	1.081^{***}	1.042^{***}	1.032^{***}	1.063^{***}	1.223^{***}	1.047^{***}
MRV	1.147^{***}	1.21^{***}	1.344^{***}	1.295^{***}	1.349^{***}	1.172^{***}
MTRV	1.134^{***}	1.217^{***}	1.355^{***}	1.299^{***}	1.361^{***}	1.179^{***}
MBPV	1.164^{***}	1.222^{***}	1.336^{***}	1.295^{***}	1.353^{***}	1.194^{***}
MJV	1.612^{***}	1.592^{***}	1.91^{***}	1.631^{***}	1.598^{***}	1.398^{***}
MVRV	**1.006**	1.173^{***}	1.134^{***}	1.227^{***}	1.189^{***}	1.135^{***}
MVTRV	1.006	1.171^{***}	1.138^{***}	1.223^{***}	1.188^{***}	1.134^{***}
MVBPV	1.006^{*}	1.174^{***}	1.13^{***}	1.23^{***}	1.184^{***}	1.139^{***}
MVJV	1.056^{***}	1.133^{***}	1.216^{***}	1.272^{***}	1.105^{***}	1.077^{***}
rolling window size = 72						
CMRV1	0.95^{***}	1.017^{***}	1^{***}	1.02	1.015^{*}	1.015
CMTRV1	1.016^{***}	1.011	0.998^{***}	1.017^{***}	1.002	$\mathbf{0.985^{***}}$
CMBPV1	$\mathbf{0.946^{***}}$	1.017^{***}	1^{***}	1.021^{*}	1.015^{*}	1.016
CMJV1	0.987^{***}	1.005	1.071^{***}	**1.008**	1.013	1.012
CMRV2	1.02^{***}	1.032^{***}	0.995^{***}	1.049^{***}	0.993^{***}	1.011
CMTRV2	1.013^{***}	1.024^{***}	0.993^{***}	1.041^{***}	$\mathbf{0.984^{***}}$	1.001^{*}
CMBPV2	1.026^{***}	1.025^{***}	$\mathbf{0.991^{***}}$	1.033^{***}	1.007	1.01
CMJV2	1.001^{**}	**1.001**	1.019	1.038^{***}	1.032^{***}	1.027^{***}
VRV	0.988^{***}	1.011	1.015	1.043	1.008	1.03^{***}
VTRV	0.986^{***}	1.009	1.015	1.045^{*}	1.011	1.033^{***}
VBPV	0.988^{***}	1.011	1.015	1.041	1.007	1.03^{***}
VJV	1.033^{***}	1.017^{***}	1.02	1.062^{***}	1.037	1.025^{***}
MRV	1.049^{***}	1.064^{***}	1.122^{***}	1.093^{***}	1.101^{***}	1.08^{***}
MTRV	1.05^{***}	1.069^{***}	1.129^{***}	1.103^{***}	1.109^{***}	1.087^{***}
MBPV	1.048^{***}	1.063^{***}	1.119^{***}	1.092^{***}	1.101^{***}	1.082^{***}
MJV	1.125^{***}	1.202^{***}	1.386^{***}	1.296^{***}	1.174^{***}	1.185^{***}
MVRV	1.05^{***}	1.065^{***}	1.095^{***}	1.034	1.063^{***}	1.051^{***}
MVTRV	1.037^{***}	1.06^{***}	1.097^{***}	1.038^{*}	1.067^{***}	1.055^{***}
MVBPV	1.054^{***}	1.066^{***}	1.094^{***}	1.033	1.063^{***}	1.051^{***}
MVJV	1.028^{***}	1.037	1.042	1.077^{***}	1.036^{***}	1.044^{***}

[1] See notes to Tables 3A and 3B.

Table A5B: Ex-Ante Relative MSFEs for Consumer Sentiment Index (Sample 2: 2009:1 - 2018:12)[1]

Model	Forecast horizon					
	1-month	2-month	3-month	4-month	5-month	6-month
rolling window size = 36						
AR	1.000	1.000	1.000	1.000	1.000	1.000
MMF	1.13^{***}	1.262^{***}	1.104^{***}	1.049	1.135^{***}	1.023
RV	1.101	1.064	1.037	1.071^{***}	1.341^{***}	1.505^{***}
TRV	1.134^{*}	1.064	1.04	1.071^{***}	1.351^{***}	1.521^{***}
BPV	1.119	1.062	1.089^{***}	1.067^{***}	1.322^{***}	1.508^{***}
JV	1.93^{***}	1.872^{***}	1.834^{***}	1.999^{***}	3.079^{***}	3.611^{***}
CMRV1	1.3^{***}	1.199^{***}	1.087^{***}	1.076^{***}	1.048^{***}	1.119
CMTRV1	1.109^{*}	1.018	1.06^{***}	1.048^{***}	1.022^{***}	1.065
CMBPV1	1.291^{***}	1.204^{***}	1.083^{***}	1.082^{***}	1.048^{***}	1.064
CMJV1	1.117^{*}	1.11^{***}	1.07^{***}	1.11^{***}	1.093^{***}	0.991^{***}
CMRV2	1.075	1.087^{***}	1.039^{**}	1.068^{***}	1.022^{***}	1.066
CMTRV2	1.095^{**}	1.014	1.046^{***}	1.042^{***}	$\mathbf{0.993^{***}}$	1.09
CMBPV2	1.06	1.096^{***}	1.079^{***}	1.038	1.013	1.01^{*}
CMJV2	**1.036**	$\mathbf{1.013^{***}}$	1.05^{***}	$\mathbf{1.028^{***}}$	1.159^{***}	$\mathbf{0.976^{***}}$
VRV	1.214^{***}	1.056	1.033^{***}	1.059^{***}	1.37^{***}	1.181^{***}
VTRV	1.189^{***}	1.059	1.03^{***}	1.059^{***}	1.364^{***}	1.182^{***}
VBPV	1.226^{***}	1.036	1.033^{***}	1.055^{***}	1.381^{***}	1.181^{***}
VJV	1.042	1.063^{***}	**1.012**	1.081^{***}	1.136^{***}	1.167^{***}
MRV	1.219^{***}	1.315^{***}	1.46^{***}	1.396^{***}	1.529^{***}	1.31^{***}
MTRV	1.175^{**}	1.319^{***}	1.465^{***}	1.392^{***}	1.547^{***}	1.326^{***}
MBPV	1.255^{***}	1.338^{***}	1.442^{***}	1.396^{***}	1.533^{***}	1.362^{***}
MJV	1.921^{***}	1.772^{***}	1.765^{***}	1.754^{***}	1.87^{***}	1.697^{***}
MVRV	1.053	1.314^{***}	1.246^{***}	1.454^{***}	1.312^{***}	1.281^{***}
MVTRV	1.052	1.309^{***}	1.252^{***}	1.441^{***}	1.311^{***}	1.277^{***}
MVBPV	1.05	1.316^{***}	1.236^{***}	1.466^{***}	1.302^{***}	1.29^{***}
MVJV	1.201^{***}	1.231^{***}	1.396^{***}	1.233^{***}	1.277^{***}	1.123^{***}
rolling window size = 72						
AR	1.000	1.000	1.000	1.000	1.000	1.000
MMF	1.053^{***}	1.074^{***}	1.008	$\mathbf{0.948^{***}}$	1.076^{***}	1.01
RV	1.123^{***}	1.06^{***}	1.043	1.08	1.069	1.045
TRV	1.111^{*}	1.061^{***}	1.044	1.083	1.071	1.046
BPV	1.106^{*}	1.061^{***}	1.04	1.076	1.066	1.043
JV	1.537^{***}	1.241^{***}	1.28^{***}	1.487^{***}	1.384^{***}	1.279^{***}
CMRV1	0.859^{***}	1.037^{***}	1.002	0.983^{***}	1.034	1.01
CMTRV1	1.032^{***}	1.015	1.015	1.033	0.998^{***}	$\mathbf{0.943^{***}}$
CMBPV1	$\mathbf{0.853^{***}}$	1.038^{***}	1.001	0.985^{***}	1.034	1.009
CMJV1	0.948^{***}	1.012^{***}	1.022^{***}	0.957^{***}	1.042	1.007
CMRV2	1.052^{***}	1.05^{***}	0.992^{***}	1.07^{***}	$\mathbf{0.987^{***}}$	1.011
CMTRV2	1.015^{***}	1.009	0.998^{***}	1.086^{***}	0.992^{***}	0.967^{***}
CMBPV2	1.056^{***}	1.032^{*}	$\mathbf{0.982^{***}}$	1.04^{*}	0.998^{***}	0.998^{***}
CMJV2	1.008	$\mathbf{1^{***}}$	1.031^{*}	0.981^{***}	1.027	1.028^{***}
VRV	0.954^{***}	1.019	0.995^{***}	1.04	0.997^{***}	1.011
VTRV	0.948^{***}	1.014	0.992^{***}	1.041	0.996^{***}	1.01
VBPV	0.953^{***}	1.021	0.997^{***}	1.036	0.997^{***}	1.011
VJV	1.08^{***}	1.027^{***}	0.982^{***}	1.096^{***}	1.028	1.023^{***}
MRV	1.106^{***}	1.112^{*}	1.123^{*}	1.044	1.106^{***}	1.056
MTRV	1.107^{***}	1.116^{**}	1.126^{**}	1.047	1.106^{***}	1.055
MBPV	1.104^{***}	1.112^{**}	1.117^{*}	1.041	1.105^{***}	1.056
MJV	1.152^{***}	1.295^{***}	1.404^{***}	1.28^{***}	1.2^{***}	1.081
MVRV	1.114^{***}	1.082^{*}	1.089	0.959^{***}	1.104^{***}	1.087^{***}
MVTRV	1.082^{***}	1.08^{*}	1.092	0.958^{***}	1.102^{***}	1.077
MVBPV	1.125^{***}	1.084^{**}	1.082	0.958^{***}	1.103^{***}	1.077
MVJV	1.055^{***}	1.034	1.157^{***}	0.975^{***}	1.098^{***}	1.023

[1] See notes to Tables 3A and 3B.

Table A5C: Ex-Ante Directional Accuracy Rate for Consumer Sentiment Index (Sample 1: 2006:1 - 2018:12)[1]

Model	Forecast horizon					
	1-month	2-month	3-month	4-month	5-month	6-month
rolling window size = 36						
AR	73.4%***	67.1%***	74.7%***	74.7%***	72.2%***	73.4%***
MMF	73.4%***	**72.2%*** **	74.7%***	**75.9%*** **	69.6%***	72.2%***
RV	68.4%***	64.6%***	73.4%***	69.6%***	70.9%***	62%**
TRV	67.1%***	64.6%***	73.4%***	69.6%***	70.9%***	60.8%**
BPV	67.1%***	64.6%***	73.4%***	69.6%***	72.2%***	60.8%**
JV	64.6%***	64.6%***	65.8%***	62%**	69.6%***	53.2%
CMRV1	70.9%***	68.4%***	74.7%***	70.9%***	69.6%***	65.8%***
CMTRV1	69.6%***	69.6%***	73.4%***	73.4%***	72.2%***	70.9%***
CMBPV1	69.6%***	68.4%***	**75.9%*** **	70.9%***	69.6%***	65.8%***
CMJV1	69.6%***	69.6%***	74.7%***	69.6%***	67.1%***	67.1%***
CMRV2	69.6%***	69.6%***	74.7%***	73.4%***	**73.4%*** **	**74.7%*** **
CMTRV2	70.9%***	70.9%***	75.9%***	73.4%***	73.4%***	72.2%***
CMBPV2	69.6%***	69.6%***	73.4%***	74.7%***	70.9%***	73.4%***
CMJV2	**75.9%*** **	65.8%***	74.7%***	75.9%***	69.6%***	70.9%***
VRV	69.6%***	64.6%***	74.7%***	69.6%***	68.4%***	68.4%***
VTRV	69.6%***	64.6%***	74.7%***	69.6%***	68.4%***	67.1%***
VBPV	69.6%***	64.6%***	74.7%***	70.9%***	69.6%***	68.4%***
VJV	72.2%***	65.8%***	73.4%***	69.6%***	69.6%***	67.1%***
MRV	68.4%***	69.6%***	69.6%***	67.1%***	68.4%***	65.8%***
MTRV	68.4%***	69.6%***	69.6%***	67.1%***	68.4%***	65.8%***
MBPV	68.4%***	69.6%***	68.4%***	67.1%***	68.4%***	65.8%***
MJV	67.1%***	64.6%***	67.1%***	64.6%***	68.4%***	64.6%***
MVRV	73.4%***	68.4%***	73.4%***	68.4%***	72.2%***	68.4%***
MVTRV	73.4%***	68.4%***	73.4%***	68.4%***	72.2%***	68.4%***
MVBPV	74.7%***	69.6%***	73.4%***	68.4%***	72.2%***	68.4%***
MVJV	73.4%***	70.9%***	72.2%***	74.7%***	68.4%***	69.6%***
rolling window size = 72						
AR	72.2%***	64.6%***	75.9%***	70.9%***	70.9%***	68.4%***
MMF	72.2%***	67.1%***	74.7%***	**73.4%*** **	72.2%***	69.6%***
RV	72.2%***	64.6%***	75.9%***	69.6%***	70.9%***	68.4%***
TRV	72.2%***	64.6%***	75.9%***	69.6%***	70.9%***	68.4%***
BPV	72.2%***	63.3%***	75.9%***	69.6%***	70.9%***	68.4%***
JV	69.6%***	63.3%***	74.7%***	68.4%***	69.6%***	65.8%***
CMRV1	72.2%***	65.8%***	75.9%***	70.9%***	72.2%***	69.6%***
CMTRV1	74.7%***	67.1%***	74.7%***	72.2%***	72.2%***	69.6%***
CMBPV1	70.9%***	65.8%***	75.9%***	70.9%***	72.2%***	68.4%***
CMJV1	74.7%***	65.8%***	75.9%***	70.9%***	72.2%***	**70.9%*** **
CMRV2	74.7%***	65.8%***	75.9%***	73.4%***	**73.4%*** **	67.1%***
CMTRV2	70.9%***	67.1%***	74.7%***	72.2%***	72.2%***	68.4%***
CMBPV2	74.7%***	67.1%***	74.7%***	72.2%***	72.2%***	68.4%***
CMJV2	**75.9%*** **	64.6%***	77.2%***	69.6%***	72.2%***	69.6%***
VRV	73.4%***	63.3%***	78.5%***	69.6%***	72.2%***	70.9%***
VTRV	73.4%***	63.3%***	78.5%***	69.6%***	72.2%***	70.9%***
VBPV	73.4%***	63.3%***	**79.7%*** **	69.6%***	72.2%***	70.9%***
VJV	72.2%***	64.6%***	75.9%***	72.2%***	73.4%***	70.9%***
MRV	73.4%***	**68.4%*** **	75.9%***	69.6%***	70.9%***	65.8%***
MTRV	73.4%***	68.4%***	75.9%***	69.6%***	70.9%***	67.1%***
MBPV	73.4%***	68.4%***	75.9%***	69.6%***	72.2%***	65.8%***
MJV	73.4%***	67.1%***	73.4%***	69.6%***	70.9%***	65.8%***
MVRV	73.4%***	67.1%***	74.7%***	69.6%***	72.2%***	65.8%***
MVTRV	73.4%***	67.1%***	74.7%***	69.6%***	72.2%***	65.8%***
MVBPV	73.4%***	67.1%***	74.7%***	72.2%***	72.2%***	65.8%***
MVJV	70.9%***	68.4%***	73.4%***	69.6%***	70.9%***	67.1%***

[1] See notes to Tables 3A and 3B.

Table A5D: Ex-Ante Directional Accuracy Rate for Consumer Sentiment Index (Sample 2: 2009:1 - 2018:12)[1]

Model	Forecast horizon					
	1-month	2-month	3-month	4-month	5-month	6-month
rolling window size = 36						
AR	74.4%***	69.8%***	72.1%***	76.7%***	69.8%***	**72.1%*** **
MMF	74.4%***	72.1%***	72.1%***	**79.1%*** **	72.1%***	72.1%***
RV	69.8%***	67.4%***	69.8%***	74.4%***	69.8%***	65.1%**
TRV	69.8%***	67.4%***	69.8%***	74.4%***	69.8%***	62.8%**
BPV	69.8%***	67.4%***	69.8%***	74.4%***	72.1%***	62.8%**
JV	72.1%***	**74.4%*** **	65.1%**	69.8%***	69.8%***	53.5%
CMRV1	72.1%***	69.8%***	72.1%***	76.7%***	69.8%***	65.1%**
CMTRV1	69.8%***	72.1%***	72.1%***	76.7%***	69.8%***	65.1%**
CMBPV1	72.1%***	69.8%***	72.1%***	76.7%***	69.8%***	65.1%**
CMJV1	74.4%***	74.4%***	72.1%***	72.1%***	69.8%***	69.8%***
CMRV2	69.8%***	72.1%***	**74.4%*** **	76.7%***	72.1%***	72.1%***
CMTRV2	69.8%***	72.1%***	72.1%***	76.7%***	72.1%***	69.8%***
CMBPV2	69.8%***	72.1%***	72.1%***	79.1%***	67.4%***	72.1%***
CMJV2	74.4%***	69.8%***	72.1%***	76.7%***	72.1%***	69.8%***
VRV	72.1%***	65.1%**	72.1%***	74.4%***	65.1%**	72.1%***
VTRV	72.1%***	65.1%**	72.1%***	74.4%***	65.1%**	69.8%***
VBPV	72.1%***	65.1%**	72.1%***	76.7%***	67.4%***	72.1%***
VJV	**79.1%*** **	67.4%***	72.1%***	76.7%***	67.4%***	67.4%***
MRV	69.8%***	74.4%***	65.1%**	69.8%***	65.1%**	65.1%**
MTRV	69.8%***	74.4%***	65.1%**	69.8%***	65.1%**	65.1%**
MBPV	69.8%***	74.4%***	62.8%**	69.8%***	65.1%**	65.1%**
MJV	72.1%***	74.4%***	62.8%**	65.1%***	65.1%***	65.1%**
MVRV	74.4%***	69.8%***	69.8%***	72.1%***	**76.7%*** **	65.1%**
MVTRV	74.4%***	69.8%***	69.8%***	72.1%***	76.7%***	65.1%**
MVBPV	76.7%***	72.1%***	69.8%***	72.1%***	76.7%***	65.1%**
MVJV	72.1%***	74.4%***	65.1%**	79.1%***	67.4%***	67.4%***
rolling window size = 72						
AR	72.1%***	67.4%***	74.4%***	72.1%***	69.8%***	65.1%**
MMF	74.4%***	72.1%***	72.1%***	**79.1%*** **	72.1%***	67.4%***
RV	72.1%***	69.8%***	74.4%***	74.4%***	69.8%***	67.4%***
TRV	72.1%***	69.8%***	74.4%***	74.4%***	69.8%***	67.4%***
BPV	72.1%***	67.4%***	74.4%***	74.4%***	69.8%***	67.4%***
JV	67.4%***	65.1%**	69.8%***	72.1%***	67.4%***	67.4%***
CMRV1	74.4%***	69.8%***	74.4%***	74.4%***	72.1%***	69.8%***
CMTRV1	**76.7%*** **	69.8%***	72.1%***	74.4%***	72.1%***	69.8%***
CMBPV1	74.4%***	69.8%***	74.4%***	74.4%***	72.1%***	67.4%***
CMJV1	76.7%***	69.8%***	74.4%***	74.4%***	72.1%***	69.8%***
CMRV2	76.7%***	69.8%***	74.4%***	76.7%***	**74.4%*** **	65.1%**
CMTRV2	72.1%***	69.8%***	72.1%***	74.4%***	72.1%***	67.4%***
CMBPV2	76.7%***	69.8%***	72.1%***	74.4%***	72.1%***	67.4%***
CMJV2	76.7%***	67.4%***	76.7%***	72.1%***	72.1%***	67.4%***
VRV	74.4%***	65.1%**	76.7%***	74.4%***	72.1%***	**72.1%*** **
VTRV	74.4%***	65.1%**	76.7%***	74.4%***	72.1%***	72.1%***
VBPV	74.4%***	65.1%**	**79.1%*** **	74.4%***	72.1%***	72.1%***
VJV	72.1%***	67.4%***	74.4%***	76.7%***	72.1%***	69.8%***
MRV	74.4%***	**74.4%*** **	74.4%***	74.4%***	69.8%***	65.1%**
MTRV	74.4%***	74.4%***	74.4%***	74.4%***	69.8%***	67.4%***
MBPV	74.4%***	74.4%***	74.4%***	74.4%***	72.1%***	65.1%**
MJV	74.4%***	72.1%***	72.1%***	76.7%***	67.4%***	65.1%**
MVRV	74.4%***	72.1%***	72.1%***	74.4%***	72.1%***	65.1%**
MVTRV	74.4%***	72.1%***	72.1%***	74.4%***	72.1%***	65.1%**
MVBPV	74.4%***	72.1%***	72.1%***	76.7%***	72.1%***	65.1%**
MVJV	72.1%***	74.4%***	72.1%***	74.4%***	69.8%***	65.1%**

[1] See notes to Tables 3A and 3B.

Table B1A: Model Confidence Set Results for Industrial Production (Sample 1: 2006:1 - 2018:12)[1]

Model	Forecast horizon					
	1-month	2-month	3-month	4-month	5-month	6-month
rolling window size = 36						
AR	0.001	0.023	0.01	0.0615	0.262	0.502*
MMF	0.001	0.062	0.01	0.0615	0.262	0.502*
RV	0.001	0.062	0.01	0.0615	0.262	0.502*
TRV	0.001	0.0725	0.01	0.215	0.262	0.502*
BPV	0.001	0.0725	0.01	0.215	0.262	0.502*
JV	0.001	0.0725	0.01	0.215	0.262	0.502*
CMRV1	0.001	0.0725	0.1435	0.215	0.304	0.502*
CMTRV1	0.001	0.0725	0.1435	0.215	0.304	0.502*
CMBPV1	0.001	0.0725	0.3605	0.215	0.566*	0.502*
CMJV1	0.001	0.0725	0.3605	0.215	0.651*	0.502*
CMRV2	0.001	0.0725	0.6085*	0.215	0.651*	0.502*
CMTRV2	0.001	0.0725	0.6085*	0.215	0.651*	0.502*
CMBPV2	0.001	0.0725	0.6085*	0.215	0.651*	0.502*
CMJV2	0.001	0.0725	0.6085*	0.215	0.651*	0.502*
VRV	0.21	0.0725	0.6085*	0.3355	0.651*	0.502*
VTRV	0.21	0.0725	0.6085*	0.3355	0.651*	0.502*
VBPV	0.21	0.0725	0.6085*	0.3355	0.651*	0.502*
VJV	0.21	0.1365	0.6085*	0.3355	0.651*	0.502*
MRV	0.21	0.1365	0.761*	0.5655*	0.651*	0.502*
MTRV	0.21	0.1365	0.761*	0.5655*	0.651*	0.5115*
MBPV	0.21	0.1365	0.761*	0.5895*	0.651*	0.5115*
MJV	0.3215	0.1365	0.761*	0.5895*	0.651*	0.5115*
MVRV	0.3215	0.199	0.761*	0.5895*	0.7205*	0.514*
MVTRV	0.3215	0.4085	0.761*	0.969*	0.7205*	0.8105*
MVBPV	0.3215	0.4085	0.761*	0.9995*	0.7205*	0.8105*
MVJV	1*	1*	1*	1*	1*	1*
rolling window size = 72						
AR	0.0005	0.0000	0.0005	0.0000	0.001	0.0055
MMF	0.0005	0.0000	0.0005	0.0000	0.001	0.0065
RV	0.0005	0.0000	0.0005	0.0000	0.008	0.0065
TRV	0.0005	0.0000	0.0005	0.0000	0.008	0.0065
BPV	0.0005	0.0000	0.0005	0.006	0.008	0.0065
JV	0.0005	0.0000	0.0005	0.006	0.008	0.0065
CMRV1	0.0005	0.0000	0.0005	0.006	0.008	0.0065
CMTRV1	0.0005	0.0000	0.0005	0.006	0.008	0.0065
CMBPV1	0.0005	0.0000	0.0005	0.006	0.008	0.0065
CMJV1	0.0005	0.0000	0.0005	0.006	0.008	0.0065
CMRV2	0.0005	0.0000	0.0005	0.006	0.008	0.0065
CMTRV2	0.0005	0.0000	0.0005	0.006	0.008	0.0065
CMBPV2	0.0005	0.0000	0.0005	0.006	0.008	0.0065
CMJV2	0.0005	0.0000	0.0005	0.006	0.008	0.0065
VRV	0.0005	0.0000	0.0005	0.006	0.008	0.0065
VTRV	0.0025	0.0000	0.0005	0.006	0.008	0.0065
VBPV	0.0025	0.009	0.0005	0.006	0.008	0.0065
VJV	0.0025	0.1095	0.0005	0.1385	0.0125	0.0065
MRV	0.0265	0.297	0.4205	0.1385	0.0125	0.0065
MTRV	0.027	0.297	0.4205	0.1385	0.0125	0.0065
MBPV	0.0325	0.297	0.4205	0.1385	0.0125	0.0065
MJV	0.0325	0.297	0.673*	0.1385	0.0125	0.0065
MVRV	0.0325	0.528*	0.673*	0.1385	0.0125	0.0065
MVTRV	0.0855	0.528*	0.673*	0.1385	0.8135*	0.8555*
MVBPV	0.279	0.528*	0.673*	0.347	0.8135*	0.9695*
MVJV	1*	1*	1*	1*	1*	1*

[1] Entries in the table are model confidence set test probability values. Larger p-value indicate models appearing in the model confidence set. See Section 3 of the main paper for complete details.

Table B1B: Model Confidence Set Results for Industrial Production (Sample 2: 2009:1 - 2018:12)[1]

Model	Forecast horizon					
	1-month	2-month	3-month	4-month	5-month	6-month
rolling window size = 36						
AR	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
MMF	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
RV	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
TRV	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
BPV	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
JV	0.0000	0.0000	0.0000	0.0000	0.0000	0.0005
CMRV1	0.0000	0.0000	0.0000	0.0000	0.0000	0.0005
CMTRV1	0.0000	0.0000	0.0000	0.0005	0.0000	0.0015
CMBPV1	0.0000	0.0000	0.0000	0.0005	0.0000	0.0015
CMJV1	0.0000	0.0000	0.0000	0.0005	0.0000	0.0015
CMRV2	0.0000	0.0000	0.0000	0.0005	0.0000	0.0115
CMTRV2	0.0000	0.0000	0.0000	0.0005	0.0000	0.03
CMBPV2	0.0000	0.0000	0.0000	0.0005	0.0000	0.0345
CMJV2	0.0000	0.0000	0.0000	0.0005	0.0895	0.0345
VRV	0.0000	0.0000	0.0000	0.0005	0.096	0.0345
VTRV	0.0000	0.0000	0.003	0.0075	0.096	0.0345
VBPV	0.0000	0.0000	0.006	0.0075	0.096	0.074
VJV	0.0000	0.0000	0.009	0.0075	0.096	0.126
MRV	0.0000	0.0000	0.0285	0.0075	0.1335	0.126
MTRV	0.0000	0.0000	0.0285	0.0075	0.2575	0.126
MBPV	0.0000	0.0000	0.0285	0.0075	0.2575	0.126
MJV	0.0000	0.0000	0.0285	0.091	0.3115	0.126
MVRV	0.0000	0.0000	0.0285	0.091	0.3115	0.541*
MVTRV	0.0000	0.0000	0.0285	0.302	0.3115	0.785*
MVBPV	0.0000	0.003	0.0285	0.302	0.8445*	0.785*
MVJV	1*	1*	1*	1*	1*	1*
rolling window size = 72						
AR	0.0075	0.028	0.049	0.0025	0.0000	0.001
MMF	0.0075	0.028	0.049	0.0025	0.0000	0.001
RV	0.0075	0.028	0.049	0.0025	0.0000	0.001
TRV	0.0075	0.028	0.049	0.0025	0.0255	0.001
BPV	0.0075	0.028	0.049	0.0025	0.0255	0.001
JV	0.0075	0.028	0.049	0.0025	0.0255	0.001
CMRV1	0.014	0.028	0.049	0.0025	0.0255	0.001
CMTRV1	0.014	0.028	0.049	0.0025	0.07	0.001
CMBPV1	0.014	0.028	0.049	0.0025	0.07	0.001
CMJV1	0.0245	0.028	0.049	0.0025	0.07	0.001
CMRV2	0.0245	0.028	0.049	0.0025	0.07	0.001
CMTRV2	0.0245	0.028	0.049	0.0025	0.07	0.001
CMBPV2	0.094	0.028	0.049	0.0295	0.07	0.001
CMJV2	0.094	0.028	0.049	0.085	0.07	0.001
VRV	0.094	0.028	0.049	0.0885	0.07	0.001
VTRV	0.094	0.028	0.049	0.0885	0.07	0.001
VBPV	0.094	0.076	0.049	0.1385	0.07	0.001
VJV	0.094	0.197	0.049	0.1385	0.07	0.001
MRV	0.094	0.2565	0.049	0.499	0.07	0.001
MTRV	0.094	0.302	0.049	0.5015*	0.07	0.001
MBPV	0.094	0.304	0.049	0.5265*	0.07	0.001
MJV	0.4265	0.304	0.049	0.5325*	0.07	0.001
MVRV	0.4265	0.304	0.48	0.6245*	0.07	0.001
MVTRV	0.4265	0.304	0.5585*	0.6245*	0.07	0.001
MVBPV	0.9435*	0.8385*	0.6525*	0.6945*	0.07	0.0135
MVJV	1*	1*	1*	1*	1*	1*

[1] See notes to Table B1A.

Table B2A: Model Confidence Set Results for Non-Farm Payroll Employment (Sample 1: 2006:1 - 2018:12)[1]

Model	Forecast horizon					
	1-month	2-month	3-month	4-month	5-month	6-month
rolling window size = 36						
AR	0.031	0.0355	0.0005	0.0005	0.0000	0.0005
MMF	0.031	0.04	0.0005	0.0005	0.0000	0.0005
RV	0.031	0.137	0.0005	0.0005	0.0000	0.0275
TRV	0.031	0.137	0.0005	0.0005	0.0065	0.0275
BPV	0.031	0.137	0.0015	0.0005	0.0065	0.0345
JV	0.031	0.167	0.002	0.0005	0.0065	0.0345
CMRV1	0.031	0.173	0.022	0.0005	0.0065	0.0345
CMTRV1	0.031	0.173	0.0285	0.0005	0.0065	0.0345
CMBPV1	0.031	0.2215	0.1235	0.0055	0.041	0.0345
CMJV1	0.031	0.2215	0.1235	0.0055	0.041	0.0345
CMRV2	0.031	0.2215	0.1235	0.0055	0.041	0.037
CMTRV2	0.031	0.2215	0.1235	0.0055	0.041	0.037
CMBPV2	0.031	0.2215	0.1235	0.0055	0.055	0.037
CMJV2	0.031	0.2215	0.1235	0.2165	0.055	0.037
VRV	0.031	0.2215	0.1235	0.2165	0.055	0.037
VTRV	0.031	0.2475	0.1235	0.2165	0.055	0.6*
VBPV	0.031	0.2475	0.1235	0.2165	0.5955*	0.6*
VJV	0.031	0.2475	0.1235	0.2165	0.5955*	0.677*
MRV	0.137	0.2475	0.1235	0.2165	0.5955*	0.677*
MTRV	0.137	0.2475	0.1235	0.2165	0.8565*	0.677*
MBPV	0.137	0.2475	0.1235	0.2165	0.8565*	0.677*
MJV	0.137	0.2475	0.1235	0.2165	0.8565*	0.677*
MVRV	0.4535	0.2475	0.1235	0.2755	0.8565*	0.677*
MVTRV	0.4535	0.2475	0.1235	0.2755	0.8565*	0.677*
MVBPV	0.4535	0.2475	0.1235	0.2755	0.8565*	0.677*
MVJV	1*	1*	1*	1*	1*	1*
rolling window size = 72						
AR	0.0000	0.0000	0.0125	0.0055	0.019	0.0025
MMF	0.0000	0.0000	0.0125	0.013	0.0565	0.0025
RV	0.0000	0.0000	0.0125	0.013	0.0565	0.0025
TRV	0.0000	0.0000	0.0125	0.013	0.0565	0.0025
BPV	0.0000	0.0000	0.0125	0.013	0.0565	0.0025
JV	0.0000	0.0015	0.0125	0.013	0.0565	0.0025
CMRV1	0.0000	0.0015	0.0125	0.013	0.0565	0.0025
CMTRV1	0.0000	0.0015	0.0125	0.013	0.0565	0.0025
CMBPV1	0.0000	0.0015	0.0125	0.013	0.0565	0.0025
CMJV1	0.0000	0.0015	0.0125	0.013	0.0565	0.0025
CMRV2	0.0000	0.0015	0.0125	0.013	0.0565	0.0025
CMTRV2	0.0000	0.0015	0.0125	0.013	0.0565	0.0025
CMBPV2	0.0000	0.0015	0.0125	0.013	0.0565	0.0025
CMJV2	0.0000	0.0015	0.0125	0.013	0.0565	0.0025
VRV	0.0000	0.0015	0.0125	0.021	0.0565	0.0025
VTRV	0.0000	0.0015	0.0125	0.021	0.0565	0.0025
VBPV	0.0000	0.0015	0.0125	0.021	0.0565	0.0025
VJV	0.0000	0.0015	0.0125	0.021	0.0565	0.0025
MRV	0.0000	0.0015	0.0125	0.021	0.0595	0.0025
MTRV	0.0000	0.0015	0.0125	0.022	0.0595	0.0025
MBPV	0.0000	0.0015	0.0125	0.022	0.0595	0.0025
MJV	0.0000	0.0015	0.0125	0.022	0.0595	0.0025
MVRV	0.0000	0.0015	0.0125	0.022	0.0595	0.0175
MVTRV	0.0000	0.0015	0.0125	0.022	0.0595	0.0235
MVBPV	0.0000	0.0015	0.0125	0.022	0.0595	0.0235
MVJV	1*	1*	1*	1*	1*	1*

[1] See notes to Table B1A.

Table B2B: Model Confidence Set Results for Non-Farm Payroll Employment (Sample 2: 2009:1 - 2018:12)[1]

Model	Forecast horizon					
	1-month	2-month	3-month	4-month	5-month	6-month
rolling window size = 36						
AR	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
MMF	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
RV	0.0000	0.0005	0.0000	0.0000	0.0000	0.0000
TRV	0.0000	0.0005	0.0000	0.0000	0.0000	0.0000
BPV	0.0000	0.0005	0.0000	0.0000	0.0005	0.0000
JV	0.0000	0.0005	0.0000	0.0000	0.0165	0.002
CMRV1	0.0000	0.0005	0.0000	0.0000	0.017	0.0025
CMTRV1	0.0000	0.0005	0.0000	0.002	0.034	0.0025
CMBPV1	0.0000	0.0005	0.0885	0.0135	0.034	0.0185
CMJV1	0.0000	0.014	0.0885	0.0135	0.19	0.0185
CMRV2	0.0000	0.014	0.0885	0.0135	0.19	0.0185
CMTRV2	0.0000	0.014	0.192	0.0135	0.19	0.022
CMBPV2	0.0025	0.014	0.192	0.0135	0.19	0.0275
CMJV2	0.0025	0.014	0.196	0.0135	0.19	0.107
VRV	0.0025	0.014	0.196	0.0135	0.19	0.107
VTRV	0.0025	0.014	0.196	0.0135	0.19	0.107
VBPV	0.003	0.156	0.2235	0.0135	0.19	0.107
VJV	0.003	0.156	0.2235	0.0135	0.19	0.107
MRV	0.4705	0.156	0.2235	0.0135	0.19	0.107
MTRV	0.4705	0.447	0.2235	0.0135	0.19	0.107
MBPV	0.4705	0.447	0.2595	0.0135	0.19	0.107
MJV	0.4705	0.447	0.2595	0.0135	0.19	0.318
MVRV	0.4705	0.447	0.2595	0.0135	0.19	0.3975
MVTRV	0.536*	0.447	0.2595	0.0135	0.4075	0.474
MVBPV	0.876*	0.447	0.2595	0.105	0.4235	0.474
MVJV	1*	1*	1*	1*	1*	1*
rolling window size = 72						
AR	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
MMF	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
RV	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
TRV	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
BPV	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
JV	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
CMRV1	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
CMTRV1	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
CMBPV1	0.0000	0.0055	0.0045	0.01	0.0000	0.0000
CMJV1	0.0000	0.0585	0.212	0.08	0.0000	0.0000
CMRV2	0.0000	0.139	0.212	0.08	0.0000	0.0000
CMTRV2	0.0000	0.139	0.212	0.08	0.0000	0.0000
CMBPV2	0.0000	0.1655	0.212	0.08	0.0000	0.0000
CMJV2	0.0000	0.4285	0.212	0.08	0.0000	0.0000
VRV	0.0000	0.4285	0.212	0.08	0.0000	0.0000
VTRV	0.0000	0.4285	0.212	0.08	0.0000	0.0000
VBPV	0.004	0.4285	0.212	0.08	0.0000	0.0000
VJV	0.008	0.4285	0.212	0.08	0.0000	0.0000
MRV	0.008	0.4285	0.212	0.2495	0.156	0.0000
MTRV	0.008	0.4285	0.212	0.2495	0.432	0.025
MBPV	0.008	0.4285	0.212	0.2495	0.432	0.5195*
MJV	0.008	0.4285	0.3265	0.2495	0.432	0.5195*
MVRV	0.008	0.4285	0.3265	0.2495	0.432	0.5445*
MVTRV	0.008	0.4285	0.3265	0.2495	0.432	0.5445*
MVBPV	0.2485	0.4285	0.3265	0.2495	0.47	0.5445*
MVJV	1*	1*	1*	1*	1*	1*

[1] See notes to Table B1A.

Table B3A: Model Confidence Set Results for Personal Consumption Expenditure (Sample 1: 2006:1 - 2018:12)[1]

Model	Forecast horizon					
	1-month	2-month	3-month	4-month	5-month	6-month
rolling window size = 36						
AR	0.0000	0.001	0.0015	0.0000	0.0000	0.0000
MMF	0.0000	0.001	0.0045	0.0000	0.0000	0.0000
RV	0.0000	0.001	0.0045	0.0000	0.0000	0.0000
TRV	0.0000	0.001	0.0045	0.0000	0.0000	0.0000
BPV	0.0000	0.0015	0.011	0.0000	0.0000	0.0000
JV	0.0000	0.0245	0.0255	0.0000	0.0000	0.0000
CMRV1	0.0000	0.0245	0.0255	0.0000	0.0000	0.0000
CMTRV1	0.0000	0.0245	0.03	0.0000	0.0000	0.0000
CMBPV1	0.0000	0.0245	0.03	0.0000	0.0000	0.0000
CMJV1	0.0000	0.0245	0.03	0.0000	0.0000	0.0000
CMRV2	0.0000	0.0245	0.03	0.0000	0.0000	0.0000
CMTRV2	0.0000	0.0245	0.03	0.0000	0.0000	0.0000
CMBPV2	0.0000	0.0245	0.03	0.0000	0.0005	0.0815
CMJV2	0.001	0.0245	0.03	0.0000	0.0005	0.1495
VRV	0.001	0.0245	0.03	0.0000	0.0005	0.1495
VTRV	0.004	0.0245	0.03	0.0000	0.0005	0.1495
VBPV	0.004	0.0245	0.03	0.0000	0.0005	0.1495
VJV	0.004	0.161	0.03	0.0155	0.0005	0.1495
MRV	0.3725	0.161	0.03	0.0155	0.0005	0.1495
MTRV	0.4755	0.161	0.036	0.0155	0.0005	0.1495
MBPV	0.4755	0.161	0.036	0.0155	0.0005	0.1495
MJV	0.4755	0.161	0.036	0.0155	0.1325	0.1495
MVRV	0.4755	0.161	0.2715	0.0155	0.1325	0.1495
MVTRV	0.4755	0.161	0.2715	0.0155	0.1325	0.1495
MVBPV	0.4755	0.161	0.4025	0.2905	0.1325	0.1495
MVJV	1^*	1^*	1^*	1^*	1^*	1^*
rolling window size = 72						
AR	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
MMF	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
RV	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
TRV	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
BPV	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
JV	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
CMRV1	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
CMTRV1	0.0000	0.0000	0.0000	0.0000	0.001	0.0000
CMBPV1	0.0000	0.0000	0.0000	0.0000	0.001	0.0000
CMJV1	0.0000	0.0000	0.0000	0.0000	0.001	0.0000
CMRV2	0.0000	0.0000	0.0000	0.0000	0.001	0.0000
CMTRV2	0.0000	0.0000	0.0000	0.0055	0.001	0.0000
CMBPV2	0.0000	0.0175	0.0000	0.0055	0.001	0.002
CMJV2	0.015	0.0175	0.0000	0.0055	0.001	0.002
VRV	0.015	0.0175	0.0000	0.0055	0.001	0.008
VTRV	0.015	0.0175	0.0000	0.0055	0.026	0.008
VBPV	0.015	0.0315	0.0000	0.0055	0.026	0.0105
VJV	0.015	0.0315	0.0000	0.0055	0.0385	0.0105
MRV	0.015	0.0315	0.0000	0.0055	0.067	0.0105
MTRV	0.015	0.059	0.012	0.0055	0.067	0.0105
MBPV	0.015	0.51^*	0.012	0.0055	0.067	0.0105
MJV	0.015	0.51^*	0.1775	0.0055	0.067	0.0105
MVRV	0.15	0.51^*	0.1775	0.0055	0.067	0.0235
MVTRV	0.15	0.6195^*	0.1775	0.0425	0.067	0.033
MVBPV	0.15	0.6195^*	0.9535^*	0.0425	0.067	0.033
MVJV	1^*	1^*	1^*	1^*	1^*	1^*

[1] See notes to Table B1A.

Table B3B: Model Confidence Set Results for Personal Consumption Expenditure (Sample 2: 2009:1 - 2018:12)[1]

Model	Forecast horizon					
	1-month	2-month	3-month	4-month	5-month	6-month
rolling window size = 36						
AR	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
MMF	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
RV	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
TRV	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
BPV	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
JV	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
CMRV1	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
CMTRV1	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
CMBPV1	0.0000	0.0015	0.0000	0.0000	0.0000	0.0000
CMJV1	0.0000	0.0015	0.0000	0.0000	0.0000	0.0000
CMRV2	0.0000	0.0025	0.0000	0.0000	0.0000	0.0000
CMTRV2	0.0000	0.0045	0.001	0.0000	0.0000	0.0000
CMBPV2	0.0000	0.0075	0.001	0.0000	0.0000	0.0000
CMJV2	0.0000	0.0265	0.001	0.0000	0.0000	0.0000
VRV	0.0000	0.0265	0.001	0.0000	0.0000	0.0000
VTRV	0.0000	0.0265	0.003	0.0000	0.0000	0.0000
VBPV	0.0000	0.0265	0.232	0.0000	0.0000	0.0000
VJV	0.0000	0.0265	0.232	0.0000	0.0000	0.0000
MRV	0.0000	0.0265	0.232	0.0000	0.0000	0.177
MTRV	0.0000	0.0265	0.232	0.049	0.001	0.293
MBPV	0.0000	0.0265	0.728*	0.049	0.0025	0.293
MJV	0.0000	0.0265	0.728*	0.049	0.0145	0.5395*
MVRV	0.0000	0.0265	0.728*	0.049	0.1505	0.5395*
MVTRV	0.0000	0.0265	0.728*	0.049	0.498	0.5395*
MVBPV	0.0000	0.0265	0.728*	0.049	0.943*	0.5395*
MVJV	1*	1*	1*	1*	1*	1*
rolling window size = 72						
AR	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
MMF	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
RV	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
TRV	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
BPV	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
JV	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
CMRV1	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
CMTRV1	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
CMBPV1	0.0000	0.0025	0.0000	0.0000	0.0000	0.0000
CMJV1	0.0000	0.0025	0.0000	0.0000	0.0000	0.0000
CMRV2	0.002	0.003	0.0000	0.0000	0.0000	0.0000
CMTRV2	0.002	0.02	0.0000	0.0000	0.1	0.0000
CMBPV2	0.0185	0.02	0.0000	0.0000	0.1	0.0000
CMJV2	0.029	0.094	0.0000	0.0000	0.122	0.0000
VRV	0.029	0.094	0.0000	0.0000	0.2325	0.309
VTRV	0.029	0.094	0.0000	0.0000	0.2325	0.309
VBPV	0.029	0.094	0.0000	0.159	0.2325	0.309
VJV	0.168	0.094	0.0000	0.159	0.2325	0.309
MRV	0.168	0.111	0.0000	0.159	0.2325	0.309
MTRV	0.168	0.111	0.0000	0.159	0.2325	0.309
MBPV	0.168	0.111	0.0000	0.159	0.2325	0.309
MJV	0.2725	0.111	0.0000	0.159	0.2325	0.309
MVRV	0.6045*	0.111	0.0000	0.159	0.2425	0.309
MVTRV	0.6045*	0.774*	0.046	0.159	0.2425	0.5365*
MVBPV	0.6045*	0.93*	0.183	0.159	0.323	0.5365*
MVJV	1*	1*	1*	1*	1*	1*

[1] See notes to Table B1A.

Table B4A: Model Confidence Set Results for Consumer Sentiment Index (Sample 1: 2006:1 - 2018:12)[1]

Model	Forecast horizon					
	1-month	2-month	3-month	4-month	5-month	6-month
rolling window size = 36						
AR	0.0005	0.0000	0.0000	0.095	0.0045	0.003
MMF	0.0005	0.0000	0.0000	0.095	0.0045	0.003
RV	0.0005	0.0000	0.0000	0.095	0.0045	0.003
TRV	0.0005	0.0000	0.001	0.095	0.0045	0.168
BPV	0.0005	0.0335	0.001	0.095	0.0685	0.168
JV	0.0005	0.0335	0.001	0.095	0.0685	0.168
CMRV1	0.0015	0.0335	0.001	0.095	0.0685	0.168
CMTRV1	0.0015	0.0335	0.001	0.095	0.0685	0.5015*
CMBPV1	0.0045	0.4355	0.001	0.095	0.0685	0.583*
CMJV1	0.0045	0.4355	0.001	0.095	0.0685	0.6565*
CMRV2	0.232	0.4355	0.001	0.095	0.0685	0.6565*
CMTRV2	0.285	0.4355	0.001	0.095	0.0685	0.6565*
CMBPV2	0.285	0.4355	0.003	0.095	0.0685	0.6565*
CMJV2	0.285	0.4355	0.003	0.095	0.0685	0.6565*
VRV	0.285	0.4355	0.0055	0.095	0.0685	0.6565*
VTRV	0.285	0.4355	0.0055	0.095	0.0685	0.6565*
VBPV	0.806*	0.4355	0.0055	0.095	0.2975	0.6565*
VJV	0.806*	0.4355	0.0075	0.095	0.2975	0.6565*
MRV	0.806*	0.4355	0.0075	0.095	0.2975	0.6565*
MTRV	0.806*	0.4355	0.107	0.095	0.2975	0.6565*
MBPV	0.806*	0.4355	0.107	0.0955	0.2975	0.6565*
MJV	0.806*	0.4355	0.107	0.0955	0.2975	0.6565*
MVRV	0.806*	0.4355	0.107	0.1185	0.2975	0.6565*
MVTRV	0.806*	0.4355	0.2025	0.144	0.364	0.914*
MVBPV	0.806*	0.8015*	0.8785*	0.397	0.946*	0.914*
MVJV	1*	1*	1*	1*	1*	1*
rolling window size = 72						
AR	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
MMF	0.0000	0.0005	0.0000	0.0000	0.0000	0.0000
RV	0.0000	0.0005	0.0000	0.0000	0.0000	0.0000
TRV	0.0000	0.0005	0.0000	0.0000	0.0000	0.0000
BPV	0.0000	0.0005	0.0000	0.0000	0.0000	0.0000
JV	0.0000	0.0005	0.0000	0.0000	0.0000	0.005
CMRV1	0.0000	0.0005	0.0000	0.0000	0.0000	0.005
CMTRV1	0.0000	0.0005	0.0000	0.0000	0.0000	0.005
CMBPV1	0.0000	0.0005	0.0000	0.0000	0.0000	0.005
CMJV1	0.0000	0.0005	0.0000	0.0000	0.0000	0.005
CMRV2	0.0000	0.0005	0.0005	0.0000	0.0000	0.005
CMTRV2	0.0000	0.0005	0.0005	0.0000	0.0000	0.005
CMBPV2	0.0000	0.0005	0.001	0.0000	0.0000	0.005
CMJV2	0.0000	0.0005	0.001	0.0000	0.0000	0.005
VRV	0.0000	0.0005	0.0025	0.0000	0.0000	0.005
VTRV	0.0000	0.0005	0.0025	0.0000	0.0000	0.005
VBPV	0.0000	0.0005	0.0025	0.0000	0.0125	0.005
VJV	0.0000	0.0005	0.029	0.0000	0.0605	0.005
MRV	0.0005	0.0005	0.0825	0.02	0.2405	0.005
MTRV	0.0805	0.0005	0.0825	0.02	0.2405	0.132
MBPV	0.0805	0.0005	0.0825	0.0395	0.2405	0.132
MJV	0.0805	0.0005	0.675*	0.0705	0.2405	0.132
MVRV	0.0805	0.0005	0.879*	0.1235	0.2405	0.132
MVTRV	0.0805	0.0005	0.879*	0.1235	0.2405	0.354
MVBPV	0.568*	0.0005	0.879*	0.335	0.571*	0.354
MVJV	1*	1*	1*	1*	1*	1*

[1] See notes to Table B1A.

Table B4B: Model Confidence Set Results for Consumer Sentiment Index (Sample 2: 2009:1 - 2018:12)[1]

Model	Forecast horizon					
	1-month	2-month	3-month	4-month	5-month	6-month
rolling window size = 36						
AR	0.0000	0.0065	0.0315	0.0000	0.0000	0.001
MMF	0.0000	0.0065	0.034	0.0000	0.0000	0.001
RV	0.0000	0.0065	0.0345	0.0000	0.0000	0.001
TRV	0.0000	0.0065	0.046	0.0000	0.0000	0.001
BPV	0.0000	0.0065	0.0505	0.0005	0.0000	0.0015
JV	0.0000	0.0065	0.057	0.0005	0.0000	0.0015
CMRV1	0.0000	0.0065	0.0665	0.0005	0.0000	0.0015
CMTRV1	0.0000	0.0175	0.0665	0.0005	0.0000	0.0015
CMBPV1	0.0000	0.0175	0.0665	0.0005	0.0000	0.0015
CMJV1	0.0000	0.0445	0.0765	0.0005	0.0000	0.0015
CMRV2	0.0000	0.045	0.0765	0.0005	0.0000	0.0015
CMTRV2	0.029	0.045	0.0765	0.0005	0.001	0.0015
CMBPV2	0.029	0.045	0.0765	0.0005	0.001	0.0015
CMJV2	0.3775	0.045	0.0765	0.0005	0.001	0.0015
VRV	0.3775	0.045	0.0765	0.0005	0.001	0.0015
VTRV	0.3775	0.045	0.0765	0.0005	0.001	0.0015
VBPV	0.3775	0.045	0.0765	0.0005	0.001	0.0015
VJV	0.7405*	0.045	0.3255	0.0005	0.001	0.0015
MRV	0.7405*	0.045	0.3255	0.0005	0.001	0.0015
MTRV	0.7405*	0.045	0.3255	0.0005	0.001	0.0015
MBPV	0.7405*	0.0455	0.3255	0.001	0.001	0.0015
MJV	0.9415*	0.0455	0.3255	0.0025	0.001	0.0015
MVRV	0.9415*	0.0455	0.3255	0.008	0.001	0.0015
MVTRV	0.9415*	0.689*	0.3255	0.008	0.002	0.0075
MVBPV	0.9415*	0.788*	0.3255	0.653*	0.002	0.061
MVJV	1*	1*	1*	1*	1*	1*
rolling window size = 72						
AR	0.0000	0.0000	0.0000	0.0000	0.0000	0.0005
MMF	0.0000	0.0000	0.0000	0.0000	0.0000	0.0005
RV	0.0000	0.0000	0.0000	0.0000	0.0000	0.0005
TRV	0.0000	0.0000	0.0000	0.0000	0.0000	0.0005
BPV	0.001	0.0000	0.0000	0.0000	0.0000	0.0005
JV	0.001	0.0000	0.0000	0.0000	0.0000	0.003
CMRV1	0.0015	0.0000	0.0000	0.0000	0.0000	0.0055
CMTRV1	0.003	0.0000	0.0000	0.0000	0.0155	0.0105
CMBPV1	0.0045	0.0000	0.0000	0.0000	0.0155	0.165
CMJV1	0.0045	0.0000	0.0000	0.0000	0.0155	0.387
CMRV2	0.0075	0.0000	0.0000	0.0000	0.0155	0.407
CMTRV2	0.01	0.0000	0.0000	0.0000	0.016	0.407
CMBPV2	0.0105	0.0000	0.002	0.0000	0.026	0.407
CMJV2	0.0115	0.0005	0.002	0.0000	0.032	0.407
VRV	0.0115	0.0005	0.002	0.0000	0.032	0.407
VTRV	0.0135	0.0005	0.002	0.016	0.5575*	0.407
VBPV	0.0135	0.0005	0.002	0.0485	0.5575*	0.407
VJV	0.0135	0.0005	0.002	0.0485	0.5575*	0.407
MRV	0.0135	0.0115	0.002	0.0485	0.5575*	0.407
MTRV	0.024	0.0115	0.002	0.0485	0.5575*	0.407
MBPV	0.024	0.0115	0.4095	0.0485	0.5575*	0.7855*
MJV	0.024	0.0115	0.522*	0.4785	0.5575*	0.7855*
MVRV	0.024	0.0115	0.522*	0.4785	0.5575*	0.9255*
MVTRV	0.024	0.0115	0.522*	0.4785	0.5575*	0.9255*
MVBPV	0.3715	0.0115	0.619*	0.4785	0.64*	0.9255*
MVJV	1*	1*	1*	1*	1*	1*

[1] See notes to Table B1A.

Table B5A: Model Confidence Set Results for Consumer Price Index (Sample 1: 2006:1 - 2018:12)[1]

Model	Forecast horizon					
	1-month	2-month	3-month	4-month	5-month	6-month
rolling window size = 36						
AR	0.0000	0.001	0.0005	0.001	0.1465	0.2515
MMF	0.0000	0.001	0.0005	0.001	0.1465	0.2515
RV	0.0000	0.001	0.0005	0.001	0.1465	0.2515
TRV	0.0000	0.001	0.0005	0.001	0.1465	0.2515
BPV	0.0000	0.001	0.0005	0.001	0.1465	0.2515
JV	0.0000	0.0235	0.0005	0.001	0.1465	0.2515
CMRV1	0.0000	0.0235	0.0005	0.0185	0.1465	0.2515
CMTRV1	0.0000	0.1625	0.055	0.03	0.1465	0.2515
CMBPV1	0.0000	0.276	0.055	0.03	0.1465	0.2515
CMJV1	0.0735	0.276	0.055	0.03	0.1465	0.2515
CMRV2	0.0735	0.276	0.127	0.03	0.494	0.2515
CMTRV2	0.0735	0.276	0.13	0.03	0.494	0.2515
CMBPV2	0.0735	0.276	0.13	0.03	0.494	0.2515
CMJV2	0.2895	0.276	0.13	0.03	0.494	0.2515
VRV	0.2895	0.322	0.296	0.03	0.494	0.2515
VTRV	0.373	0.322	0.296	0.03	0.4955	0.2515
VBPV	0.373	0.322	0.507^{*}	0.03	0.532^{*}	0.2515
VJV	0.373	0.322	0.6185^{*}	0.03	0.7075^{*}	0.2515
MRV	0.471	0.322	0.6695^{*}	0.03	0.7075^{*}	0.2515
MTRV	0.471	0.592^{*}	0.6695^{*}	0.03	0.726^{*}	0.2515
MBPV	0.471	0.592^{*}	0.6695^{*}	0.03	0.726^{*}	0.2515
MJV	0.471	0.8255^{*}	0.6695^{*}	0.03	0.726^{*}	0.2515
MVRV	0.471	0.8255^{*}	0.827^{*}	0.9125^{*}	0.726^{*}	0.2515
MVTRV	0.471	0.8255^{*}	0.827^{*}	0.9125^{*}	0.726^{*}	0.2515
MVBPV	0.471	0.8255^{*}	0.827^{*}	0.9125^{*}	0.726^{*}	0.873^{*}
MVJV	1^{*}	1^{*}	1^{*}	1^{*}	1^{*}	1^{*}
rolling window size = 72						
AR	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
MMF	0.0000	0.0015	0.0000	0.0000	0.0000	0.0000
RV	0.0000	0.0015	0.0000	0.0000	0.0000	0.0000
TRV	0.0000	0.0025	0.0005	0.0000	0.0000	0.0000
BPV	0.0000	0.009	0.0095	0.0000	0.0000	0.0000
JV	0.0000	0.045	0.0095	0.0000	0.0000	0.0000
CMRV1	0.0000	0.045	0.012	0.0000	0.0000	0.0000
CMTRV1	0.0000	0.045	0.012	0.0000	0.0000	0.0000
CMBPV1	0.0000	0.045	0.012	0.0000	0.0000	0.0000
CMJV1	0.0000	0.096	0.012	0.0000	0.0000	0.0000
CMRV2	0.0000	0.2025	0.012	0.0000	0.0000	0.0000
CMTRV2	0.0000	0.2025	0.0165	0.007	0.002	0.0000
CMBPV2	0.0005	0.2025	0.0165	0.007	0.006	0.0000
CMJV2	0.002	0.2025	0.0165	0.0175	0.006	0.0000
VRV	0.002	0.2025	0.0165	0.0185	0.013	0.0000
VTRV	0.002	0.2025	0.0165	0.0185	0.0135	0.0000
VBPV	0.002	0.2025	0.0165	0.034	0.304	0.2085
VJV	0.002	0.2025	0.0165	0.034	0.304	0.2135
MRV	0.005	0.2025	0.0165	0.034	0.3055	0.2135
MTRV	0.0065	0.2025	0.0205	0.0485	0.3395	0.2135
MBPV	0.0595	0.2025	0.0205	0.247	0.3415	0.3325
MJV	0.0915	0.52^{*}	0.0225	0.247	0.654^{*}	0.357
MVRV	0.0915	0.52^{*}	0.0225	0.247	0.6725^{*}	0.3725
MVTRV	0.0915	0.52^{*}	0.3545	0.2835	0.6725^{*}	0.654^{*}
MVBPV	0.1455	0.9845^{*}	0.8145^{*}	0.7835^{*}	0.6725^{*}	0.654^{*}
MVJV	1^{*}	1^{*}	1^{*}	1^{*}	1^{*}	1^{*}

[1] See notes to Table B1A.

Table B5B: Model Confidence Set Results for Consumer Price Index (Sample 2: 2009:1 - 2018:12)[1]

Model	Forecast horizon					
	1-month	2-month	3-month	4-month	5-month	6-month
rolling window size = 36						
AR	0.008	0.0015	0.0000	0.0000	0.0000	0.0000
MMF	0.008	0.0025	0.0000	0.0000	0.0000	0.0000
RV	0.008	0.005	0.0000	0.0000	0.0000	0.0000
TRV	0.008	0.0125	0.0000	0.0000	0.0000	0.0000
BPV	0.008	0.0635	0.0000	0.0000	0.0000	0.0000
JV	0.01	0.0635	0.0000	0.0000	0.0000	0.0000
CMRV1	0.01	0.269	0.005	0.0000	0.0015	0.0000
CMTRV1	0.043	0.269	0.005	0.0000	0.0015	0.0000
CMBPV1	0.043	0.269	0.0055	0.0000	0.0015	0.0015
CMJV1	0.611*	0.269	0.0165	0.0000	0.0065	0.0015
CMRV2	0.611*	0.33	0.0165	0.0000	0.007	0.0015
CMTRV2	0.611*	0.33	0.0165	0.001	0.007	0.0015
CMBPV2	0.611*	0.33	0.0165	0.001	0.007	0.0015
CMJV2	0.611*	0.5895*	0.0165	0.001	0.007	0.0015
VRV	0.611*	0.5895*	0.0165	0.01	0.007	0.0015
VTRV	0.611*	0.5895*	0.0435	0.01	0.07	0.0015
VBPV	0.611*	0.607*	0.614*	0.01	0.1585	0.0015
VJV	0.611*	0.7545*	0.614*	0.01	0.1585	0.0015
MRV	0.611*	0.7545*	0.614*	0.01	0.203	0.0015
MTRV	0.611*	0.8915*	0.614*	0.111	0.29	0.2615
MBPV	0.611*	0.8915*	0.614*	0.111	0.29	0.2615
MJV	0.611*	0.906*	0.614*	0.4125	0.569*	0.2615
MVRV	0.885*	0.906*	0.614*	0.4125	0.569*	0.2615
MVTRV	0.885*	0.9615*	0.614*	0.687*	0.569*	0.2615
MVBPV	0.885*	0.9615*	0.7615*	0.687*	0.569*	0.8445*
MVJV	1*	1*	1*	1*	1*	1*
rolling window size = 72						
AR	0.0000	0.0000	0.0000	0.002	0.0000	0.0000
MMF	0.0000	0.0000	0.0000	0.002	0.0000	0.0000
RV	0.0000	0.0000	0.0000	0.002	0.0000	0.0000
TRV	0.0000	0.0015	0.0000	0.002	0.011	0.0000
BPV	0.0000	0.0015	0.0005	0.002	0.011	0.0000
JV	0.0000	0.003	0.0005	0.002	0.011	0.0000
CMRV1	0.0000	0.0045	0.0005	0.002	0.011	0.0005
CMTRV1	0.0000	0.046	0.0005	0.002	0.011	0.0005
CMBPV1	0.0000	0.046	0.0005	0.002	0.011	0.0005
CMJV1	0.001	0.046	0.0005	0.002	0.011	0.01
CMRV2	0.061	0.046	0.0005	0.002	0.011	0.01
CMTRV2	0.061	0.046	0.0005	0.002	0.0245	0.01
CMBPV2	0.061	0.046	0.0005	0.002	0.0815	0.024
CMJV2	0.061	0.046	0.0005	0.2165	0.0815	0.024
VRV	0.061	0.046	0.0005	0.315	0.0815	0.16
VTRV	0.061	0.2785	0.0005	0.315	0.0815	0.16
VBPV	0.061	0.2785	0.0005	0.315	0.33	0.16
VJV	0.061	0.2785	0.0035	0.315	0.33	0.16
MRV	0.061	0.2785	0.0035	0.315	0.33	0.16
MTRV	0.061	0.2785	0.0035	0.8605*	0.6605*	0.9005*
MBPV	0.061	0.2785	0.0035	0.8605*	0.709*	0.9005*
MJV	0.061	0.2785	0.0035	0.8605*	0.709*	0.904*
MVRV	0.061	0.2785	0.9555*	0.8605*	0.803*	0.914*
MVTRV	0.061	0.2785	0.9555*	0.8605*	0.803*	0.914*
MVBPV	0.061	0.2785	0.9555*	0.8605*	0.9155*	0.914*
MVJV	1*	1*	1*	1*	1*	1*

[1] See notes to Table B1A.

Table B6A: Model Confidence Set Results for Housing Starts (Sample 1: 2006:1 - 2018:12)[1]

Model	Forecast horizon					
	1-month	2-month	3-month	4-month	5-month	6-month
rolling window size = 36						
AR	0.0015	0.007	0.013	0.0135	0.0645	0.0925
MMF	0.0015	0.007	0.013	0.0135	0.0645	0.0925
RV	0.0055	0.0085	0.1895	0.0135	0.0645	0.0925
TRV	0.0055	0.015	0.2065	0.3065	0.0645	0.0925
BPV	0.0055	0.015	0.2065	0.3065	0.0645	0.0925
JV	0.0055	0.015	0.2065	0.3065	0.0645	0.0925
CMRV1	0.0165	0.0375	0.2065	0.3065	0.0645	0.0925
CMTRV1	0.0165	0.0655	0.2065	0.3065	0.0645	0.0925
CMBPV1	0.0165	0.0655	0.305	0.3065	0.0645	0.0925
CMJV1	0.02	0.0655	0.305	0.3065	0.0645	0.0925
CMRV2	0.0215	0.1235	0.305	0.3065	0.0645	0.0925
CMTRV2	0.026	0.1235	0.305	0.3065	0.0645	0.0925
CMBPV2	0.072	0.1695	0.305	0.3065	0.0645	0.0925
CMJV2	0.072	0.1695	0.305	0.3065	0.0645	0.0925
VRV	0.072	0.1695	0.305	0.3065	0.0645	0.0925
VTRV	0.072	0.1695	0.305	0.3065	0.0645	0.2935
VBPV	0.072	0.1695	0.305	0.3065	0.2655	0.2935
VJV	0.072	0.1695	0.305	0.3065	0.2655	0.2935
MRV	0.072	0.1695	0.305	0.3065	0.2655	0.2935
MTRV	0.072	0.1695	0.305	0.3065	0.2655	0.2935
MBPV	0.072	0.1695	0.305	0.3065	0.2655	0.2935
MJV	0.072	0.1695	0.305	0.3065	0.2655	0.2935
MVRV	0.072	0.1695	0.386	0.3065	0.4985	0.2935
MVTRV	0.072	0.1695	0.386	0.3065	0.4985	0.2935
MVBPV	0.072	0.1695	0.386	0.3065	0.4985	0.2935
MVJV	1*	1*	1*	1*	1*	1*
rolling window size = 72						
AR	0.0000	0.0000	0.0000	0.0005	0.002	0.0055
MMF	0.0000	0.0000	0.0000	0.0005	0.002	0.0055
RV	0.0000	0.0000	0.0000	0.0005	0.002	0.0055
TRV	0.0000	0.0000	0.0000	0.0005	0.002	0.0055
BPV	0.0000	0.0000	0.0000	0.0005	0.002	0.0055
JV	0.0000	0.0000	0.0000	0.0015	0.002	0.0055
CMRV1	0.0000	0.0000	0.0000	0.0015	0.002	0.0055
CMTRV1	0.0000	0.0000	0.0000	0.0015	0.002	0.0055
CMBPV1	0.0000	0.0000	0.0000	0.0015	0.002	0.0055
CMJV1	0.0000	0.0000	0.0000	0.0015	0.002	0.0055
CMRV2	0.0000	0.0000	0.0000	0.0015	0.002	0.0055
CMTRV2	0.0000	0.0000	0.0000	0.0015	0.002	0.0055
CMBPV2	0.0000	0.0000	0.0000	0.0015	0.002	0.0055
CMJV2	0.0000	0.0000	0.0000	0.0015	0.002	0.0055
VRV	0.0000	0.0000	0.0000	0.0015	0.002	0.0055
VTRV	0.0000	0.0000	0.0000	0.0035	0.002	0.0095
VBPV	0.0000	0.0000	0.0025	0.0035	0.002	0.0115
VJV	0.0000	0.0000	0.0025	0.0035	0.0025	0.0115
MRV	0.0000	0.0000	0.0025	0.0035	0.0025	0.0525
MTRV	0.0000	0.0000	0.009	0.0035	0.01	0.0525
MBPV	0.0000	0.0000	0.009	0.0035	0.01	0.0525
MJV	0.0000	0.0095	0.009	0.0035	0.01	0.0525
MVRV	0.002	0.0105	0.009	0.0895	0.01	0.0525
MVTRV	0.002	0.0105	0.073	0.0895	0.0405	0.0525
MVBPV	0.002	0.0105	0.073	0.0895	0.0405	0.0525
MVJV	1*	1*	1*	1*	1*	1*

[1] See notes to Table B1A.

Table B6B: Model Confidence Set Results for Housing Starts (Sample 2: 2009:1 - 2018:12)[1]

Model	Forecast horizon					
	1-month	2-month	3-month	4-month	5-month	6-month
rolling window size = 36						
AR	0.0000	0.0000	0.0000	0.0000	0.0000	0.001
MMF	0.0000	0.0000	0.0000	0.0000	0.0000	0.001
RV	0.0000	0.0000	0.0000	0.0000	0.0000	0.001
TRV	0.0000	0.0000	0.0000	0.0000	0.0000	0.001
BPV	0.0000	0.0000	0.0000	0.0000	0.0000	0.001
JV	0.0000	0.0000	0.0000	0.0000	0.0000	0.001
CMRV1	0.0000	0.0000	0.0000	0.0000	0.0000	0.001
CMTRV1	0.0000	0.0000	0.0000	0.0000	0.0005	0.001
CMBPV1	0.0000	0.0000	0.0000	0.0000	0.011	0.0035
CMJV1	0.0000	0.0000	0.0015	0.0000	0.011	0.0035
CMRV2	0.0000	0.0000	0.0015	0.0000	0.011	0.004
CMTRV2	0.0000	0.0000	0.0015	0.0000	0.011	0.0165
CMBPV2	0.0000	0.0000	0.0015	0.0000	0.011	0.0165
CMJV2	0.0000	0.001	0.0015	0.001	0.011	0.0165
VRV	0.0000	0.001	0.0015	0.001	0.011	0.0165
VTRV	0.0000	0.001	0.0015	0.001	0.011	0.0165
VBPV	0.0000	0.001	0.0015	0.001	0.011	0.0165
VJV	0.0000	0.001	0.0015	0.021	0.011	0.0165
MRV	0.036	0.001	0.0015	0.021	0.011	0.2465
MTRV	0.036	0.001	0.0015	0.021	0.011	0.2465
MBPV	0.036	0.001	0.0015	0.021	0.011	0.2465
MJV	0.036	0.001	0.0105	0.021	0.011	0.2465
MVRV	0.036	0.001	0.0105	0.13	0.011	0.2465
MVTRV	0.036	0.001	0.0105	0.254	0.376	0.2465
MVBPV	0.036	0.0025	0.0105	0.254	0.376	0.2595
MVJV	1^*	1^*	1^*	1^*	1^*	1^*
rolling window size = 72						
AR	0.0000	0.0000	0.0000	0.0000	0.005	0.0005
MMF	0.0000	0.0000	0.0000	0.0000	0.005	0.0005
RV	0.0000	0.0000	0.0000	0.0000	0.005	0.0005
TRV	0.0000	0.0000	0.0000	0.0000	0.005	0.0005
BPV	0.0000	0.0000	0.0000	0.0000	0.005	0.0005
JV	0.0000	0.0000	0.0000	0.0000	0.005	0.0005
CMRV1	0.0000	0.0000	0.0000	0.0000	0.005	0.0005
CMTRV1	0.0000	0.0000	0.0000	0.0000	0.005	0.0005
CMBPV1	0.0000	0.0000	0.0000	0.0000	0.005	0.0005
CMJV1	0.0000	0.0000	0.0000	0.0000	0.005	0.001
CMRV2	0.0000	0.0000	0.0000	0.0000	0.022	0.001
CMTRV2	0.0000	0.0000	0.0000	0.0000	0.022	0.001
CMBPV2	0.0000	0.0000	0.0000	0.005	0.022	0.001
CMJV2	0.0000	0.0000	0.0000	0.005	0.022	0.001
VRV	0.0000	0.0000	0.0000	0.005	0.0285	0.001
VTRV	0.0000	0.0000	0.0375	0.005	0.2685	0.001
VBPV	0.0000	0.0000	0.0375	0.005	0.31	0.001
VJV	0.0000	0.0000	0.0375	0.005	0.467	0.001
MRV	0.0000	0.0000	0.0375	0.005	0.634^*	0.001
MTRV	0.0000	0.0000	0.098	0.005	0.634^*	0.01
MBPV	0.0000	0.0000	0.098	0.005	0.634^*	0.499
MJV	0.0000	0.0000	0.098	0.005	0.634^*	0.6695^*
MVRV	0.0565	0.0000	0.098	0.005	0.634^*	0.6695^*
MVTRV	0.0565	0.229	0.957^*	0.005	0.634^*	0.6695^*
MVBPV	0.0565	0.229	0.957^*	0.005	0.902^*	0.9475^*
MVJV	1^*	1^*	1^*	1^*	1^*	1^*

[1] See notes to Table B1A.

Table RR1: Ex-Ante Relative MSFEs of DLM vs Corresponding Linear Model for Housing Starts[1]

Forecasting Model	Forecast horizon					
	1-month	2-month	3-month	4-month	5-month	6-month
rolling window size = 36						
MAC	1.53	1.38	1.17	0.93	0.89	0.78
RV	1.26	2.86	4.45	4.76	5.14	4.24
BPV	1.04	2.40	3.85	4.34	4.76	4.05
TRV	1.19	2.73	4.23	4.53	4.92	4.07
JV	1.84	1.69	1.61	1.49	1.71	1.70
CMRV1	1.70	2.02	2.16	1.73	1.62	1.26
CMBPV1	3.77	3.16	2.73	1.97	1.65	1.43
CMTRV1	1.67	1.97	2.09	1.66	1.55	1.18
CMJV1	1.38	1.39	1.36	1.06	0.97	0.79
CMRV2	4.57	3.84	3.29	2.32	1.90	1.63
CMBPV2	3.94	3.29	2.87	1.98	1.65	1.55
CMTRV2	3.34	2.70	2.30	1.66	1.50	1.41
CMJV2	1.34	2.31	3.65	3.50	3.18	2.51

[1] This table reports mean square forecast errors (MSFEs) fro predictions made using a dynamic linear model (DLM) relative to those made using our linear model. The factor augmented forecasting models are given in the first column are defined in Table 2 of the main paper. The sample period used in the forecasting experiment is 2006:1-2018:12. The DLM is estimated using a rolling window size of 72 months.

Table RR2A: Ex-Ante Relative MSFEs for Housing Starts (Sample 1: 2006:1 - 2018:12)[1]

Corresponding Model	Forecast horizon							
	1-month	2-month	3-month	4-month	5-month	6-month	12-month	24-month
rolling window size = 36								
AR	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000
MMF	1.173***	1.092***	1.104***	1.027	0.981***	0.938***	1.010	1.199
RV	0.930***	0.897***	0.999***	1.006	1.037	1.038***	1.068	0.996
TRV	0.930***	0.902***	1.015	1.013	1.043	1.040***	1.066	1.010
BPV	0.931***	0.897***	1.012	1.002**	1.036	1.035***	1.070	1.001
JV	2.277***	2.178***	2.010***	1.726***	1.747***	1.602***	1.861	4.349
CMRV1	0.999***	1.096***	1.161***	1.028***	1.004*	0.968***	1.118	1.061
CMTRV1	1.019	1.003*	0.998***	1.004*	1.058***	1.047	1.020	1.088
CMBPV1	0.997***	1.096**	1.158***	1.033***	1.032***	0.967***	1.129	1.065
CMJV1	1.011	1.133***	1.078***	1.022	0.979***	0.952***	1.073	1.096
CMRV2	0.992***	0.974***	1.011	0.982***	1.079***	1.031	0.997	1.111
CMTRV2	0.991***	0.989***	1.055***	1.004*	1.062***	1.044	0.997	1.081
CMBPV2	1.007	1.020	1.016	0.992***	1.076***	1.059	1.011	1.106
CMJV2	1.014	0.991***	1.048***	1.031***	0.962***	0.963***	0.995	1.083
VRV	1.040***	1.022	1.052	1.041***	1.037***	0.983***	1.142	1.054
VTRV	1.037***	1.021	1.053	1.041***	1.038***	0.985***	1.145	1.052
VBPV	1.043***	1.023	1.058	1.049***	1.043***	0.982***	1.179	1.056
VJV	1.044*	0.952***	0.999***	0.998***	0.962***	0.964***	1.057	1.087
MRV	1.152***	1.090***	1.165***	1.321***	1.194***	1.208***	1.206	1.216
MTRV	1.151***	1.091***	1.181***	1.336***	1.199***	1.218***	1.200	1.259
MBPV	1.146***	1.075***	1.160***	1.326***	1.194***	1.193***	1.203	1.206
MJV	1.253***	1.254***	1.096	1.174***	1.252***	1.286***	1.139	1.431
MVRV	1.272***	1.197***	1.116***	1.129***	1.005*	1.037	1.169	1.353
MVTRV	1.272***	1.200***	1.115***	1.132***	1.016	1.040	1.169	1.350
MVBPV	1.272***	1.196***	1.119***	1.129***	1.011	1.032	1.166	1.327
MVJV	1.253***	1.156***	1.103***	1.016	1.029	1.085	1.141	1.209
rolling window size = 72								
AR	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000
MMF	0.925	0.851	0.841	0.700	0.623	0.591	0.585	0.535
RV	0.849	0.780	0.711	0.569	0.484	0.479	0.459	0.540
TRV	0.852	0.798	0.724	0.561	0.477	0.463	0.434	0.487
BPV	0.855	0.779	0.710	0.567	0.482	0.477	0.457	0.540
JV	1.081	1.061	1.034	0.796	0.630	0.559	0.387	0.573
CMRV1	0.920	0.882	0.841	0.760	0.709	0.741	0.944	0.963
CMTRV1	0.889	0.883	0.884	0.832	0.872	0.881	0.821	0.958
CMBPV1	0.916	0.877	0.833	0.754	0.704	0.749	0.937	0.970
CMJV1	0.906	0.892	0.880	0.812	0.756	0.792	0.950	0.985
CMRV2	0.910	0.922	0.919	0.853	0.875	0.857	0.723	0.941
CMTRV2	0.873	0.868	0.856	0.834	0.875	0.812	0.784	0.882
CMBPV2	0.866	0.877	0.899	0.866	0.872	0.832	0.753	0.973
CMJV2	0.922	0.915	0.911	0.805	0.721	0.770	0.799	0.924
VRV	0.922	0.836	0.766	0.753	0.642	0.664	0.767	0.861
VTRV	0.917	0.837	0.764	0.753	0.629	0.660	0.752	0.842
VBPV	0.923	0.837	0.764	0.754	0.637	0.667	0.793	0.865
VJV	0.938	0.863	0.883	0.794	0.698	0.723	0.811	0.888
MRV	0.886	0.806	0.785	0.660	0.607	0.615	0.714	0.541
MTRV	0.887	0.813	0.789	0.668	0.607	0.616	0.729	0.539
MBPV	0.884	0.804	0.782	0.655	0.605	0.610	0.712	0.541
MJV	1.011	0.894	0.801	0.712	0.631	0.658	1.118	0.647
MVRV	0.930	0.823	0.838	0.706	0.627	0.639	0.636	0.550
MVTRV	0.928	0.825	0.842	0.706	0.627	0.633	0.638	0.549
MVBPV	0.930	0.820	0.834	0.699	0.626	0.640	0.636	0.550
MVJV	0.920	0.880	0.839	0.727	0.629	0.632	0.650	0.544

[1] This table displays mean square forecast errors (MSFEs) of the listed models, relative to the AR benchmark model. The first column indicates the forecasting model. The sample period used in the forecasting experiment is 2006:1-2018:12.

Table RR2B: Ex-Ante Relative MSFEs for Housing Starts (Sample 2: 2009:1 - 2018:12)[1]

Model	Forecast horizon							
	1-month	2-month	3-month	4-month	5-month	6-month	12-month	24-month
rolling window size = 36								
AR	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000
MMF	1.231	1.114	1.166	0.970	0.967	0.969	1.477	1.196
RV	0.954	0.842	0.944	0.924	1.193	1.064	1.167	0.960
TRV	0.950	0.846	0.981	0.938	1.205	1.061	1.171	0.951
BPV	0.958	0.847	0.952	0.910	1.187	1.050	1.172	0.978
JV	2.977	3.567	3.028	1.923	2.313	2.173	2.228	2.308
CMRV1	1.121	1.191	1.304	1.056	1.147	0.924	1.077	1.074
CMTRV1	1.030	0.993	0.927	1.074	1.050	0.990	1.180	1.045
CMBPV1	1.122	1.181	1.296	1.074	1.149	0.920	1.072	1.073
CMJV1	1.121	1.267	1.148	0.988	1.083	0.936	1.148	1.043
CMRV2	0.958	0.995	0.944	1.023	1.114	0.986	1.213	1.035
CMTRV2	0.994	0.984	1.081	1.052	1.061	1.009	1.145	1.047
CMBPV2	1.003	0.987	0.970	1.030	1.098	0.988	1.275	1.027
CMJV2	1.058	0.969	1.189	1.008	0.997	0.940	1.074	0.966
VRV	1.117	1.145	1.262	1.023	1.047	1.007	1.187	1.108
VTRV	1.107	1.136	1.259	1.021	1.045	1.008	1.241	1.105
VBPV	1.125	1.153	1.279	1.032	1.061	1.012	1.180	1.111
VJV	1.137	0.818	0.989	1.058	0.966	0.972	1.100	1.042
MRV	1.231	1.123	1.259	1.479	1.474	1.637	1.771	1.786
MTRV	1.232	1.121	1.316	1.512	1.476	1.652	1.764	1.972
MBPV	1.231	1.099	1.243	1.489	1.473	1.588	1.766	1.748
MJV	1.127	0.993	1.048	1.024	1.212	1.513	1.605	2.970
MVRV	1.383	1.393	1.226	1.219	1.105	1.155	1.743	1.631
MVTRV	1.379	1.399	1.224	1.224	1.107	1.156	1.762	1.606
MVBPV	1.389	1.400	1.225	1.217	1.102	1.148	1.736	1.630
MVJV	1.235	1.245	1.296	1.028	1.095	1.345	1.688	1.200
rolling window size = 72								
AR	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000
MMF	1.064	1.043	1.030	1.020	1.050	0.949	1.918	1.128
RV	0.989	0.963	0.998	1.001	0.994	0.971	1.060	1.131
TRV	0.985	0.970	1.001	0.974	0.997	0.972	1.057	1.147
BPV	1.014	0.958	0.994	0.996	0.992	0.971	1.056	1.123
JV	1.420	1.447	1.356	1.239	1.192	1.117	2.078	1.229
CMRV1	1.037	0.950	0.978	0.965	0.958	0.980	1.057	1.140
CMTRV1	1.033	0.927	1.022	0.951	0.975	1.033	0.987	1.085
CMBPV1	1.043	0.952	0.980	0.963	0.956	0.962	1.058	1.142
CMJV1	0.938	0.958	1.009	1.049	0.991	1.079	0.977	1.208
CMRV2	0.989	0.994	1.028	0.999	1.004	1.048	1.022	1.094
CMTRV2	0.971	0.974	1.036	0.979	1.004	0.979	0.972	0.818
CMBPV2	0.988	0.947	1.038	0.963	0.984	1.028	1.017	1.438
CMJV2	0.955	0.943	1.024	1.036	0.983	1.083	1.026	1.207
VRV	0.999	1.008	0.956	1.017	0.949	0.984	1.132	1.251
VTRV	0.997	1.002	0.958	1.021	0.952	1.001	1.123	1.265
VBPV	1.002	1.014	0.955	1.016	0.947	0.993	1.133	1.247
VJV	1.019	0.961	1.026	0.998	1.006	1.032	1.040	1.210
MRV	1.106	1.027	1.049	1.053	1.087	0.982	2.300	1.114
MTRV	1.105	1.032	1.053	1.056	1.091	0.987	2.306	1.120
MBPV	1.106	1.022	1.046	1.049	1.085	0.981	2.300	1.125
MJV	1.267	1.332	1.188	1.222	1.141	1.144	2.791	1.035
MVRV	1.147	0.991	1.040	0.984	1.060	0.986	2.223	1.230
MVTRV	1.141	0.990	1.042	0.985	1.058	1.009	2.214	1.225
MVBPV	1.153	0.993	1.040	0.984	1.057	0.988	2.223	1.236
MVJV	1.008	1.087	0.976	1.026	1.008	0.983	2.141	1.124

[1] The sample period used in the forecasting experiment is 2006:1 to 2018:12.

Table RR3A: MSFE-Best Models (Sample 1: 2006:1 - 2018:12)

Targets	Forecast horizon							
	1-month	2-month	3-month	4-month	5-month	6-month	12-month	24-month
				rolling window size = 36				
HS	RV	RV	CMTRV1	CMRV2	CMJV2	MAC	CMJV2	MAC
	0.930***	0.897***	0.998***	0.982***	0.962***	0.938***	0.995	1.199
IP	CMTRV1	MVJV	MVRV	MAC	CMJV2	TRV	MAC	VRV
	0.987***	0.939***	0.952***	1.010	0.973***	0.997***	0.879	0.983
PAY	CMRV2	VBPV	MAC	CMTRV1	MAC	VJV	VTRV	RV
	0.912***	1.024	0.978***	0.926***	0.956***	1.010	1.017	0.934
CPI	VJV	VJV	CMJV2	CMJV2	CMRV2	VBPV	VRV	CMBPV
	1.025***	0.998***	0.995***	0.972***	0.904***	1.024	1.010	0.975
PCE	CMRV2	CMBPV1	VJV	CMJV2	VJV	CMJV2	MAC	MVTRV
	1.008	1.000***	1.020	0.986***	0.943***	0.973***	1.015	0.919
SI	MVRV	CMJV2	VRV	MAC	CMTRV2	CMJV2	CMJV2	CMTRV
	1.006	0.998***	1.028***	1.022	1.012	0.965***	0.970	0.990
				rolling window size = 72				
HS	RV	BPV	BPV	TRV	TRV	TRV	JV	TRV
	0.849***	0.779***	0.710***	0.561***	0.477***	0.463***	0.387	0.487
IP	MAC	CMRV2	MVBPV	MVRV	MVRV	MVRV	MAC	CMJV
	0.954***	0.985***	0.890***	0.924***	0.956***	0.912***	0.838	0.954
PAY	MAC	VTRV	VJV	VTRV	VBPV	RV	TRV	MAC
	0.832***	0.931***	0.837***	0.795***	0.788***	0.678***	0.639	0.991
CPI	CMRV1	CMTRV2	CMBPV2	CMRV1	CMRV2	CMJV2	VJV	CMBPV
	0.980***	1.000***	1.007	0.993***	0.949***	1.001**	0.941	0.902
PCE	CMBPV2	CMTRV2	MVRV	MVTRV	MVBPV	MAC	CMBPV	CMRV
	0.977***	1.008	0.991***	1.025	0.948***	0.952***	0.974	0.996
SI	CMBPV1	CMJV2	CMBPV2	CMJV1	CMTRV2	CMTRV1	CMTRV2	VBPV
	0.946***	1.001	0.991***	1.008	0.984***	0.985***	1.017	1.005

[1] See notes to Table RR1 and Table 5A in the main paper.

Table RR3B: MSFE-Best Models (Sample 2: 2009:1 - 2018:12)

Targets	Forecast horizon							
	1-month	2-month	3-month	4-month	5-month	6-month	12-month	24-month
				rolling window size = 36				
HS	TRV	VJV	CMTRV1	BPV	VJV	CMBPV1	CMBPV	TRV
	0.950***	0.818***	0.927***	0.910***	0.966***	0.920***	1.072	0.951
IP	CMTRV1	MVJV	MVRV	CMRV2	CMJV2	TRV	MVBPV	VRV
	0.931***	0.876***	0.956***	1.018	0.975***	0.975***	0.715	0.971
PAY	CMRV2	VJV	CMRV1	CMTRV1	MAC	CMJV2	CMJV2	RV
	0.828***	1.04	0.996***	0.910***	0.993***	0.994***	0.987	0.909
CPI	CMJV2	VJV	CMTRV2	CMJV1	CMRV1	VBPV	VBPV	MVBPV
	1.015***	0.988***	0.986***	0.946***	0.954***	1.043	1.011	0.887
PCE	CMRV2	CMRV2	CMJV2	CMJV2	VRV	CMTRV1	CMTRV	MVTRV
	0.992***	0.977***	1.011	1.016	0.992***	0.962***	0.997	0.884
SI	CMJV2	CMJV2	VJV	CMJV2	CMTRV2	CMJV2	CMTRV2	CMBPV2
	1.036	1.013***	1.012	1.028***	0.993***	0.976***	0.808	0.993
				rolling window size = 72				
HS	CMJV1	CMTRV1	VBPV	CMTRV1	VBPV	MAC	CMTRV2	CMTRV2
	0.938***	0.927***	0.955***	0.951***	0.947***	0.949***	0.972	0.818
IP	MAC	TRV	MVBPV	VRV	CMJV1	MVJV	MAC	MAC
	0.950***	0.962***	0.972***	0.963***	0.963***	0.938***	0.760	0.983
PAY	CMTRV2	CMJV2	CMRV2	CMJV2	MRV	VTRV	CMTRV2	CMRV
	0.864***	1.048*	0.975***	0.957***	0.902***	0.953***	0.995	0.942
CPI	CMRV1	CMTRV2	CMBPV2	CMRV2	CMRV2	TRV	CMBPV2	CMBPV
	0.970***	0.993***	0.985***	0.983***	0.946***	0.995***	0.988	0.915
PCE	MVJV	CMTRV2	MVRV	MVBPV	MVBPV	MAC	CMJV2	CMBPV
	0.979***	0.994***	0.934***	0.962***	0.894***	0.858***	0.956	0.985
SI	CMBPV1	CMJV2	CMBPV2	MAC	CMRV2	CMTRV1	CMTRV2	VBPV
	0.853***	1.000***	0.982***	0.948***	0.987***	0.943***	0.970	1.014

[1] See notes to Table RR1 and Table 5A in the main paper.

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