Forecasting models for the Chinese macroeconomy: The simpler the better?

Online Supplement

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Abstract

This document contains tables and plots that were not included in the published version of the paper.

JEL Codes: C52, C53, C55.

Key Words: Forecasting, China, Inflation, Real Activity, Industrial Production, Electricity Production.

1 Introduction

This document has 4 sections. In Section 2, parameter estimates of the models computed using all the available observations are presented. In Section 3, plots of rolling 24 month means of the mean squared prediction errors (MSPEs) are presented for each model at each forecasting horizon. Section 4 contains plots of the differences of the MSPEs of each forecasting model and the MSPE of the relevant benchmark forecast. Lastly, in Section 5, we present tables of the relative means squared errors, the p-values for the conditional test of Giacomini and White (2006), and the p-values for the unconditional Giacomini and White (2006) test for each variable and forecast computed using only forecasts from January 2010 and later.

PDF bookmarks have been included for each table and plot to make it easier to navigate the document (in compatible PDF viewers).

2 Within-sample estimates

Table 1: AR(1) Estimates: Levels

	Dependent variable:			
	CPI_t	PPI_t	IP_t	EP_t
Lagged dependent variable	0.402***	0.978***	0.953***	0.162***
	(0.056)	(0.013)	(0.019)	(0.061)
Constant	0.085***	2.215*	5.179**	1.489***
	(0.021)	(1.298)	(2.153)	(0.378)
Observations	266	266	266	266
R^2	0.161	0.957	0.903	0.026
Adjusted R^2	0.158	0.957	0.902	0.022
Residual Std. Error (df = 264)	0.312	1.087	1.292	5.905
F Statistic (df = 1; 264)	50.724***	5,851.493***	2,443.842***	7.095***
Note:				*p<0.1; **p<0.05; ***p<0.01

Table 2: AR(1) Estimates: Differences

	Dependent variable:			
	ΔCPI_t	ΔPPI_t	ΔIP_t	ΔEP_t
Lagged dependent variable	-0.327^{***}	0.743^{***}	0.069	-0.352^{***}
	(0.058)	(0.042)	(0.062)	(0.058)
Constant	-0.0004	-0.006	-0.027	0.014
	(0.022)	(0.045)	(0.080)	(0.446)
Observations	265	265	265	265
R^2	0.107	0.543	0.005	0.124
Adjusted R^2	0.103	0.541	0.001	0.120
Residual Std. Error (df = 263)	0.353	0.740	1.305	7.264
F Statistic (df = 1; 263)	31.460^{***}	312.646^{***}	1.258	37.168^{***}
Note:				*p<0.1; **p<0.05; ***p<0.01

Table 3: Direct AR(1) Estimates: Levels: Horizon = 1

	Dependent variable:			
	CPI_{t+1}	PPI_{t+1}	IP_{t+1}	EP_{t+1}
Contemporaneous dependent variable	0.402^{***}	0.978^{***}	0.953^{***}	0.162^{***}
	(0.056)	(0.013)	(0.019)	(0.061)
Constant	0.085^{***}	2.215^{*}	5.179^{**}	1.489^{***}
	(0.021)	(1.298)	(2.153)	(0.378)
Observations	266	266	266	266
R^2	0.161	0.957	0.903	0.026
Adjusted R^2	0.158	0.957	0.902	0.022
Residual Std. Error (df = 264)	0.312	1.087	1.292	5.905
F Statistic (df = 1; 264)	50.724^{***}	$5{,}851.493^{***}$	$2{,}443.842^{***}$	7.095^{***}
Note:				*p<0.1; **p<0.05; ***p<0.01

Table 4: Direct AR(1) Estimates: Levels: Horizon = 3

	Dependent variable:			
	CPI_{t+3}	PPI_{t+3}	IP_{t+3}	EP_{t+3}
Contemporaneous dependent variable	0.186***	0.853***	0.870***	−0.003
	(0.061)	(0.032)	(0.032)	(0.062)
Constant	0.115***	14.911***	14.435***	1.785***
	(0.022)	(3.281)	(3.548)	(0.385)
Observations	264	264	264	264
R^2	0.034	0.727	0.741	0.00001
Adjusted R^2	0.031	0.726	0.740	−0.004
Residual Std. Error (df = 262)	0.336	2.745	2.111	6.006
F Statistic (df = 1; 262)	9.337***	696.964***	749.863***	0.002
Note:				*p<0.1; **p<0.05; ***p<0.01

Table 5: Direct AR(1) Estimates: Levels: Horizon = 6

	Dependent variable:			
	CPI_{t+6}	PPI_{t+6}	IP_{t+6}	EP_{t+6}
Contemporaneous dependent variable	0.250***	0.593***	0.787***	0.003
	(0.060)	(0.050)	(0.040)	(0.062)
Constant	0.106***	41.356***	23.683***	1.783***
	(0.022)	(5.109)	(4.521)	(0.389)
Observations	261	261	261	261
R^2	0.063	0.349	0.593	0.00001
Adjusted R^2	0.059	0.346	0.592	−0.004
Residual Std. Error (df = 259)	0.331	4.263	2.659	6.025
F Statistic (df = 1; 259)	17.331***	138.550***	378.120***	0.002
Note:				*p<0.1; **p<0.05; ***p<0.01

Table 6: Direct AR(1) Estimates: Levels: Horizon = 9

	Dependent variable:			
	CPI_{t+9}	PPI_{t+9}	IP_{t+9}	EP_{t+9}
Contemporaneous dependent variable	0.124**	0.328***	0.699***	−0.030
	(0.062)	(0.060)	(0.047)	(0.062)
Constant	0.125***	68.253***	33.413***	1.859***
	(0.023)	(6.037)	(5.292)	(0.392)
Observations	258	258	258	258
R^2	0.016	0.106	0.460	0.001
Adjusted R^2	0.012	0.102	0.458	−0.003
Residual Std. Error (df = 256)	0.341	5.022	3.081	6.050
F Statistic (df = 1; 256)	4.039**	30.289***	218.253***	0.237
Note:				*p<0.1; **p<0.05; ***p<0.01

Table 7: Direct AR(1) Estimates: Levels: Horizon = 12

	Dependent variable:			
	CPI_{t+12}	PPI_{t+12}	IP_{t+12}	EP_{t+12}
Contemporaneous dependent variable	−0.101	0.093	0.627***	0.271***
	(0.062)	(0.063)	(0.052)	(0.064)
Constant	0.159***	91.995***	41.455***	1.344***
	(0.023)	(6.404)	(5.826)	(0.385)
Observations	255	255	255	255
R^2	0.010	0.009	0.364	0.066
Adjusted R^2	0.006	0.005	0.362	0.062
Residual Std. Error (df = 253)	0.343	5.315	3.360	5.878
F Statistic (df = 1; 253)	2.631	2.188	144.976***	17.738***
Note:				*p<0.1; **p<0.05; ***p<0.01

Table 8: Direct AR(1) Estimates: Differences: Horizon = 1

	Dependent variable:			
	ΔCPI_{t+1}	ΔPPI_{t+1}	ΔIP_{t+1}	ΔEP_{t+1}
Δ contemporaneous dependent variable	-0.327^{***}	0.743^{***}	0.069	-0.352^{***}
	(0.058)	(0.042)	(0.062)	(0.058)
Constant	-0.0004	-0.006	-0.027	0.014
	(0.022)	(0.045)	(0.080)	(0.446)
Observations	265	265	265	265
R^2	0.107	0.543	0.005	0.124
Adjusted R^2	0.103	0.541	0.001	0.120
Residual Std. Error (df = 263)	0.353	0.740	1.305	7.264
F Statistic (df = 1; 263)	31.460^{***}	312.646^{***}	1.258	37.168^{***}

Note: *p<0.1; **p<0.05; ***p<0.01

Table 9: Direct AR(1) Estimates: Differences: Horizon = 3

	Dependent variable:			
	ΔCPI_{t+3}	ΔPPI_{t+3}	ΔIP_{t+3}	ΔEP_{t+3}
Δ contemporaneous dependent variable	-0.510^{***}	1.437^{***}	-0.226^{**}	-0.470^{***}
	(0.065)	(0.136)	(0.102)	(0.061)
Constant	-0.002	0.003	-0.085	0.036
	(0.024)	(0.147)	(0.133)	(0.474)
Observations	263	263	263	263
R^2	0.192	0.300	0.019	0.185
Adjusted R^2	0.189	0.297	0.015	0.182
Residual Std. Error (df = 261)	0.392	2.390	2.154	7.685
F Statistic (df = 1; 261)	61.898^{***}	111.780^{***}	4.950^{**}	59.197^{***}

Note: *p<0.1; **p<0.05; ***p<0.01

Table 10: Direct AR(1) Estimates: Differences: Horizon = 6

	Dependent variable:			
	ΔCPI_{t+6}	ΔPPI_{t+6}	ΔIP_{t+6}	ΔEP_{t+6}
Δ contemporaneous dependent variable	-0.493^{***}	1.593^{***}	-0.102	-0.497^{***}
	(0.062)	(0.254)	(0.132)	(0.060)
Constant	0.0004	0.044	-0.151	0.028
	(0.023)	(0.276)	(0.174)	(0.471)
Observations	260	260	260	260
R^2	0.195	0.133	0.002	0.207
Adjusted R^2	0.192	0.129	-0.002	0.204
Residual Std. Error (df = 258)	0.377	4.453	2.799	7.592
F Statistic (df = 1; 258)	62.609^{***}	39.420^{***}	0.600	67.472^{***}

Note: *p<0.1; **p<0.05; ***p<0.01

Table 11: Direct AR(1) Estimates: Differences: Horizon = 9

	Dependent variable:			
	ΔCPI_{t+9}	ΔPPI_{t+9}	ΔIP_{t+9}	ΔEP_{t+9}
Δ contemporaneous dependent variable	-0.500^{***}	1.449^{***}	-0.279^{*}	-0.539^{***}
	(0.069)	(0.340)	(0.155)	(0.063)
Constant	0.003	0.123	-0.207	0.006
	(0.026)	(0.371)	(0.205)	(0.478)
Observations	257	257	257	257
R^2	0.171	0.067	0.012	0.225
Adjusted R^2	0.168	0.063	0.009	0.222
Residual Std. Error (df = 255)	0.415	5.951	3.288	7.668
F Statistic (df = 1; 255)	52.769^{***}	18.181^{***}	3.223^{*}	73.878^{***}

Note: *p<0.1; **p<0.05; ***p<0.01

Table 12: Direct AR(1) Estimates: Differences: Horizon = 12

	Dependent variable:			
	ΔCPI_{t+12}	ΔPPI_{t+12}	ΔIP_{t+12}	ΔEP_{t+12}
Δ contemporaneous dependent variable	-0.632^{***}	0.700^{*}	-0.395^{**}	-0.462^{***}
	(0.075)	(0.408)	(0.173)	(0.056)
Constant	0.007	0.194	-0.266	0.047
	(0.028)	(0.447)	(0.229)	(0.403)
Observations	254	254	254	254
R^2	0.218	0.012	0.020	0.210
Adjusted R^2	0.215	0.008	0.016	0.207
Residual Std. Error (df = 252)	0.453	7.130	3.654	6.431
F Statistic (df = 1; 252)	70.272^{***}	2.939^{*}	5.223^{**}	67.117^{***}
Note:				*p<0.1; **p<0.05; ***p<0.01

Table 13: ARMA(1,1) Estimates: Levels

	Dependent variable:			
	CPI_t	PPI_t	IP_t	EP_t
Lagged dependent variable	0.872^{***}	0.963^{***}	0.931^{***}	-0.531^{**}
	(0.074)	(0.015)	(0.024)	(0.208)
ε_{t-1}	-0.654^{***}	0.714^{***}	0.192^{**}	0.718^{***}
	(0.124)	(0.041)	(0.083)	(0.174)
intercept	0.139^{***}	101.259^{***}	111.376^{***}	1.775^{***}
	(0.050)	(2.039)	(1.284)	(0.399)
Observations	267	267	267	267
Log Likelihood	-65.566	-318.478	-444.599	-848.657
σ^2	0.096	0.626	1.622	33.742
Akaike Inf. Crit.	139.131	644.955	897.198	1,705.314
Note:				*p<0.1; **p<0.05; ***p<0.01

Table 14: ARMA(1,1) Estimates: Differences

	Dependent variable:			
	ΔCPI_t	ΔPPI_t	ΔIP_t	ΔEP_t
Δ Lagged dependent variable	0.312^{***}	0.617^{***}	-0.438^{***}	0.153^{**}
	(0.065)	(0.063)	(0.158)	(0.061)
ε_{t-1}	-0.958^{***}	0.290^{***}	0.600^{***}	-1.000^{***}
	(0.024)	(0.075)	(0.135)	(0.011)
intercept	0.001	-0.020	-0.029	0.009^{*}
	(0.001)	(0.147)	(0.087)	(0.005)
Observations	266	266	266	266
Log Likelihood	-64.390	-289.836	-443.186	-850.000
σ^2	0.094	0.516	1.639	34.235
Akaike Inf. Crit.	136.781	587.672	894.372	1,708.001

Note: *p<0.1; **p<0.05; ***p<0.01

Table 15: VAR(1) Estimates: Levels

	Dependent variable:			
	CPI_t	PPI_t	IP_t	EP_t
Lagged dependent variable	0.329^{***}	0.943^{***}	0.956^{***}	0.159^{***}
	(0.058)	(0.014)	(0.021)	(0.061)
Lagged variable	0.019^{***}	0.092^{***}	0.069	-0.139
	(0.005)	(0.018)	(0.245)	(1.072)
$Rate_{t-1}$	-0.033^{**}	-0.177^{***}	-0.063	-0.254
	(0.015)	(0.052)	(0.065)	(0.287)
Constant	-1.863^{***}	-3.410^{*}	5.248^{**}	3.022^{*}
	(0.526)	(1.797)	(2.242)	(1.768)
Observations	266	266	266	266
R^2	0.213	0.961	0.903	0.029
Adjusted R^2	0.204	0.961	0.902	0.018
Residual Std. Error (df = 262)	0.304	1.033	1.294	5.918
F Statistic (df = 3; 262)	23.663^{***}	$2{,}171.346^{***}$	812.349^{***}	2.617^{*}

Note: *p<0.1; **p<0.05; ***p<0.01

Table 16: VAR(1) Estimates: Differences

	Dependent variable:			
	ΔCPI_t	ΔPPI_t	ΔIP_t	ΔEP_t
Δ Lagged dependent variable	-0.324^{***}	0.714^{***}	0.069	-0.351^{***}
	(0.058)	(0.043)	(0.062)	(0.058)
Δ Lagged variable	0.023	0.131^{***}	0.179	-0.153
	(0.017)	(0.034)	(0.216)	(1.210)
$\Delta Rate_{t-1}$	-0.012	0.155	0.149	-1.214
	(0.131)	(0.273)	(0.483)	(2.688)
Constant	-0.00000	0.002	-0.024	-0.012
	(0.022)	(0.045)	(0.081)	(0.451)
Observations	265	265	265	265
R^2	0.113	0.568	0.008	0.125
Adjusted R^2	0.103	0.563	-0.004	0.115
Residual Std. Error (df = 261)	0.353	0.723	1.308	7.289
F Statistic (df = 3; 261)	11.117^{***}	114.356^{***}	0.690	12.382^{***}
Note:				*p<0.1; **p<0.05; ***p<0.01

Table 17: Two Factor Model: Levels: Horizon = 1

	Dependent variable:			
	CPI_{t+1}	PPI_{t+1}	IP_{t+1}	EP_{t+1}
f_{1t}	-0.006^{**}	0.014	0.325^{***}	-0.091^{*}
	(0.003)	(0.043)	(0.024)	(0.049)
f_{2t}	-0.824^{***}	-4.440^{*}	-12.878^{***}	-2.976
	(0.146)	(2.383)	(1.334)	(2.720)
Constant	0.141^{***}	101.398^{***}	111.520^{***}	1.776^{***}
	(0.020)	(0.319)	(0.179)	(0.364)
Observations	266	266	266	266
R^2	0.124	0.013	0.506	0.018
Adjusted R^2	0.118	0.006	0.502	0.010
Residual Std. Error (df = 263)	0.320	5.207	2.914	5.942
F Statistic (df = 2; 263)	18.692^{***}	1.779	134.599^{***}	2.349^{*}
Note:				*p<0.1; **p<0.05; ***p<0.01

Table 18: Two Factor Model: Levels: Horizon = 3

	Dependent variable:			
	CPI_{t+3}	PPI_{t+3}	IP_{t+3}	EP_{t+3}
f_{1t}	-0.006^{**}	0.015	0.339^{***}	-0.088^{*}
	(0.003)	(0.044)	(0.025)	(0.051)
f_{2t}	-0.791^{***}	-3.150	-12.090^{***}	-2.859
	(0.150)	(2.443)	(1.397)	(2.780)
Constant	0.140^{***}	101.395^{***}	111.436^{***}	1.788^{***}
	(0.020)	(0.323)	(0.185)	(0.368)
Observations	264	264	264	264
R^2	0.113	0.007	0.479	0.016
Adjusted R^2	0.106	-0.001	0.475	0.009
Residual Std. Error (df = 261)	0.323	5.245	2.999	5.969
F Statistic (df = 2; 261)	16.644^{***}	0.864	120.145^{***}	2.135
Note:				*p<0.1; **p<0.05; ***p<0.01

Table 19: Two Factor Model: Levels: Horizon = 6

	Dependent variable:			
	CPI_{t+6}	PPI_{t+6}	IP_{t+6}	EP_{t+6}
f_{1t}	-0.005^{*}	0.010	0.361^{***}	-0.086
	(0.003)	(0.046)	(0.027)	(0.052)
f_{2t}	-0.751^{***}	-0.283	-10.675^{***}	-3.090
	(0.155)	(2.526)	(1.482)	(2.858)
Constant	0.138^{***}	101.410^{***}	111.340^{***}	1.802^{***}
	(0.020)	(0.328)	(0.193)	(0.372)
Observations	261	261	261	261
R^2	0.101	0.0002	0.448	0.016
Adjusted R^2	0.094	-0.008	0.444	0.009
Residual Std. Error (df = 258)	0.325	5.292	3.104	5.987
F Statistic (df = 2; 258)	14.465^{***}	0.029	104.628^{***}	2.142
Note:				*p<0.1; **p<0.05; ***p<0.01

Table 20: Two Factor Model: Levels: Horizon = 9

	Dependent variable:			
	CPI_{t+9}	PPI_{t+9}	IP_{t+9}	EP_{t+9}
f_{1t}	−0.004	−0.0003	0.381***	−0.085
	(0.003)	(0.048)	(0.029)	(0.055)
f_{2t}	−0.706***	3.266	−9.283***	−3.303
	(0.161)	(2.602)	(1.567)	(2.950)
Constant	0.138***	101.460***	111.239***	1.825***
	(0.021)	(0.332)	(0.200)	(0.377)
Observations	258	258	258	258
R^2	0.087	0.006	0.422	0.017
Adjusted R^2	0.079	−0.001	0.417	0.009
Residual Std. Error (df = 255)	0.329	5.304	3.195	6.013
F Statistic (df = 2; 255)	12.088***	0.809	92.988***	2.172
Note:				*p<0.1; **p<0.05; ***p<0.01

Table 21: Two Factor Model: Levels: Horizon = 12

	Dependent variable:			
	CPI_{t+12}	PPI_{t+12}	IP_{t+12}	EP_{t+12}
f_{1t}	−0.004	−0.014	0.403***	−0.079
	(0.003)	(0.050)	(0.031)	(0.057)
f_{2t}	−0.638***	6.577**	−8.079***	−4.016
	(0.167)	(2.649)	(1.621)	(3.027)
Constant	0.141***	101.537***	111.161***	1.841***
	(0.021)	(0.335)	(0.205)	(0.383)
Observations	255	255	255	255
R^2	0.070	0.024	0.413	0.018
Adjusted R^2	0.062	0.016	0.408	0.010
Residual Std. Error (df = 252)	0.333	5.283	3.234	6.037
F Statistic (df = 2; 252)	9.428***	3.114**	88.694***	2.331*
Note:				*p<0.1; **p<0.05; ***p<0.01

Table 22: Two Factor Model: Differences: Horizon = 1

	Dependent variable:			
	ΔCPI_{t+1}	ΔPPI_{t+1}	ΔIP_{t+1}	ΔEP_{t+1}
f_{d1t}	−0.137	0.223	0.145	−9.335**
	(0.219)	(0.641)	(0.768)	(4.468)
f_{d2t}	0.599	−3.722	−0.184	−52.100**
	(1.029)	(3.008)	(3.606)	(20.968)
Constant	−0.0004	0.001	−0.029	0.021
	(0.023)	(0.067)	(0.081)	(0.468)
Observations	265	265	265	265
R^2	0.003	0.006	0.0001	0.039
Adjusted R^2	−0.005	−0.001	−0.007	0.031
Residual Std. Error (df = 262)	0.374	1.094	1.311	7.624
F Statistic (df = 2; 262)	0.367	0.828	0.019	5.248***
Note:				*p<0.1; **p<0.05; ***p<0.01

Table 23: Two Factor Model: Differences: Horizon = 3

	Dependent variable:			
	ΔCPI_{t+3}	ΔPPI_{t+3}	ΔIP_{t+3}	ΔEP_{t+3}
f_{d1t}	−0.093	−0.066	−0.380	−4.534
	(0.220)	(0.644)	(0.758)	(4.563)
f_{d2t}	0.620	−3.567	−3.526	−8.955
	(1.034)	(3.029)	(3.566)	(21.468)
Constant	−0.002	0.002	−0.017	0.039
	(0.023)	(0.068)	(0.080)	(0.480)
Observations	263	263	263	263
R^2	0.002	0.005	0.005	0.004
Adjusted R^2	−0.006	−0.002	−0.003	−0.003
Residual Std. Error (df = 260)	0.375	1.098	1.293	7.781
F Statistic (df = 2; 260)	0.270	0.698	0.614	0.580
Note:				*p<0.1; **p<0.05; ***p<0.01

Table 24: Two Factor Model: Differences: Horizon = 6

	Dependent variable:			
	ΔCPI_{t+6}	ΔPPI_{t+6}	ΔIP_{t+6}	ΔEP_{t+6}
f_{d1t}	−0.042	−0.265	0.258	3.944
	(0.218)	(0.652)	(0.757)	(4.604)
f_{d2t}	2.438**	0.201	−0.899	−1.601
	(1.028)	(3.069)	(3.564)	(21.672)
Constant	−0.001	0.003	−0.024	0.014
	(0.023)	(0.069)	(0.080)	(0.484)
Observations	260	260	260	260
R^2	0.022	0.001	0.001	0.003
Adjusted R^2	0.014	−0.007	−0.007	−0.005
Residual Std. Error (df = 257)	0.371	1.106	1.284	7.810
F Statistic (df = 2; 257)	2.833*	0.085	0.090	0.370
Note:				*p<0.1; **p<0.05; ***p<0.01

Table 25: Two Factor Model: Differences: Horizon = 9

	Dependent variable:			
	ΔCPI_{t+9}	ΔPPI_{t+9}	ΔIP_{t+9}	ΔEP_{t+9}
f_{d1t}	−0.034	−0.844	0.277	2.707
	(0.222)	(0.652)	(0.751)	(4.628)
f_{d2t}	−0.336	4.552	−1.315	−20.624
	(1.058)	(3.105)	(3.574)	(22.038)
Constant	0.001	0.007	−0.011	0.021
	(0.023)	(0.069)	(0.079)	(0.489)
Observations	257	257	257	257
R^2	0.0005	0.015	0.001	0.005
Adjusted R^2	−0.007	0.007	−0.007	−0.003
Residual Std. Error (df = 254)	0.376	1.104	1.271	7.836
F Statistic (df = 2; 254)	0.063	1.910	0.136	0.608
Note:				*p<0.1; **p<0.05; ***p<0.01

Table 26: Two Factor Model: Differences: Horizon = 12

	Dependent variable:			
	ΔCPI_{t+12}	ΔPPI_{t+12}	ΔIP_{t+12}	ΔEP_{t+12}
f_{d1t}	0.111	−0.744	0.891	−1.458
	(0.224)	(0.664)	(0.754)	(4.593)
f_{d2t}	1.184	4.107	−4.043	−80.764***
	(1.070)	(3.166)	(3.593)	(21.900)
Constant	0.001	0.009	−0.027	0.016
	(0.024)	(0.070)	(0.079)	(0.483)
Observations	254	254	254	254
R^2	0.006	0.012	0.011	0.052
Adjusted R^2	−0.002	0.004	0.003	0.044
Residual Std. Error (df = 251)	0.376	1.112	1.261	7.689
F Statistic (df = 2; 251)	0.732	1.481	1.342	6.842***
Note:				*p<0.1; **p<0.05; ***p<0.01

Table 27: F(2)VAR(1) Estimates: Levels

	Dependent variable:			
	CPI_t	PPI_t	IP_t	EP_t
Lagged dependent variable	0.218***	0.921***	0.881***	0.144**
	(0.060)	(0.014)	(0.029)	(0.061)
Lagged variable	0.032***	0.186***	0.365	−0.805
	(0.007)	(0.026)	(0.261)	(1.152)
$Rate_{t-1}$	0.003	−0.067	−0.215***	−0.033
	(0.017)	(0.059)	(0.075)	(0.341)
f_{1t}	−0.015***	−0.053***	0.064***	−0.080
	(0.004)	(0.014)	(0.017)	(0.059)
f_{2t}	−0.200	2.535***	−0.905	−3.357
	(0.162)	(0.557)	(0.701)	(2.896)
Constant	−3.523***	−12.387***	14.503***	1.833
	(0.786)	(2.526)	(3.396)	(2.069)
Observations	266	266	266	266
R^2	0.275	0.965	0.908	0.041
Adjusted R^2	0.261	0.964	0.906	0.022
Residual Std. Error (df = 260)	0.293	0.990	1.265	5.905
F Statistic (df = 5; 260)	19.682***	1,424.316***	512.882***	2.214*
Note:				*p<0.1; **p<0.05; ***p<0.01

Table 28: F(2)VAR(1) Estimates: Differences

	Dependent variable:			
	ΔCPI_t	ΔPPI_t	ΔIP_t	ΔEP_t
Δ Lagged dependent variable	-0.326^{***}	0.712^{***}	0.069	-0.259^{***}
	(0.059)	(0.043)	(0.062)	(0.059)
Δ Lagged variable	0.023	0.132^{***}	0.184	0.018
	(0.017)	(0.035)	(0.217)	(1.157)
$\Delta Rate_{t-1}$	-0.037	0.148	0.216	0.287
	(0.132)	(0.275)	(0.489)	(2.582)
f_{d1t}	-0.040	0.420	0.070	-7.045^{*}
	(0.207)	(0.424)	(0.769)	(4.076)
f_{d2t}	-1.364	-0.878	3.712	101.541^{***}
	(0.979)	(2.009)	(3.631)	(20.311)
Constant	-0.001	0.002	-0.022	0.019
	(0.022)	(0.045)	(0.081)	(0.431)
Observations	265	265	265	265
R^2	0.120	0.570	0.012	0.210
Adjusted R^2	0.103	0.562	-0.007	0.195
Residual Std. Error (df = 259)	0.353	0.724	1.311	6.949
F Statistic (df = 5; 259)	7.065^{***}	68.632^{***}	0.623	13.806^{***}
Note:				*p<0.1; **p<0.05; ***p<0.01

3 24 month moving average of MSPEs

3.1 CPI

3.1.1 Forecast Horizon = 1

Figure 1: 24 month moving average of mean squared forecasting errors of 1-step-ahead Mean forecast of CPI

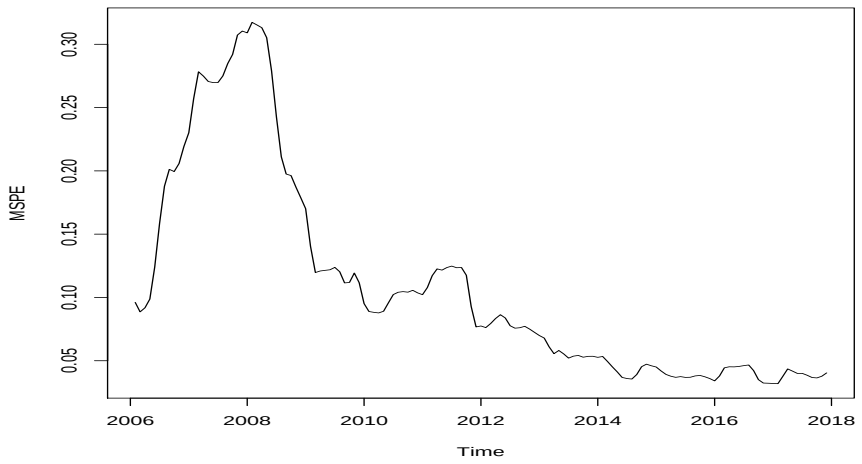


Figure 2: 24 month moving average of mean squared forecasting errors of 1-step-ahead Naive forecast of CPI

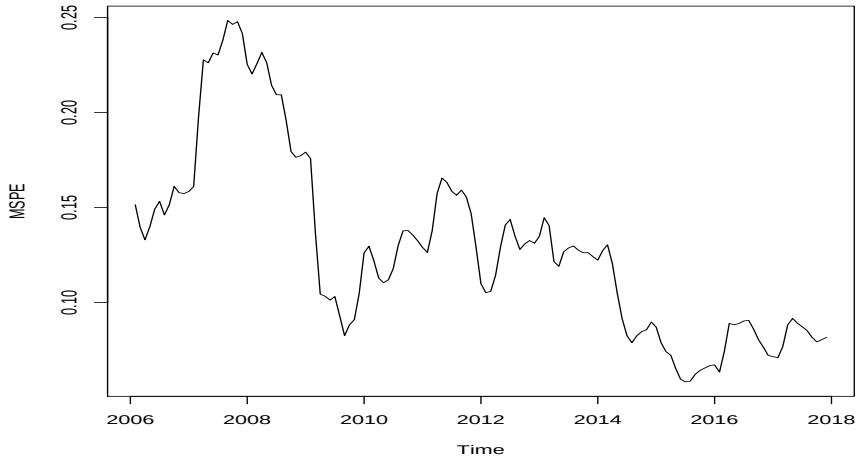


Figure 3: 24 month moving average of mean squared forecasting errors of 1-step-ahead MA forecast of CPI

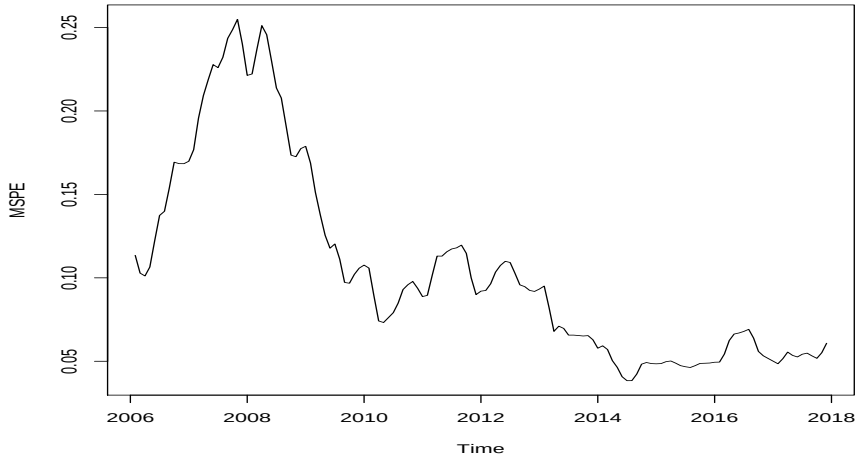


Figure 4: 24 month moving average of mean squared forecasting errors of 1-step-ahead MA-opt forecast of CPI

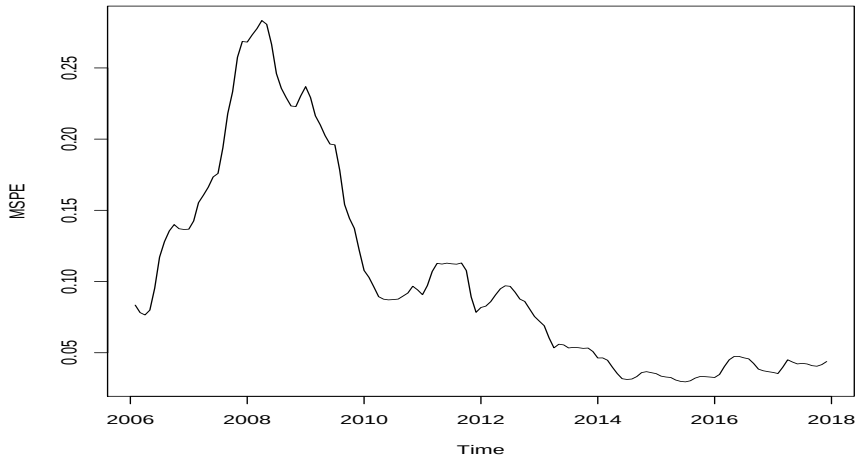


Figure 5: 24 month moving average of mean squared forecasting errors of 1-step-ahead SES forecast of CPI

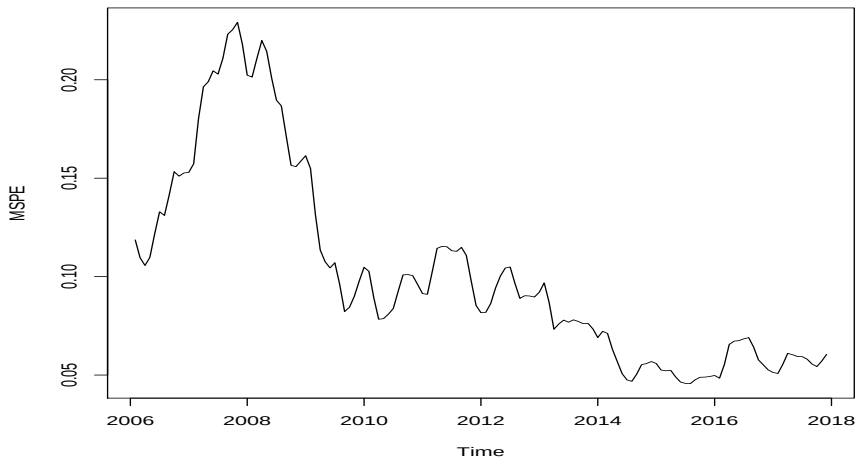


Figure 6: 24 month moving average of mean squared forecasting errors of 1-step-ahead SES-opt forecast of CPI

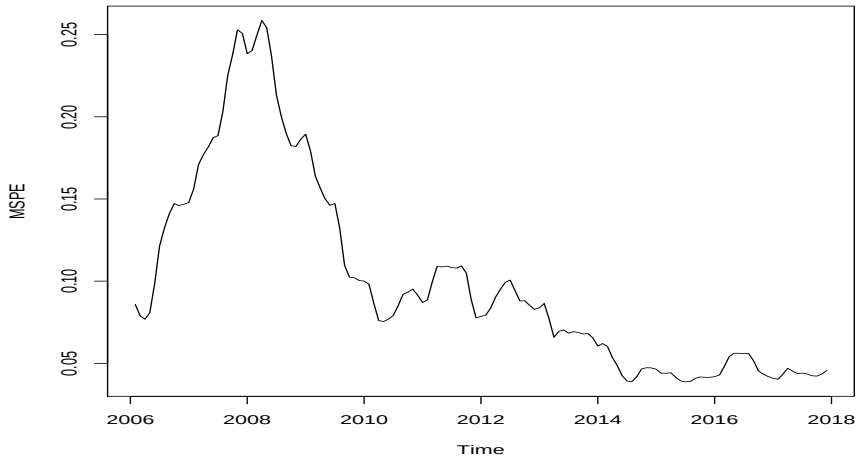


Figure 7: 24 month moving average of mean squared forecasting errors of 1-step-ahead AR(1) forecast of CPI

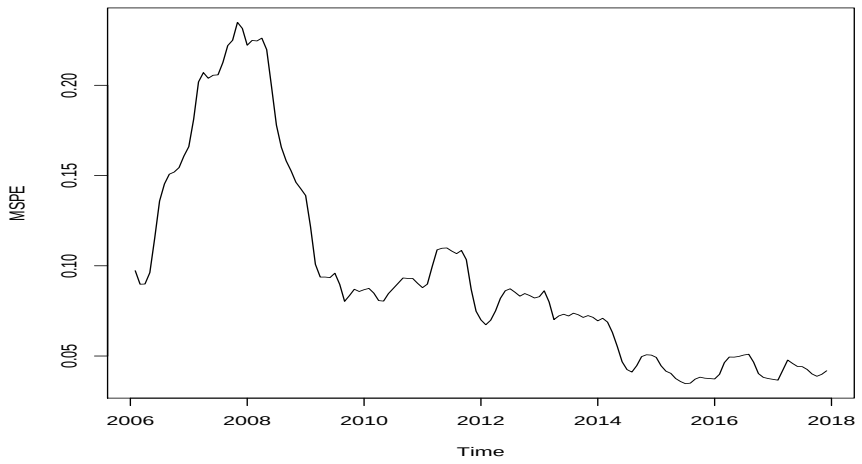


Figure 8: 24 month moving average of mean squared forecasting errors of 1-step-ahead AR(p) forecast of CPI

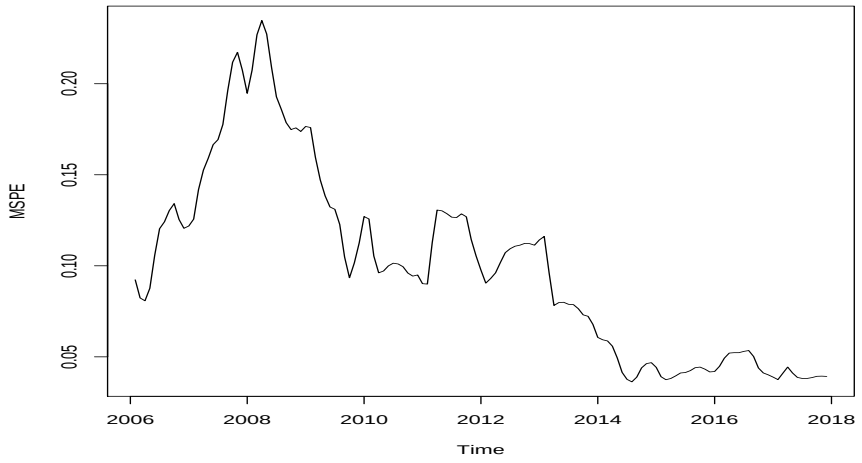


Figure 9: 24 month moving average of mean squared forecasting errors of 1-step-ahead ARd(1) forecast of CPI

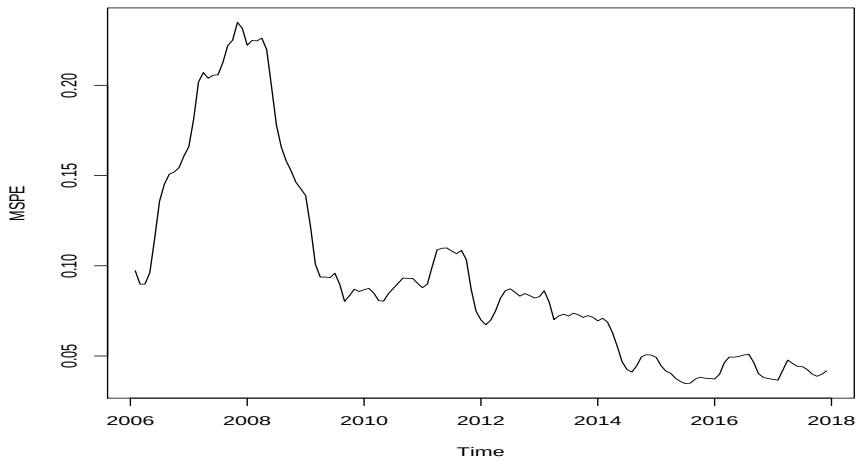


Figure 10: 24 month moving average of mean squared forecasting errors of 1-step-ahead ARd(p) forecast of CPI

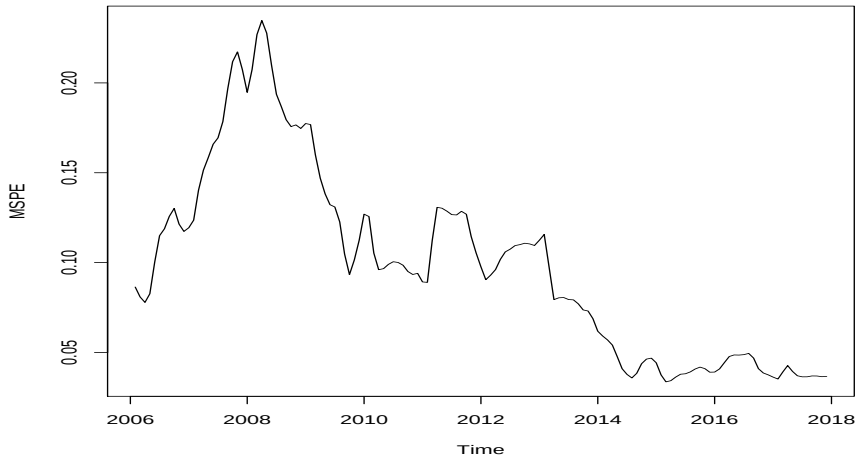


Figure 11: 24 month moving average of mean squared forecasting errors of 1-step-ahead ARMA(1,1) forecast of CPI

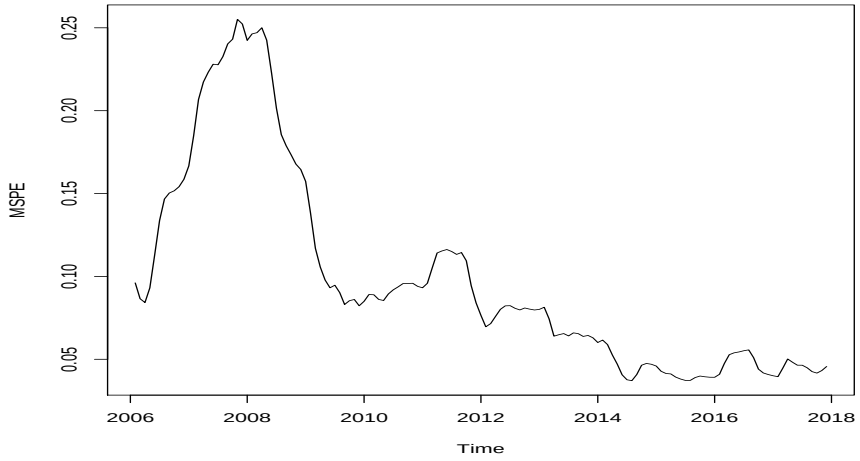


Figure 12: 24 month moving average of mean squared forecasting errors of 1-step-ahead ARMA(p,q) forecast of CPI

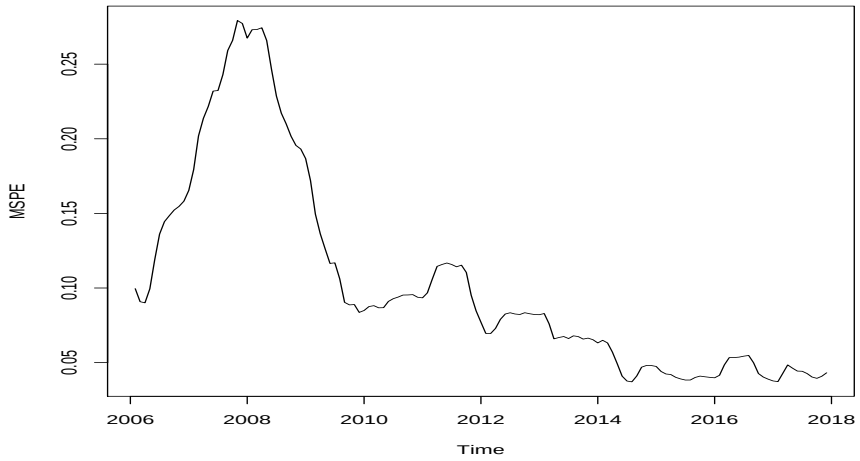


Figure 13: 24 month moving average of mean squared forecasting errors of 1-step-ahead VAR(1) forecast of CPI

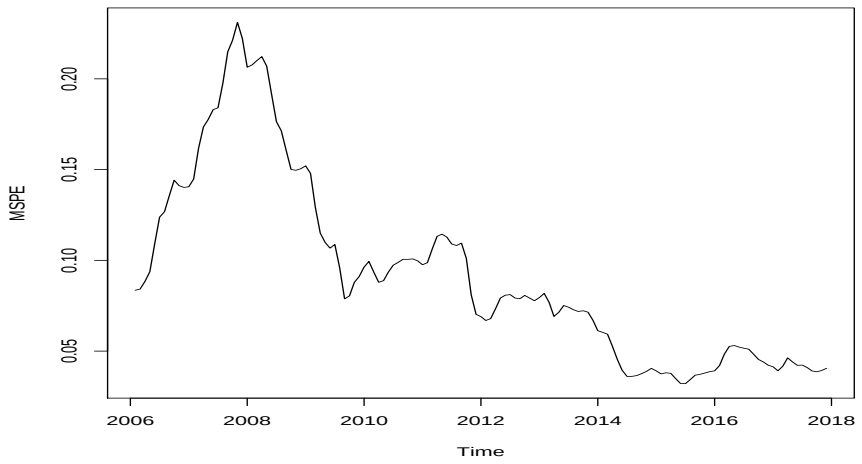


Figure 14: 24 month moving average of mean squared forecasting errors of 1-step-ahead VAR(p) forecast of CPI

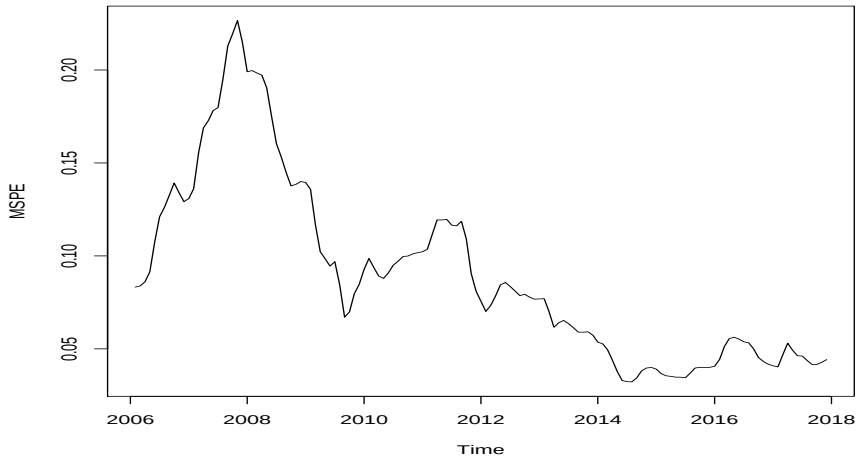


Figure 15: 24 month moving average of mean squared forecasting errors of 1-step-ahead BVAR forecast of CPI

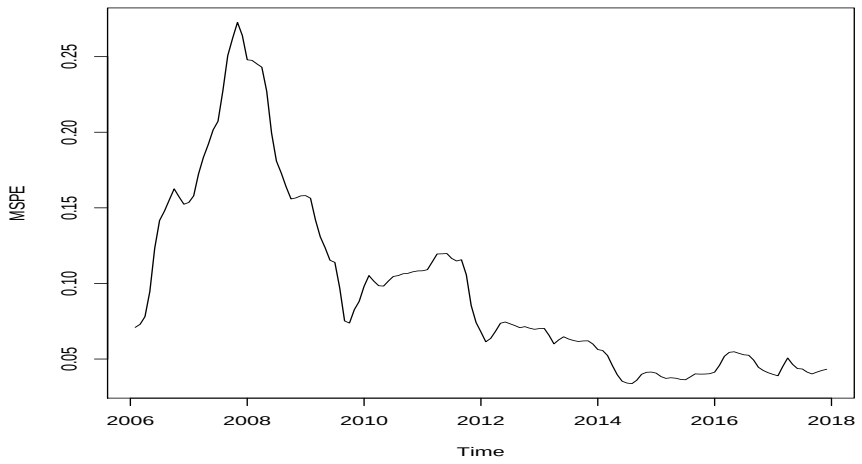


Figure 16: 24 month moving average of mean squared forecasting errors of 1-step-ahead Factor(2) forecast of CPI

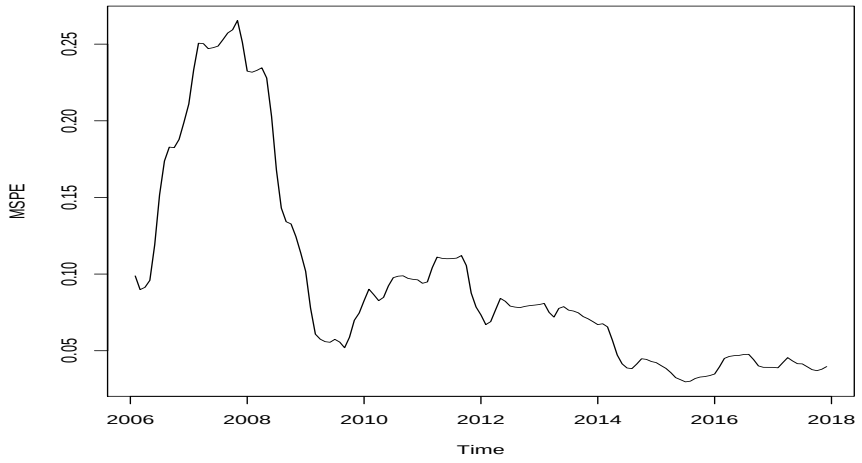


Figure 17: 24 month moving average of mean squared forecasting errors of 1-step-ahead Factor(k) forecast of CPI

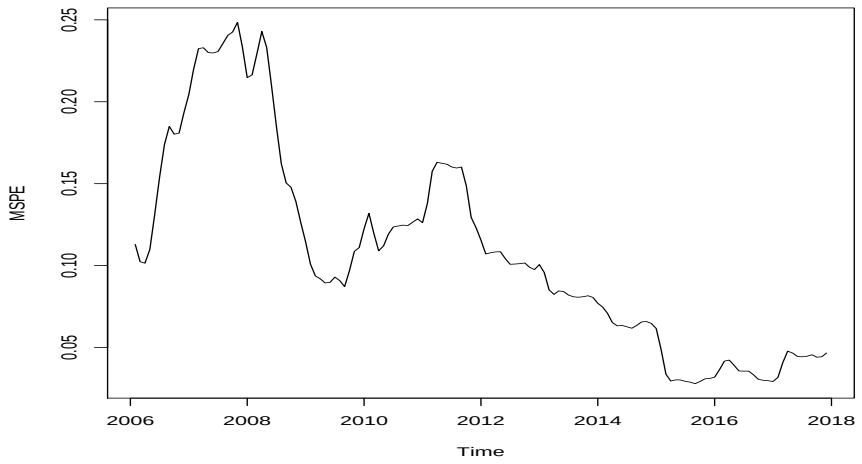


Figure 18: 24 month moving average of mean squared forecasting errors of 1-step-ahead F(2)VAR(1) forecast of CPI

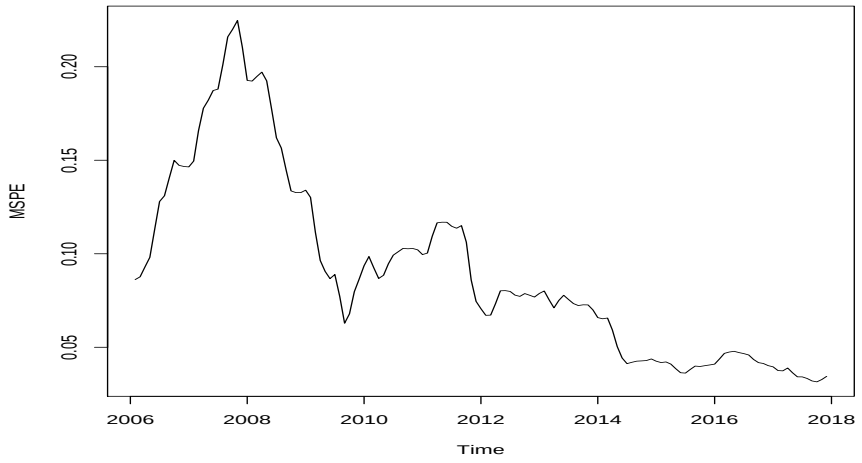
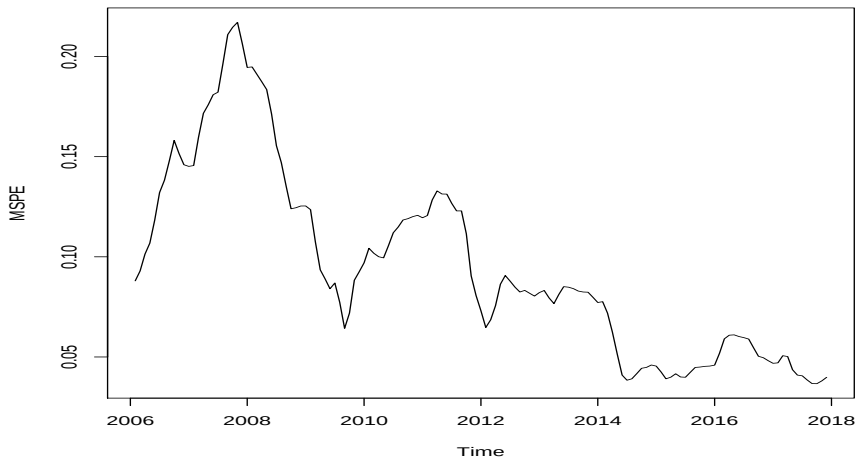


Figure 19: 24 month moving average of mean squared forecasting errors of 1-step-ahead F(2)VAR(p) forecast of CPI



3.1.2 Forecast Horizon = 3

Figure 20: 24 month moving average of mean squared forecasting errors of 3-step-ahead Mean forecast of CPI

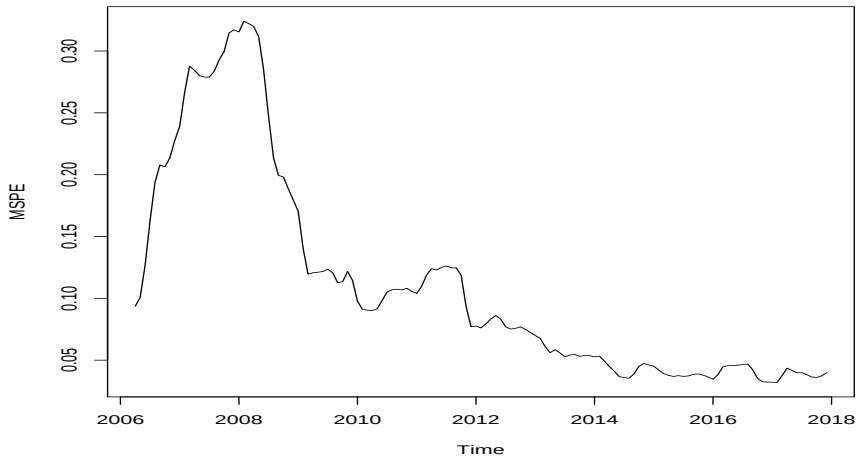


Figure 21: 24 month moving average of mean squared forecasting errors of 3-step-ahead Naive forecast of CPI

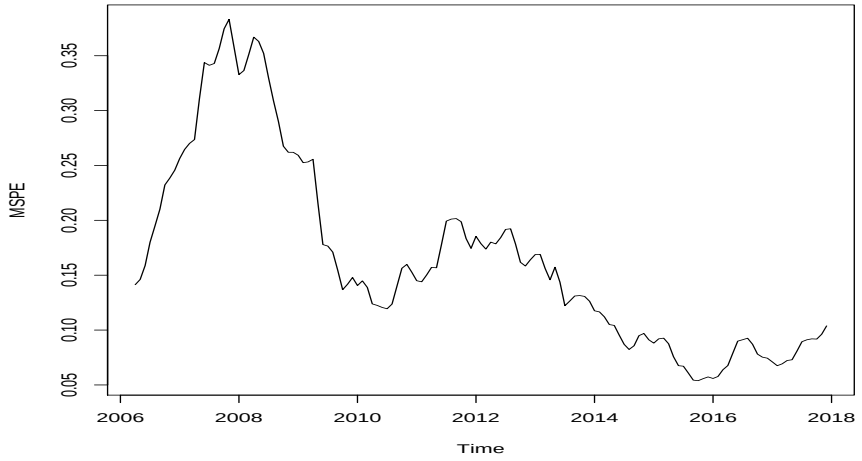


Figure 22: 24 month moving average of mean squared forecasting errors of 3-step-ahead MA forecast of CPI

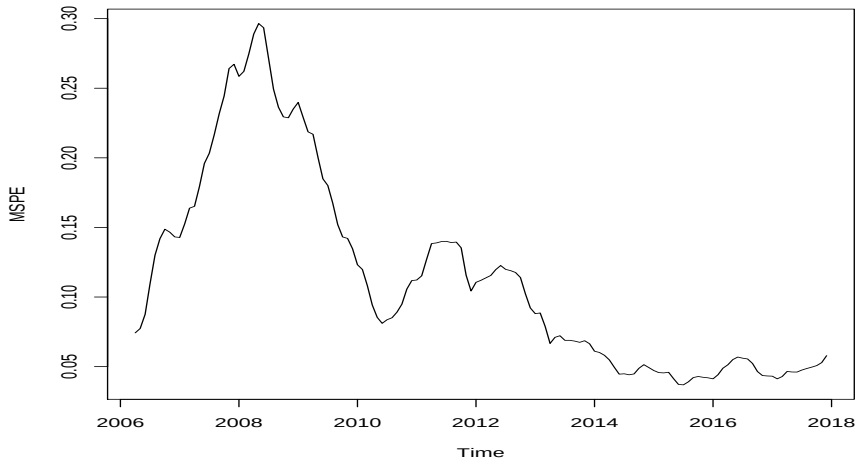


Figure 23: 24 month moving average of mean squared forecasting errors of 3-step-ahead MA-opt forecast of CPI

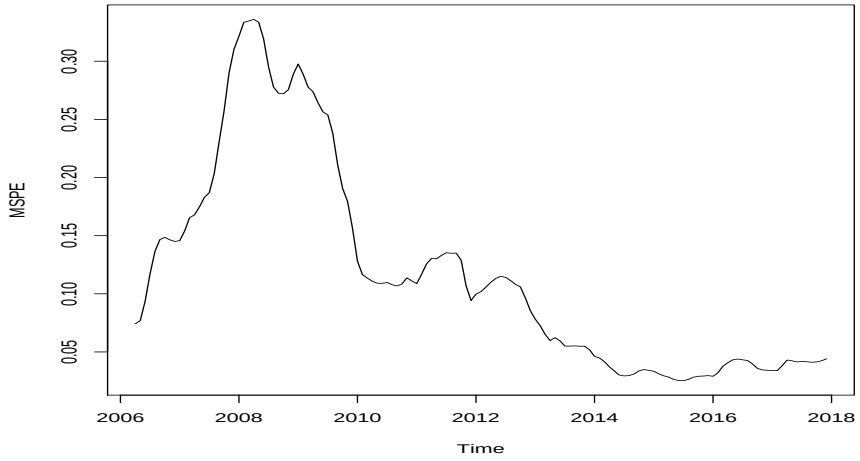


Figure 24: 24 month moving average of mean squared forecasting errors of 3-step-ahead SES forecast of CPI

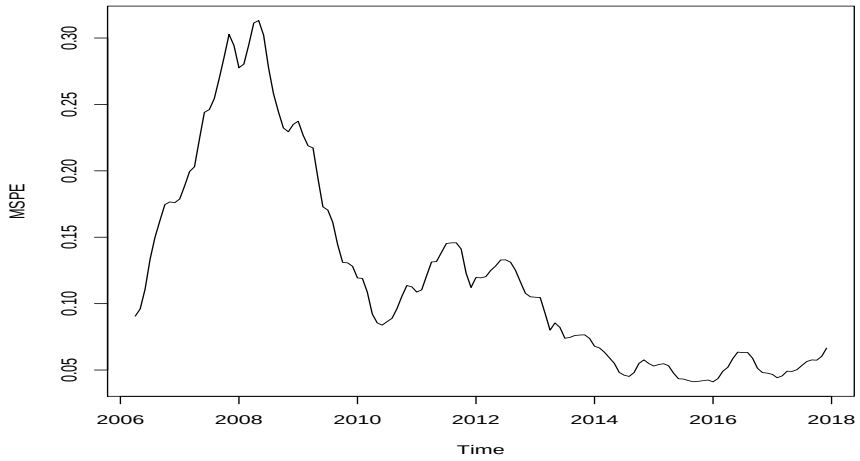


Figure 25: 24 month moving average of mean squared forecasting errors of 3-step-ahead SES-opt forecast of CPI

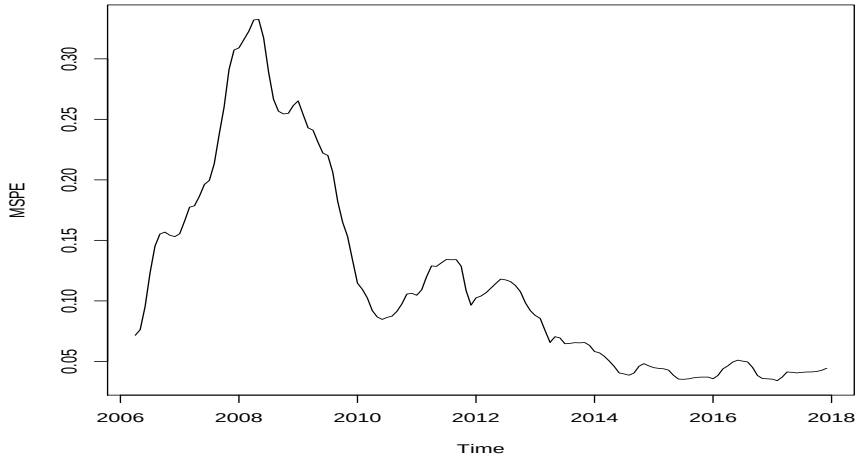


Figure 26: 24 month moving average of mean squared forecasting errors of 3-step-ahead AR(1) forecast of CPI

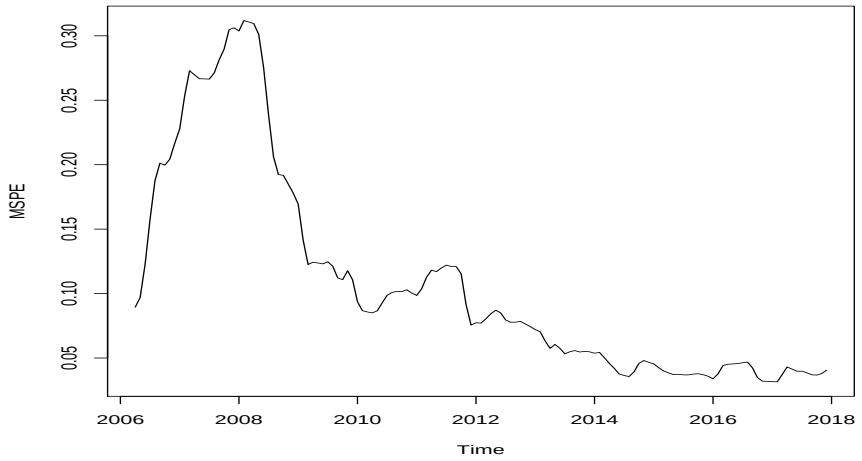


Figure 27: 24 month moving average of mean squared forecasting errors of 3-step-ahead AR(p) forecast of CPI

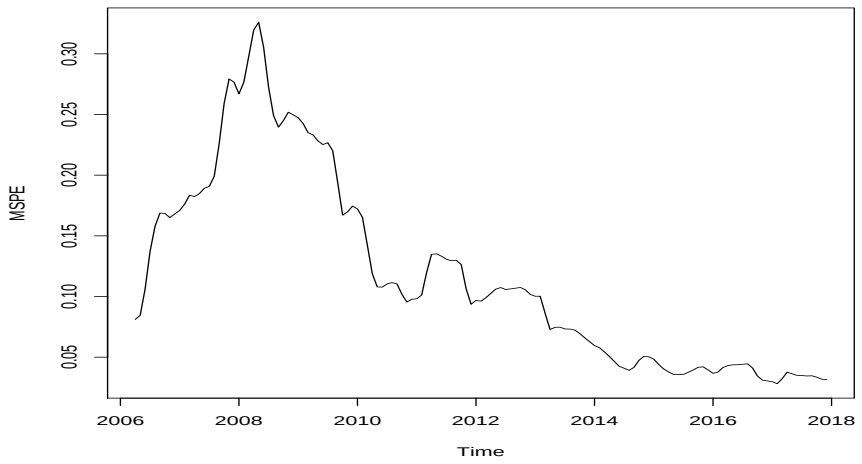


Figure 28: 24 month moving average of mean squared forecasting errors of 3-step-ahead ARd(1) forecast of CPI

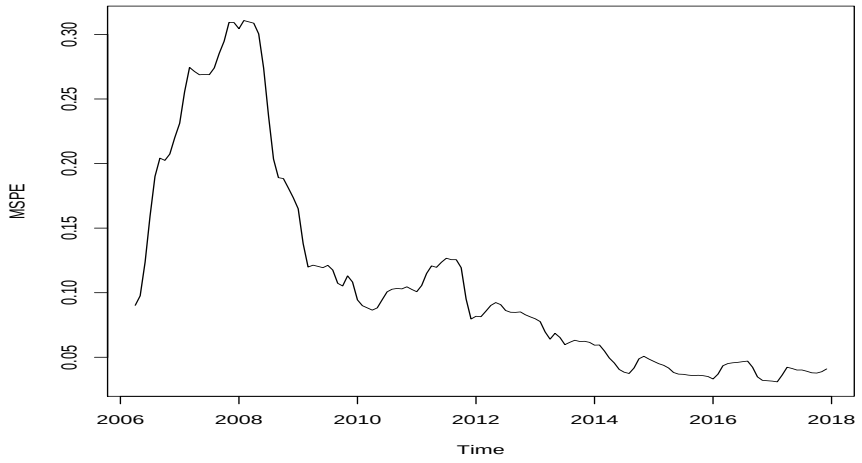


Figure 29: 24 month moving average of mean squared forecasting errors of 3-step-ahead ARd(p) forecast of CPI

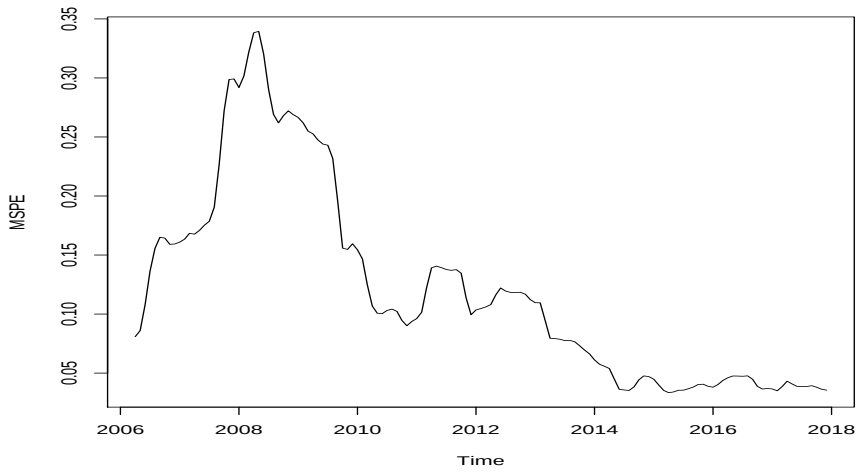


Figure 30: 24 month moving average of mean squared forecasting errors of 3-step-ahead ARMA(1,1) forecast of CPI

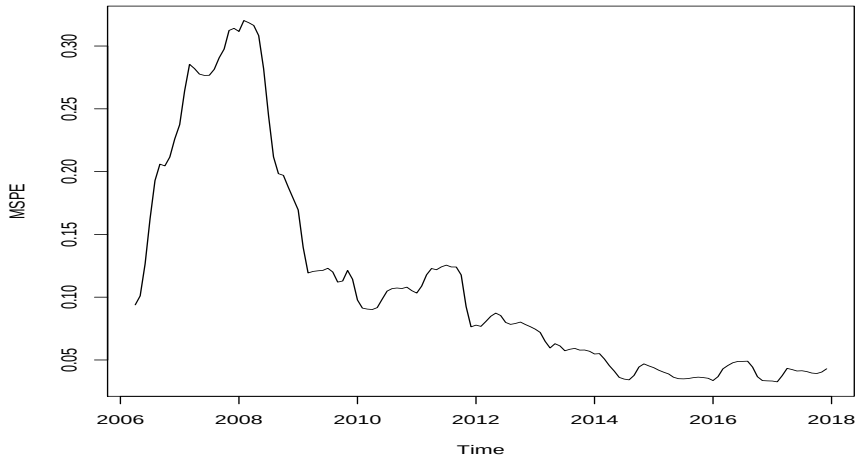


Figure 31: 24 month moving average of mean squared forecasting errors of 3-step-ahead ARMA(p,q) forecast of CPI

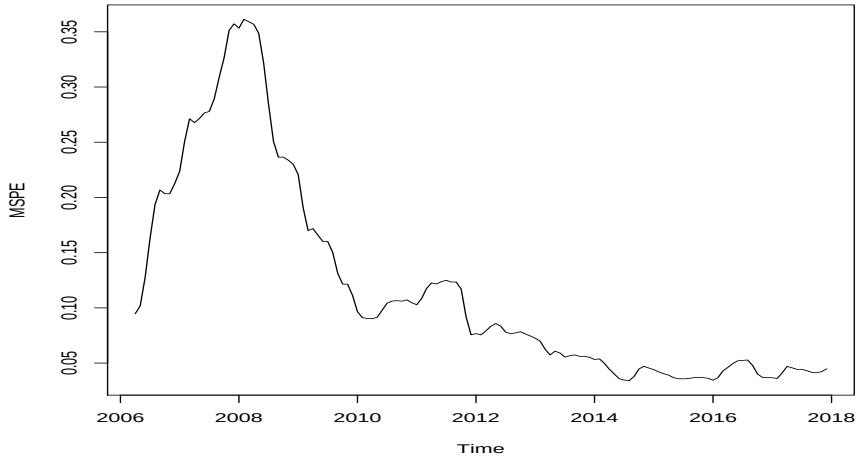


Figure 32: 24 month moving average of mean squared forecasting errors of 3-step-ahead VAR(1) forecast of CPI

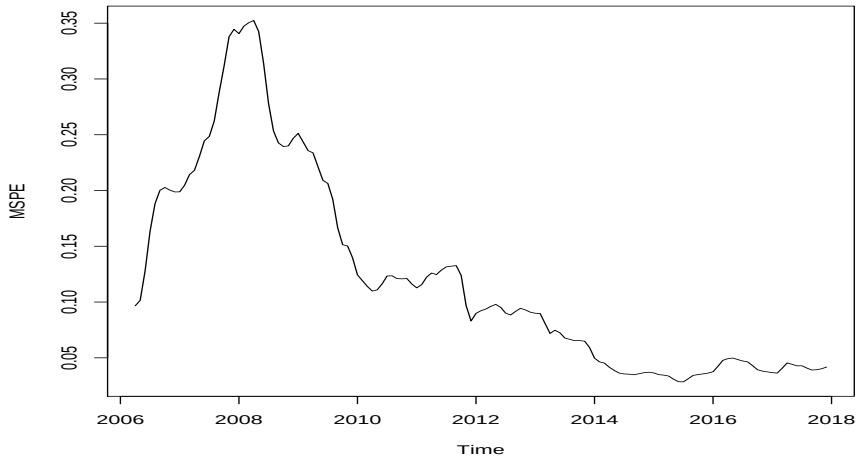


Figure 33: 24 month moving average of mean squared forecasting errors of 3-step-ahead VAR(p) forecast of CPI

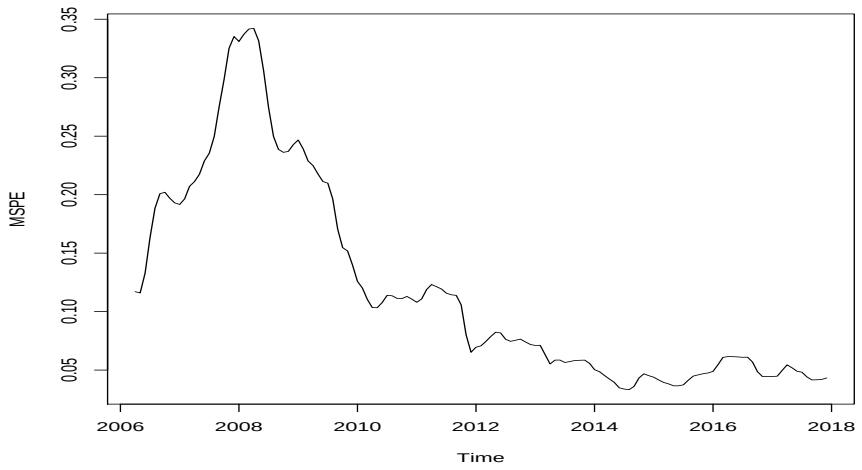


Figure 34: 24 month moving average of mean squared forecasting errors of 3-step-ahead BVAR forecast of CPI

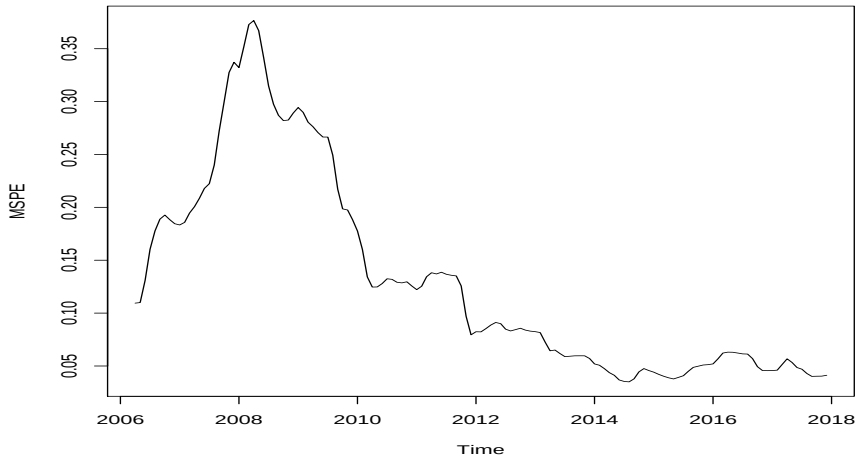


Figure 35: 24 month moving average of mean squared forecasting errors of 3-step-ahead Factor(2) forecast of CPI

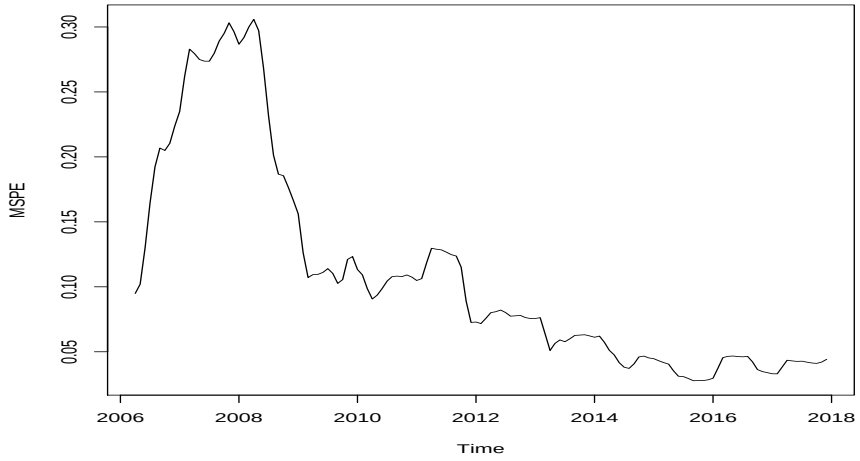


Figure 36: 24 month moving average of mean squared forecasting errors of 3-step-ahead Factor(k) forecast of CPI

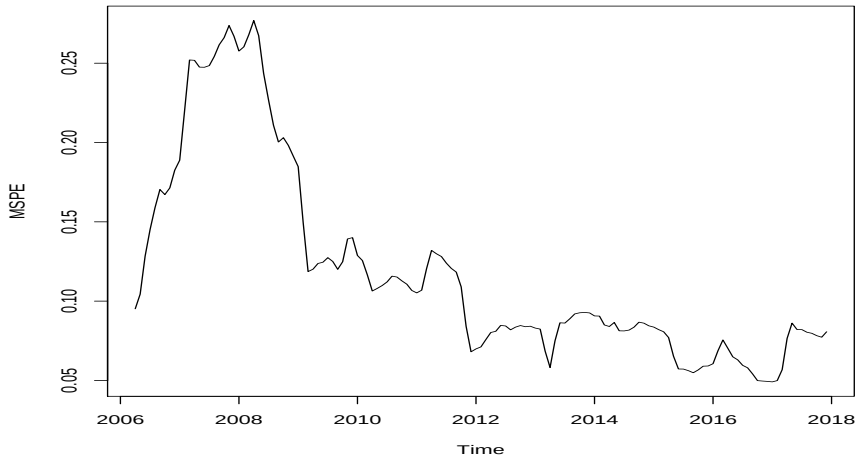


Figure 37: 24 month moving average of mean squared forecasting errors of 3-step-ahead F(2)VAR(1) forecast of CPI

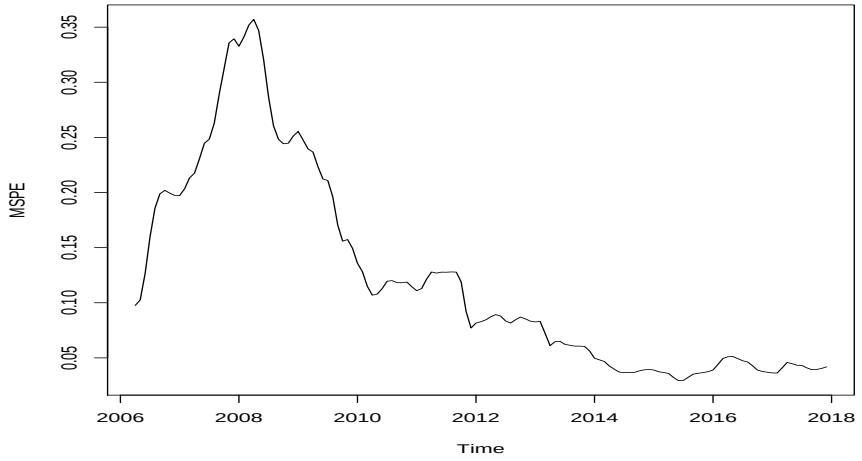
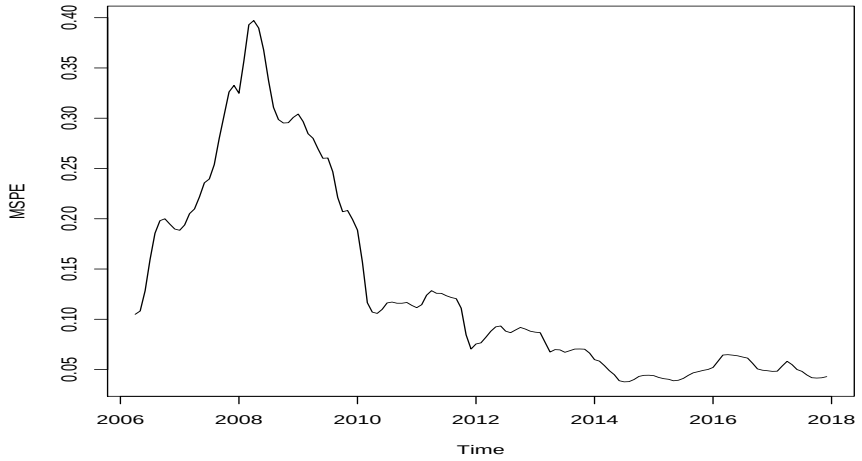


Figure 38: 24 month moving average of mean squared forecasting errors of 3-step-ahead F(2)VAR(p) forecast of CPI



3.1.3 Forecast Horizon = 6

Figure 39: 24 month moving average of mean squared forecasting errors of 6-step-ahead Mean forecast of CPI

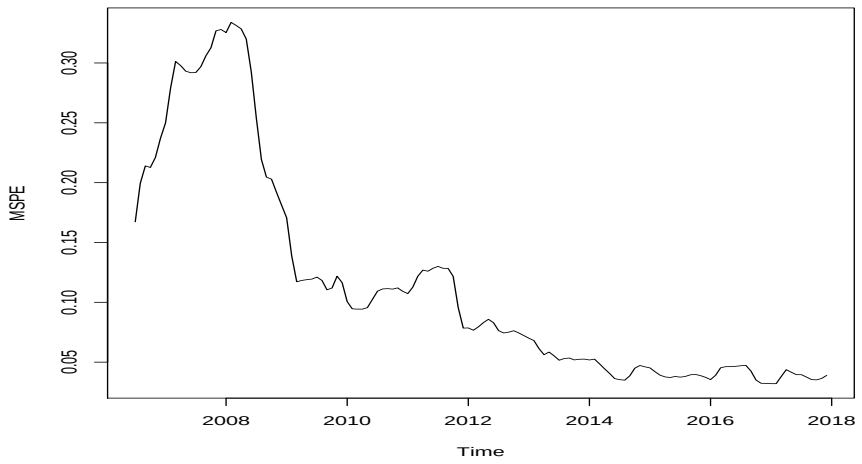


Figure 40: 24 month moving average of mean squared forecasting errors of 6-step-ahead Naive forecast of CPI

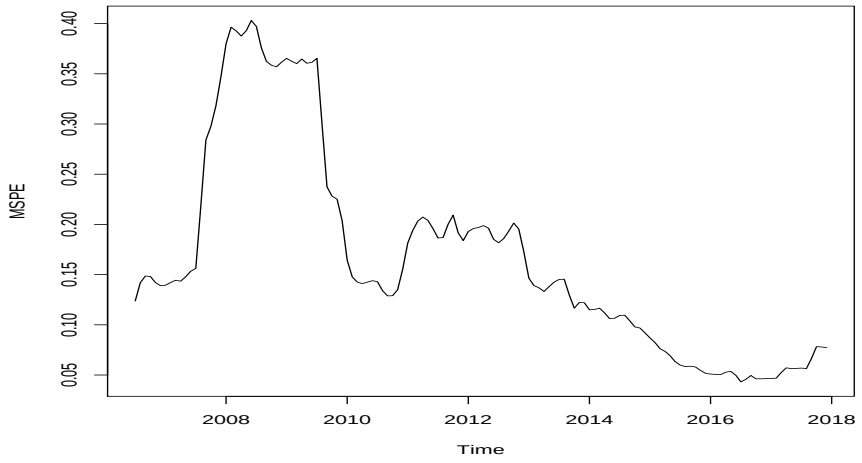


Figure 41: 24 month moving average of mean squared forecasting errors of 6-step-ahead MA forecast of CPI

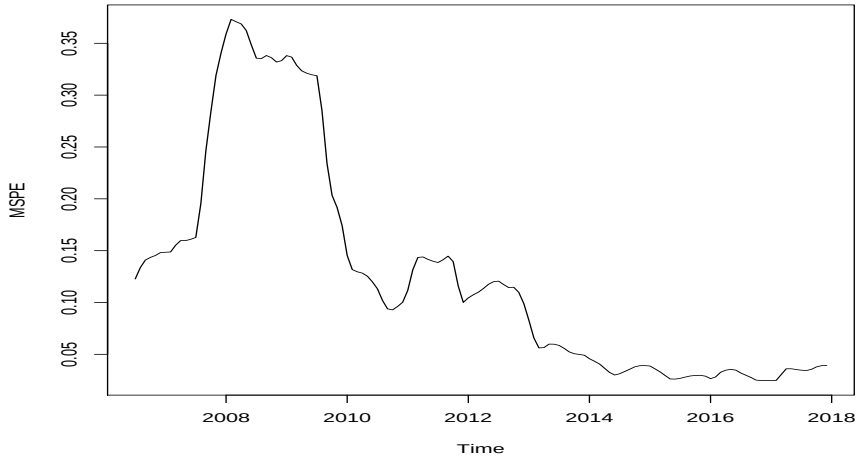


Figure 42: 24 month moving average of mean squared forecasting errors of 6-step-ahead MA-opt forecast of CPI

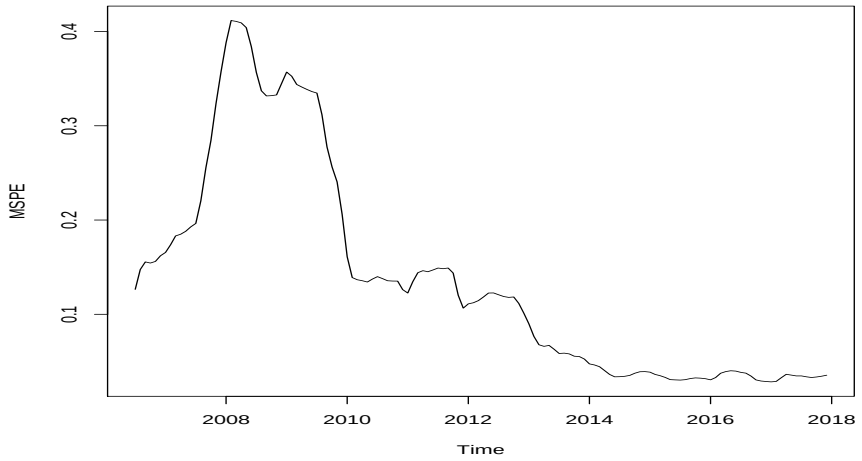


Figure 43: 24 month moving average of mean squared forecasting errors of 6-step-ahead SES forecast of CPI

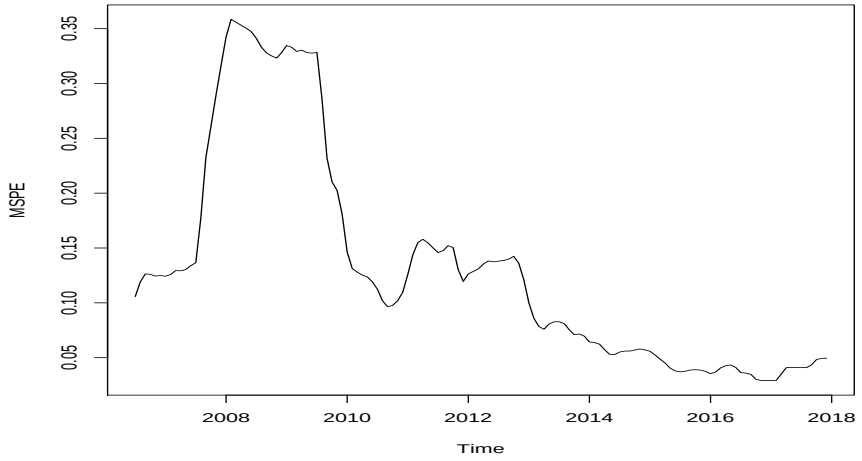


Figure 44: 24 month moving average of mean squared forecasting errors of 6-step-ahead SES-opt forecast of CPI

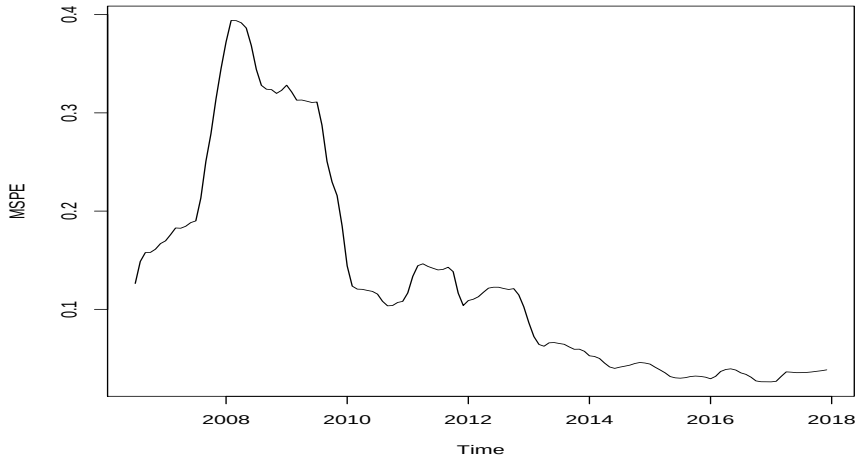


Figure 45: 24 month moving average of mean squared forecasting errors of 6-step-ahead AR(1) forecast of CPI

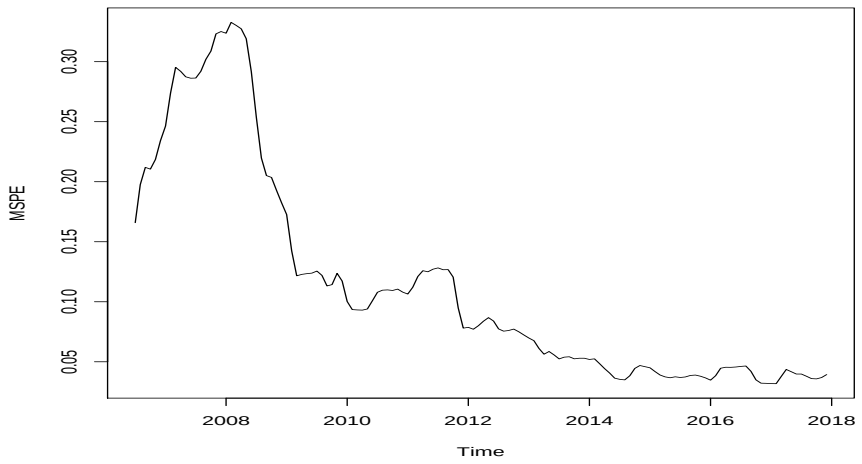


Figure 46: 24 month moving average of mean squared forecasting errors of 6-step-ahead AR(p) forecast of CPI

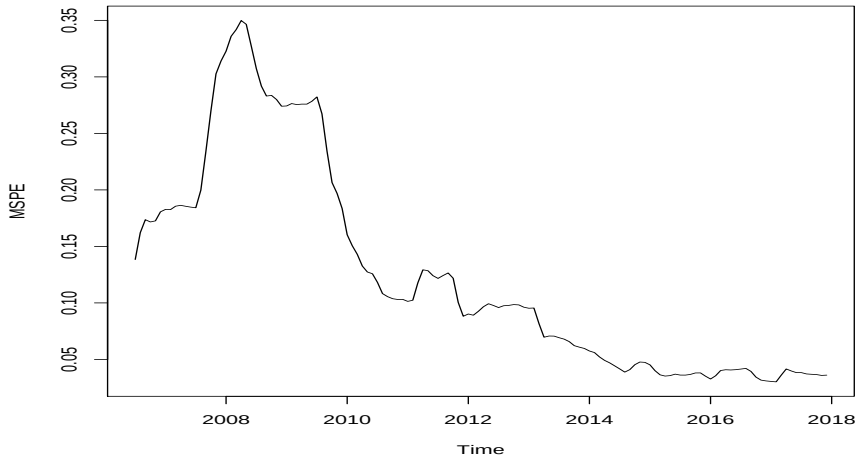


Figure 47: 24 month moving average of mean squared forecasting errors of 6-step-ahead ARd(1) forecast of CPI

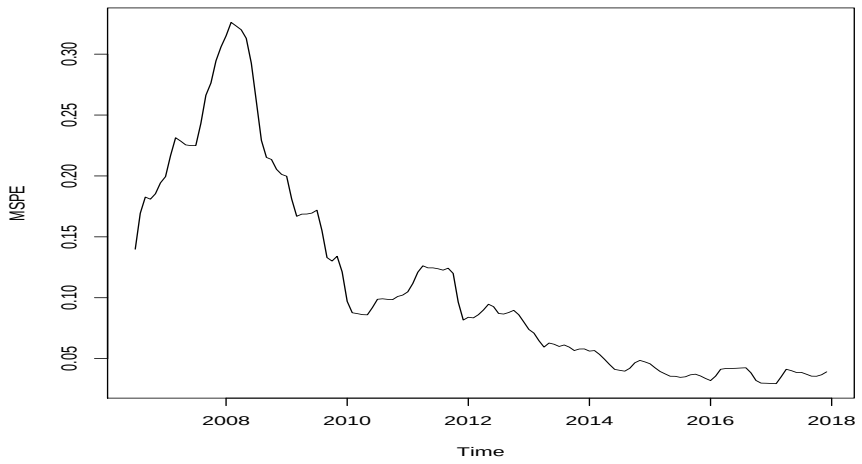


Figure 48: 24 month moving average of mean squared forecasting errors of 6-step-ahead ARd(p) forecast of CPI

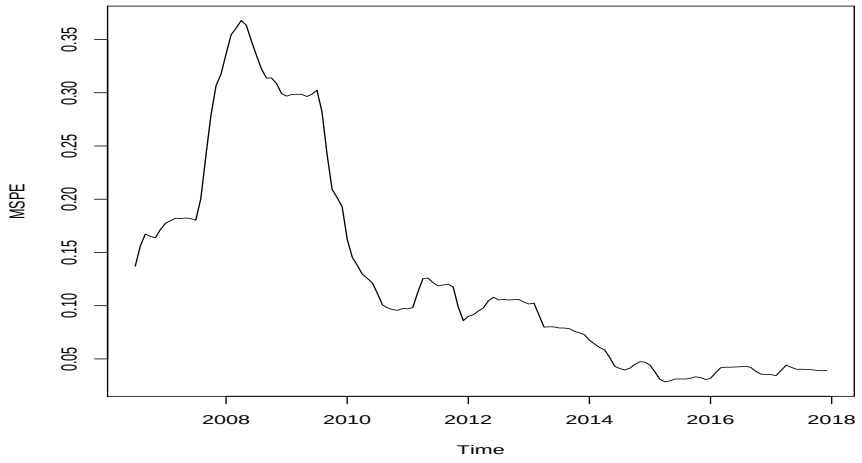


Figure 49: 24 month moving average of mean squared forecasting errors of 6-step-ahead ARMA(1,1) forecast of CPI

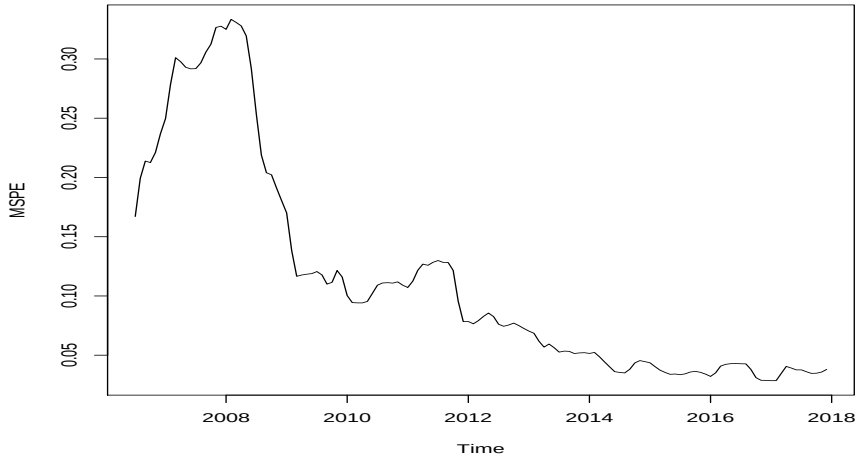


Figure 50: 24 month moving average of mean squared forecasting errors of 6-step-ahead ARMA(p,q) forecast of CPI

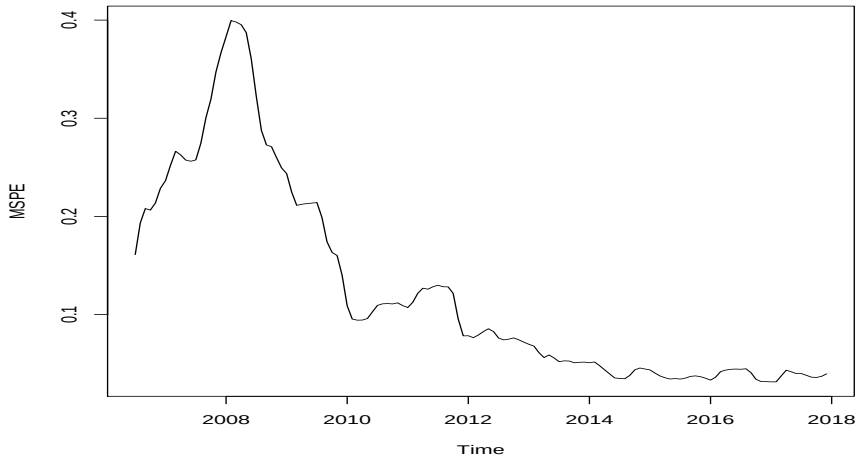


Figure 51: 24 month moving average of mean squared forecasting errors of 6-step-ahead VAR(1) forecast of CPI

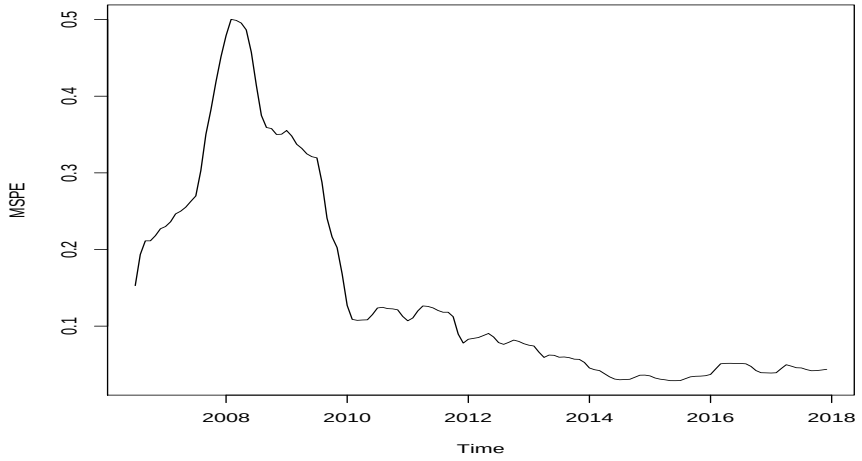


Figure 52: 24 month moving average of mean squared forecasting errors of 6-step-ahead VAR(p) forecast of CPI

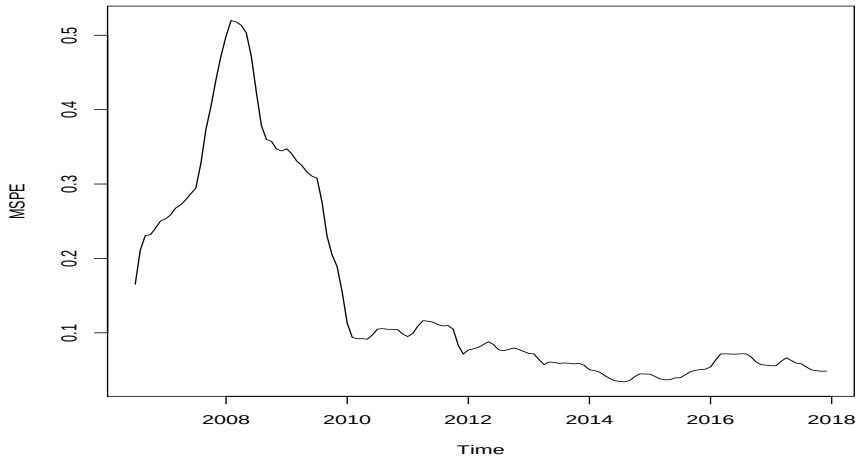


Figure 53: 24 month moving average of mean squared forecasting errors of 6-step-ahead BVAR forecast of CPI

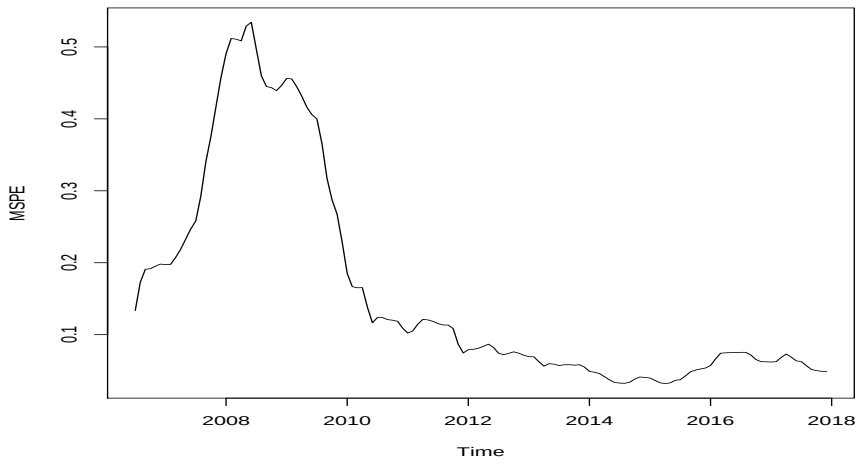


Figure 54: 24 month moving average of mean squared forecasting errors of 6-step-ahead Factor(2) forecast of CPI

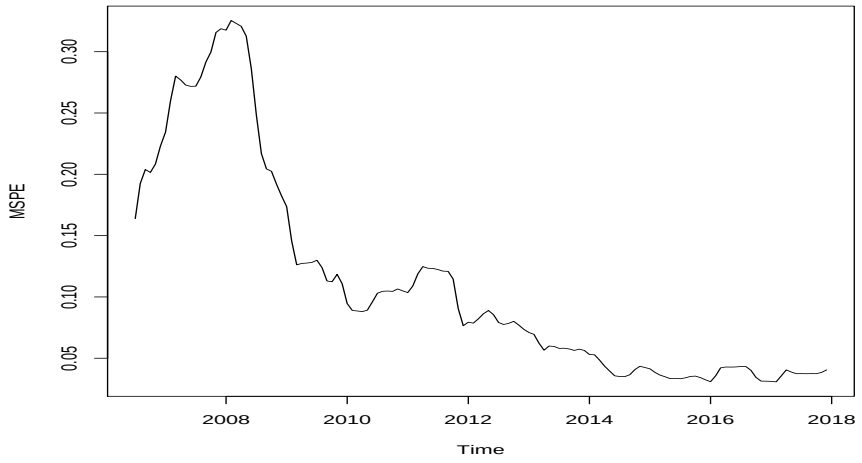


Figure 55: 24 month moving average of mean squared forecasting errors of 6-step-ahead Factor(k) forecast of CPI

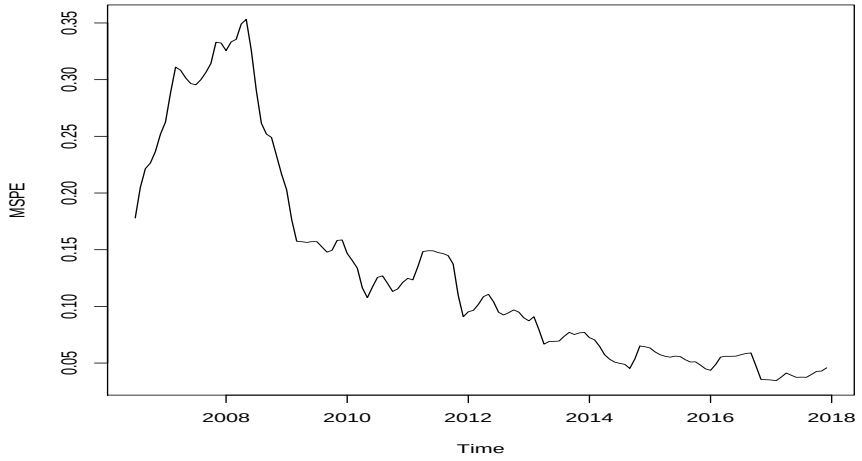


Figure 56: 24 month moving average of mean squared forecasting errors of 6-step-ahead F(2)VAR(1) forecast of CPI

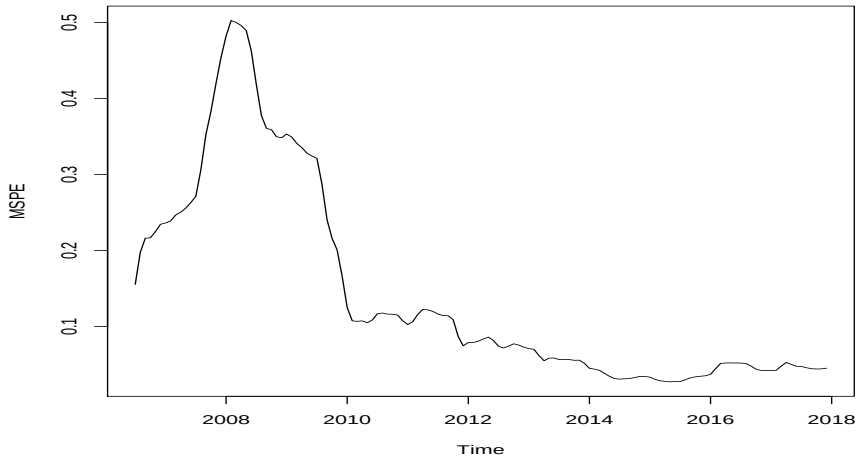
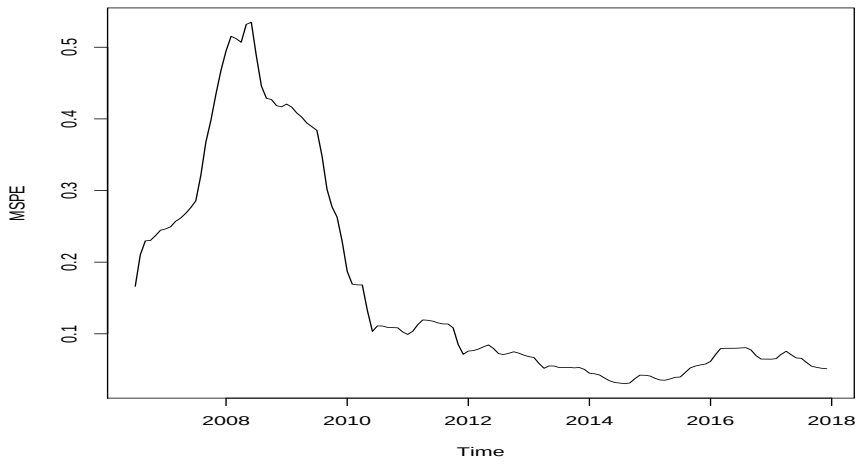


Figure 57: 24 month moving average of mean squared forecasting errors of 6-step-ahead F(2)VAR(p) forecast of CPI



3.1.4 Forecast Horizon = 9

Figure 58: 24 month moving average of mean squared forecasting errors of 9-step-ahead Mean forecast of CPI

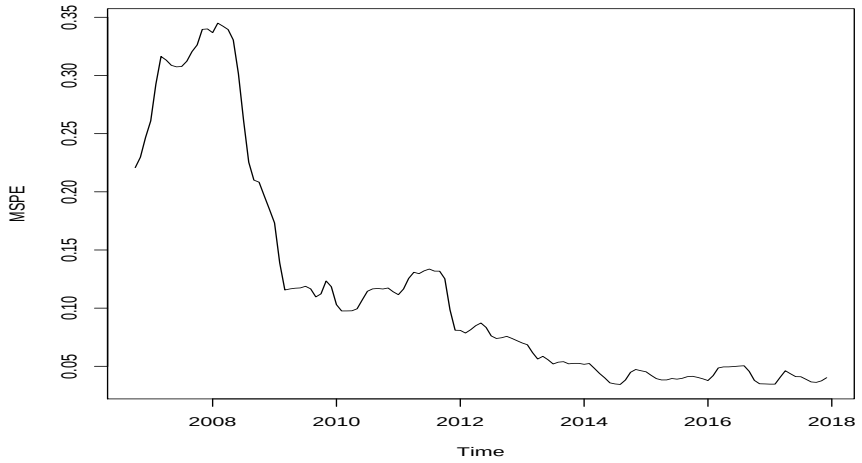


Figure 59: 24 month moving average of mean squared forecasting errors of 9-step-ahead Naive forecast of CPI

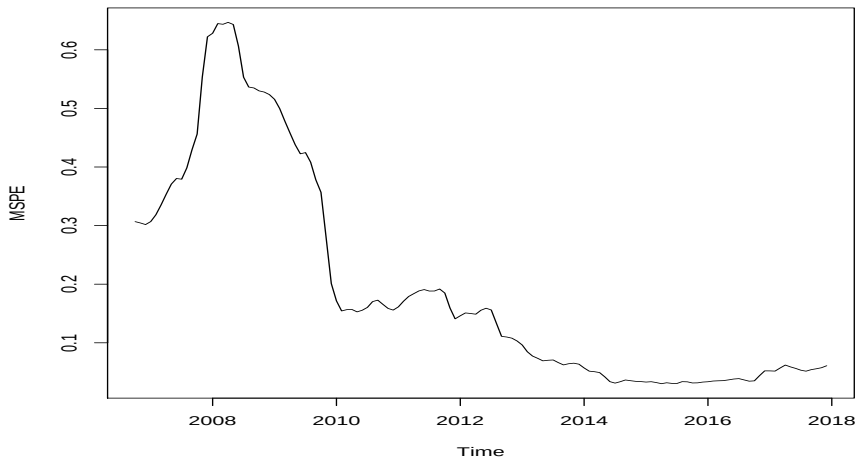


Figure 60: 24 month moving average of mean squared forecasting errors of 9-step-ahead MA forecast of CPI

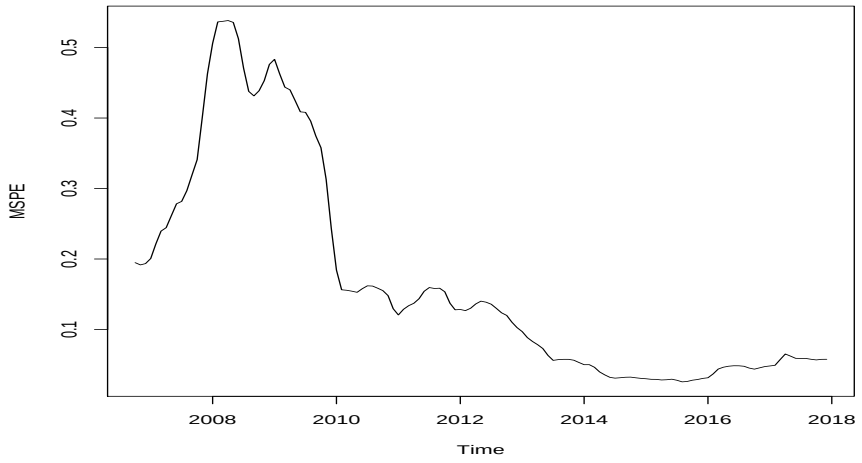


Figure 61: 24 month moving average of mean squared forecasting errors of 9-step-ahead MA-opt forecast of CPI

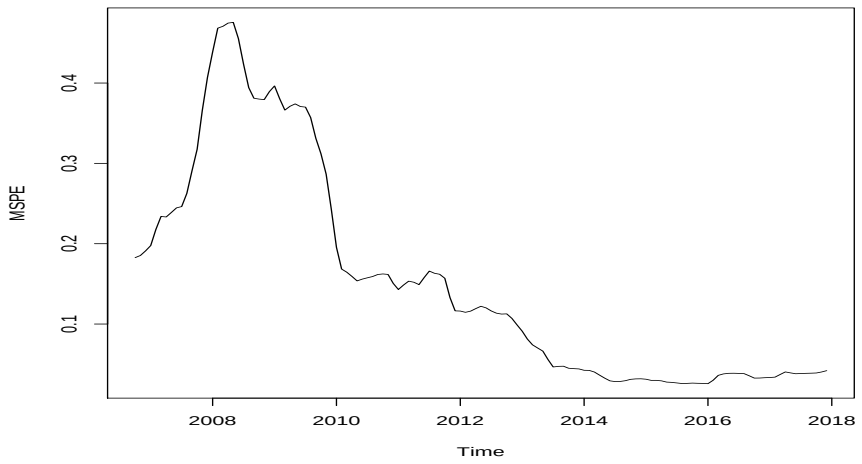


Figure 62: 24 month moving average of mean squared forecasting errors of 9-step-ahead SES forecast of CPI

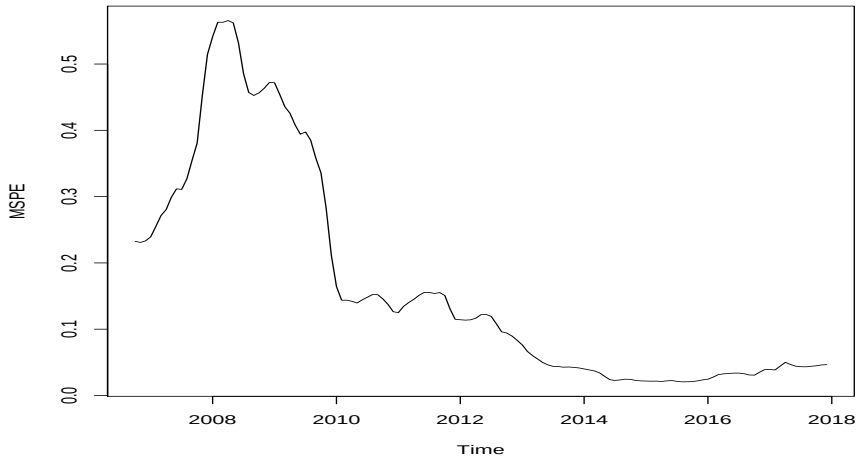


Figure 63: 24 month moving average of mean squared forecasting errors of 9-step-ahead SES-opt forecast of CPI

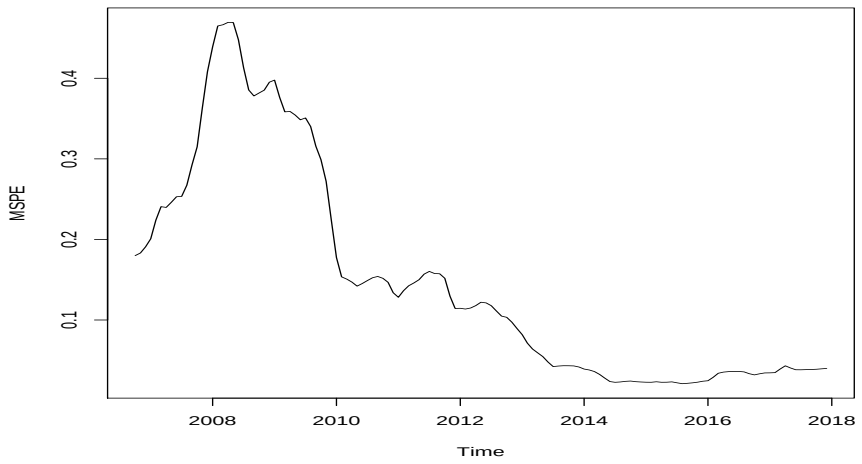


Figure 64: 24 month moving average of mean squared forecasting errors of 9-step-ahead AR(1) forecast of CPI

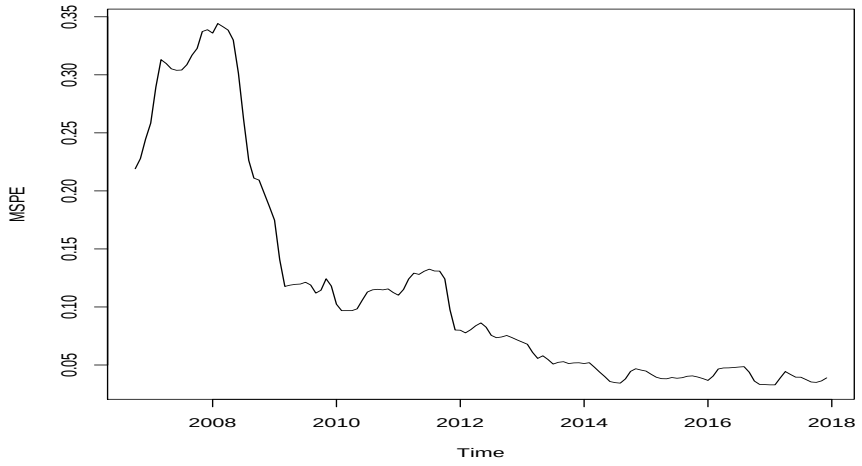


Figure 65: 24 month moving average of mean squared forecasting errors of 9-step-ahead AR(p) forecast of CPI

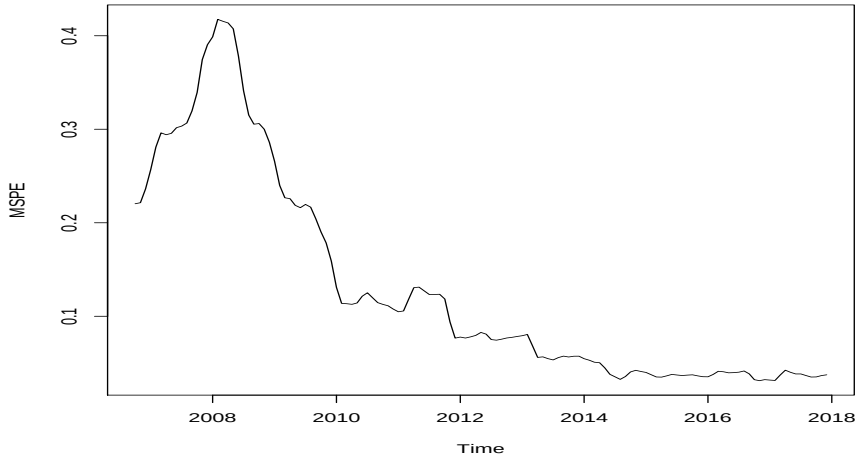


Figure 66: 24 month moving average of mean squared forecasting errors of 9-step-ahead ARd(1) forecast of CPI

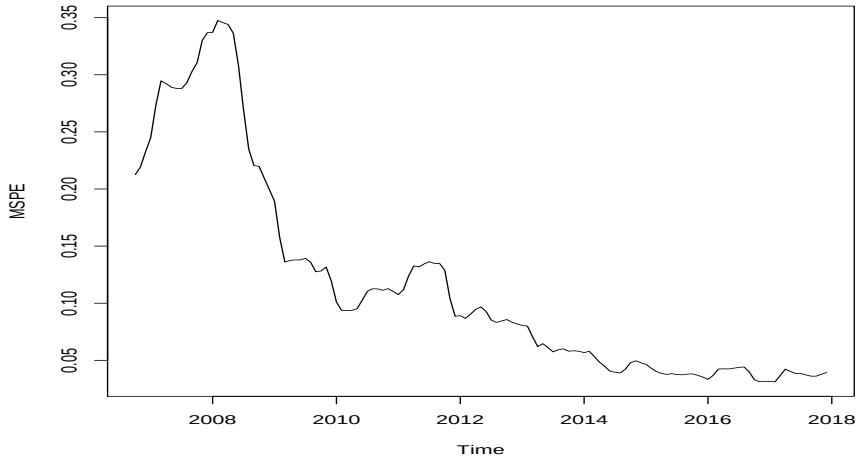


Figure 67: 24 month moving average of mean squared forecasting errors of 9-step-ahead ARd(p) forecast of CPI

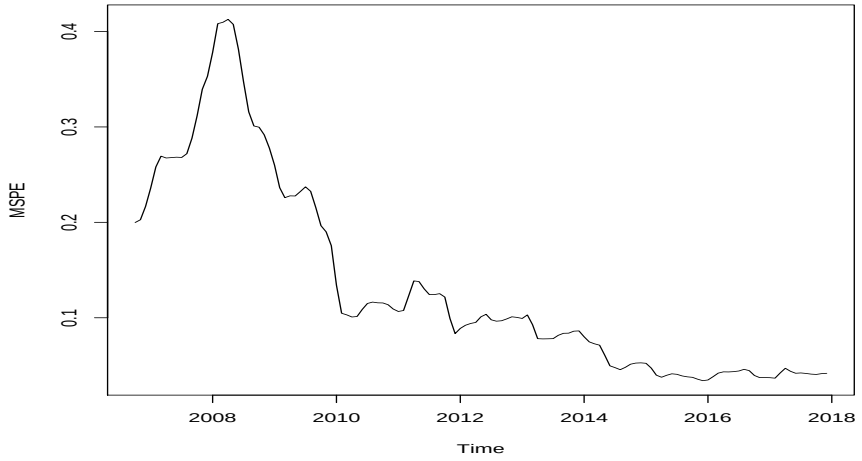


Figure 68: 24 month moving average of mean squared forecasting errors of 9-step-ahead ARMA(1,1) forecast of CPI

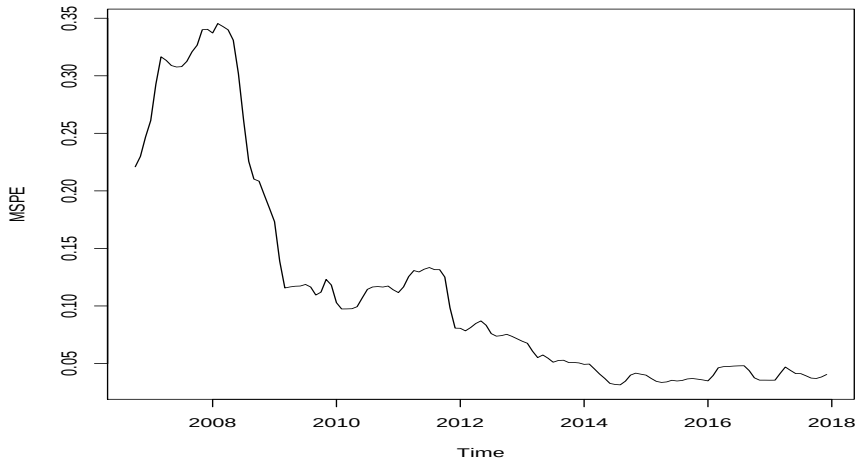


Figure 69: 24 month moving average of mean squared forecasting errors of 9-step-ahead ARMA(p,q) forecast of CPI

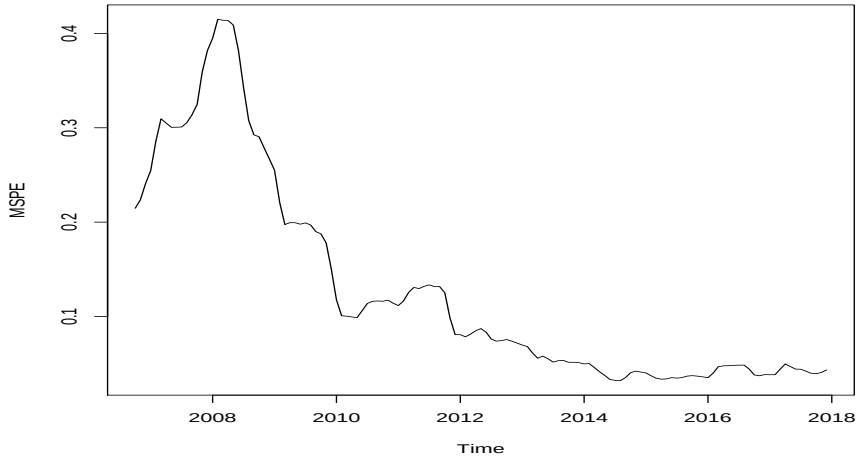


Figure 70: 24 month moving average of mean squared forecasting errors of 9-step-ahead VAR(1) forecast of CPI

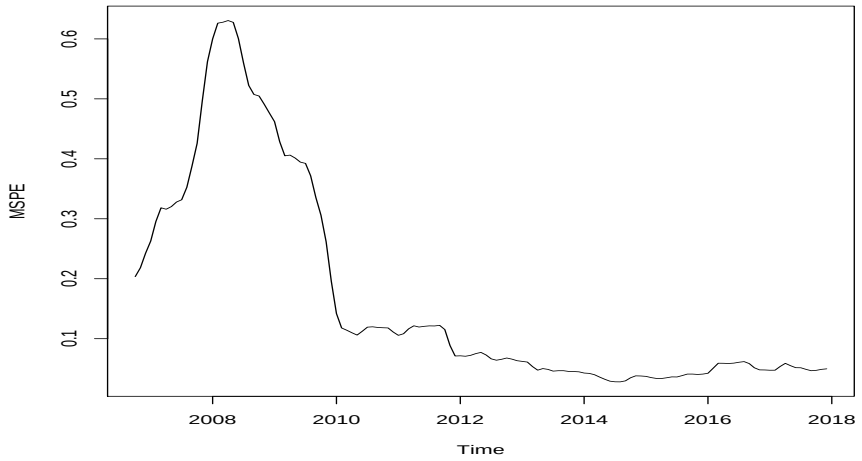


Figure 71: 24 month moving average of mean squared forecasting errors of 9-step-ahead VAR(p) forecast of CPI

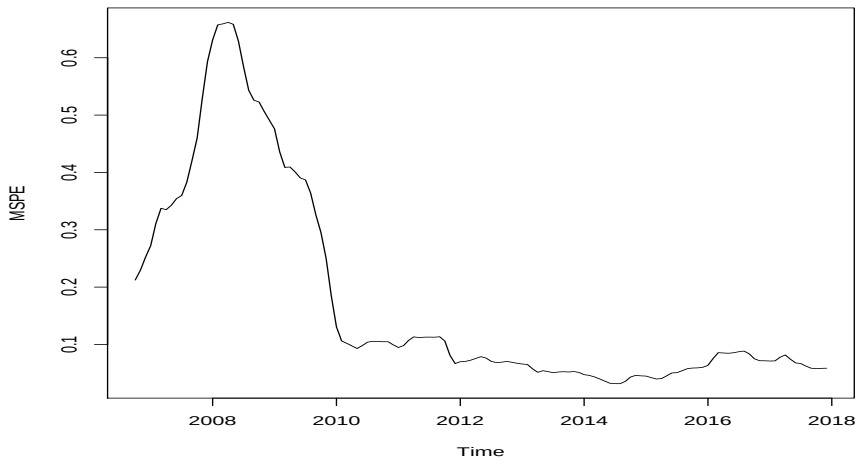


Figure 72: 24 month moving average of mean squared forecasting errors of 9-step-ahead BVAR forecast of CPI

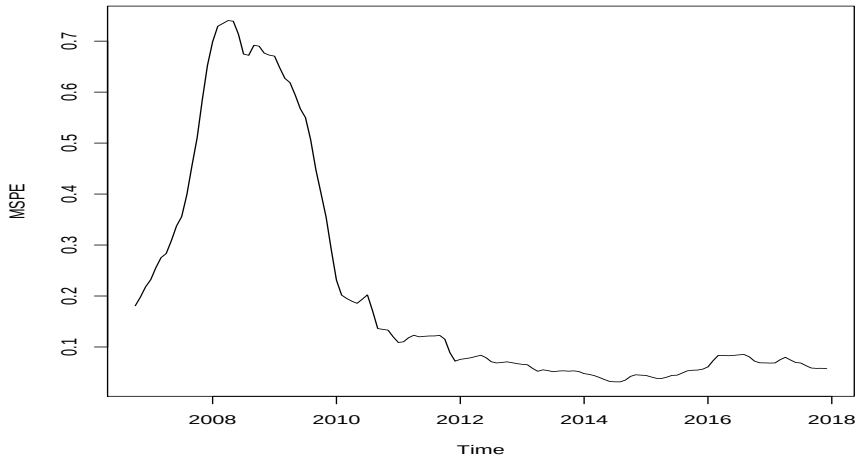


Figure 73: 24 month moving average of mean squared forecasting errors of 9-step-ahead Factor(2) forecast of CPI

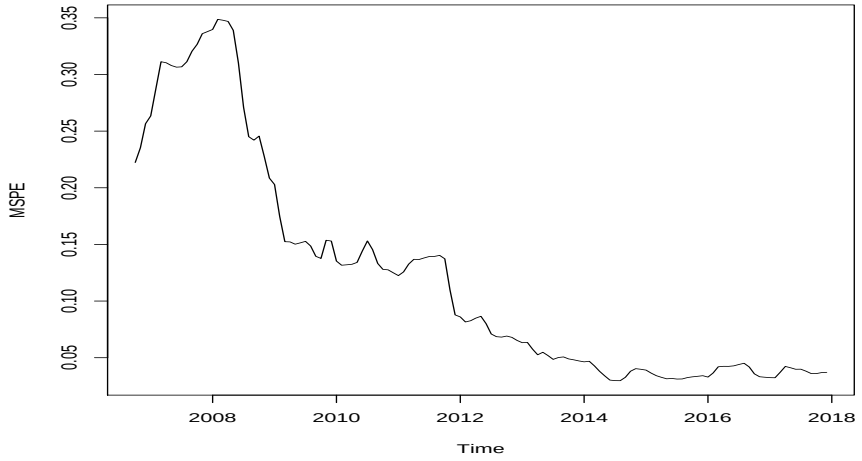


Figure 74: 24 month moving average of mean squared forecasting errors of 9-step-ahead Factor(k) forecast of CPI

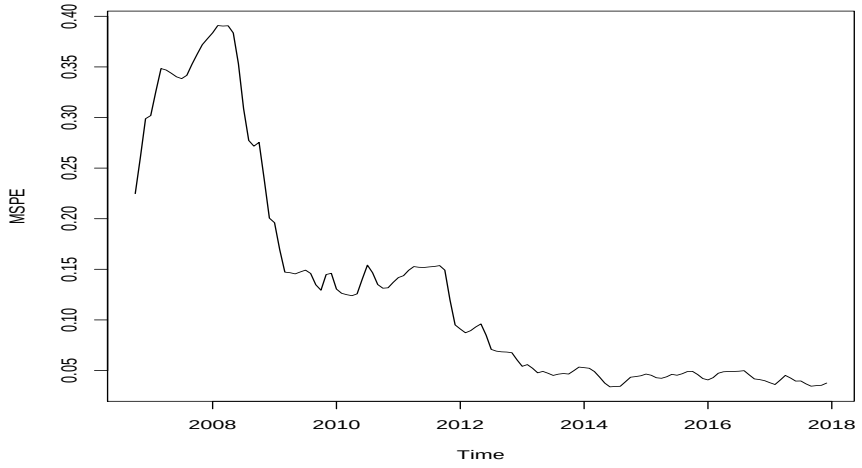


Figure 75: 24 month moving average of mean squared forecasting errors of 9-step-ahead F(2)VAR(1) forecast of CPI

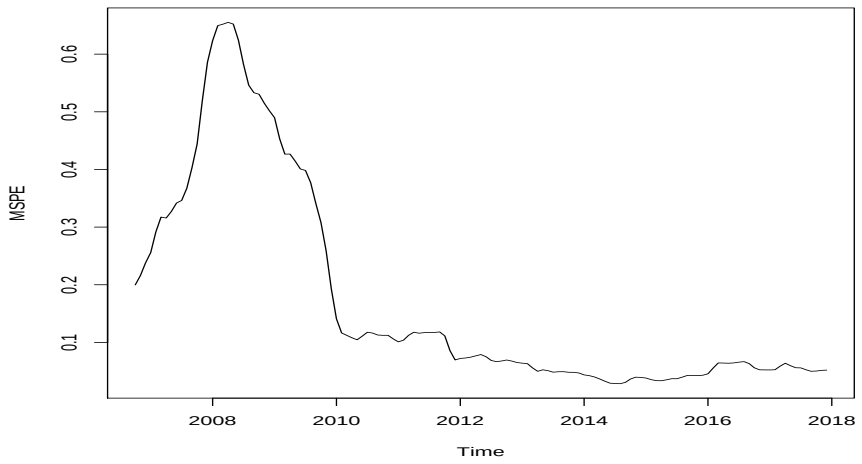
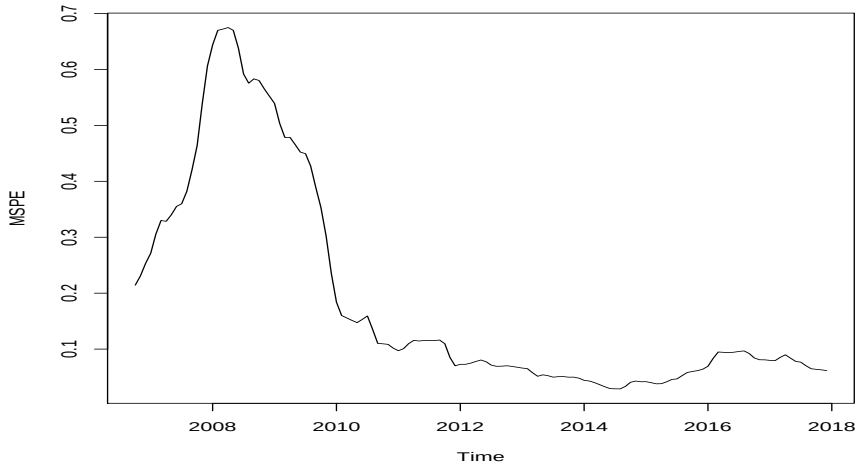


Figure 76: 24 month moving average of mean squared forecasting errors of 9-step-ahead F(2)VAR(p) forecast of CPI



3.1.5 Forecast Horizon = 12

Figure 77: 24 month moving average of mean squared forecasting errors of 12-step-ahead Mean forecast of CPI

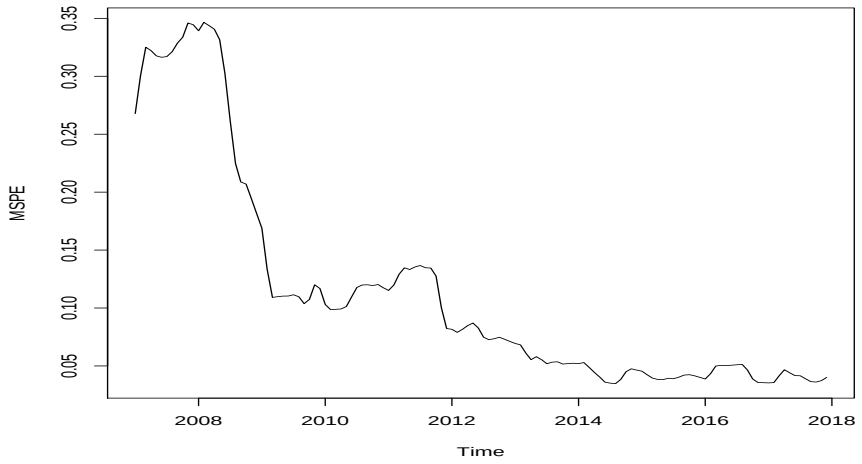


Figure 78: 24 month moving average of mean squared forecasting errors of 12-step-ahead Naive forecast of CPI

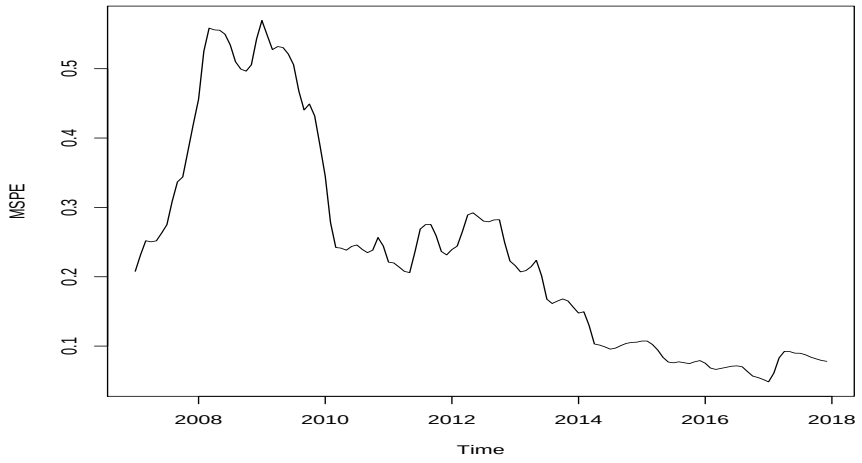


Figure 79: 24 month moving average of mean squared forecasting errors of 12-step-ahead MA forecast of CPI

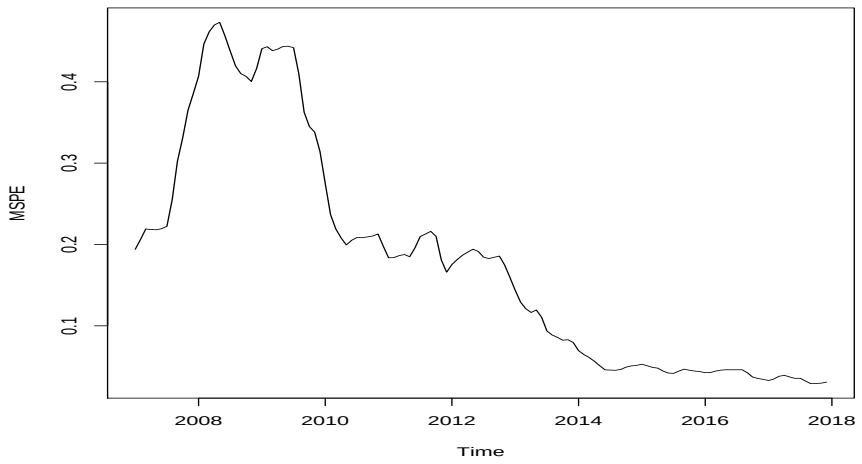


Figure 80: 24 month moving average of mean squared forecasting errors of 12-step-ahead MA-opt forecast of CPI

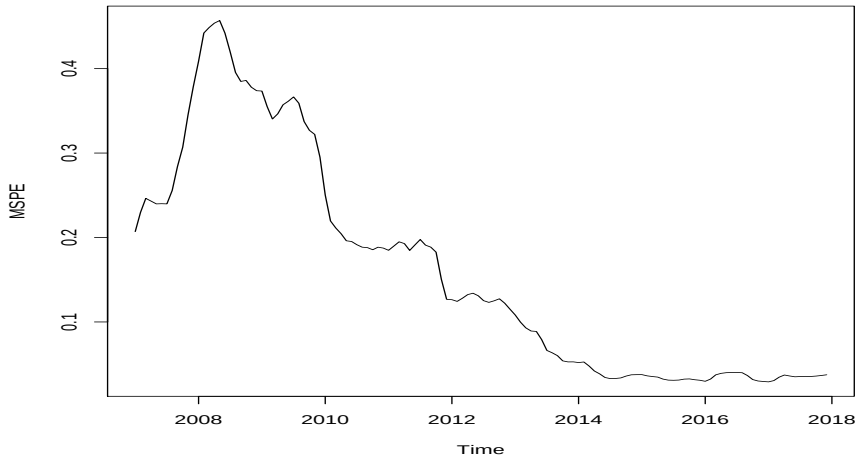


Figure 81: 24 month moving average of mean squared forecasting errors of 12-step-ahead SES forecast of CPI

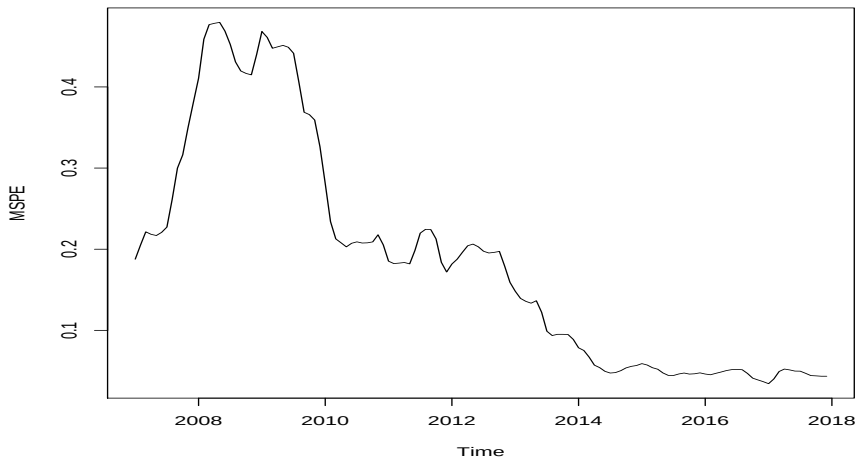


Figure 82: 24 month moving average of mean squared forecasting errors of 12-step-ahead SES-opt forecast of CPI

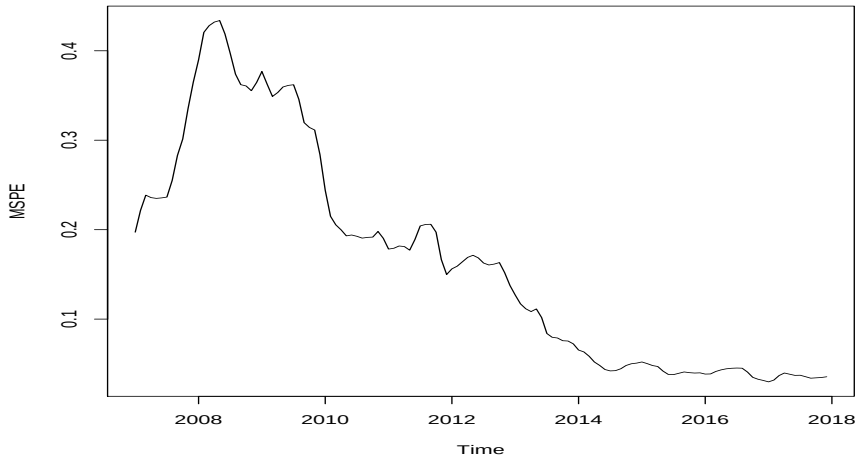


Figure 83: 24 month moving average of mean squared forecasting errors of 12-step-ahead AR(1) forecast of CPI

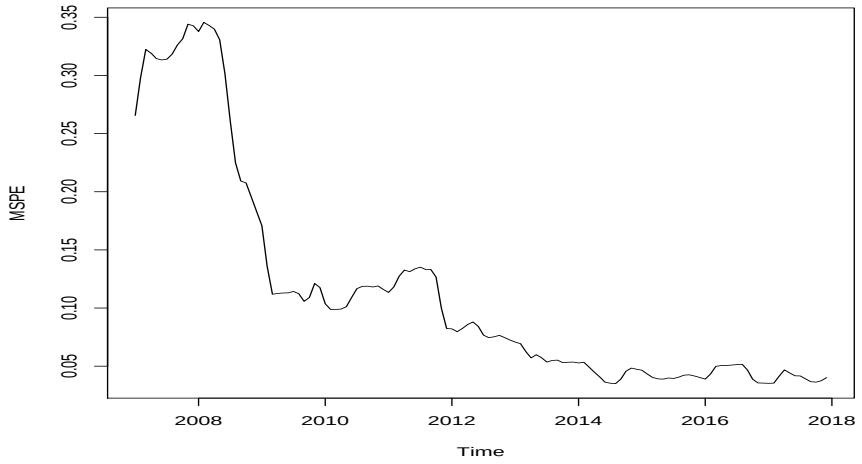


Figure 84: 24 month moving average of mean squared forecasting errors of 12-step-ahead AR(p) forecast of CPI

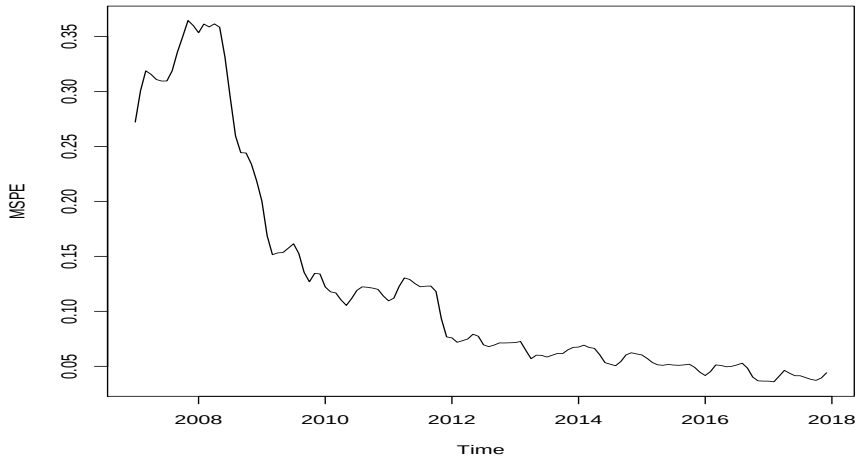


Figure 85: 24 month moving average of mean squared forecasting errors of 12-step-ahead ARd(1) forecast of CPI

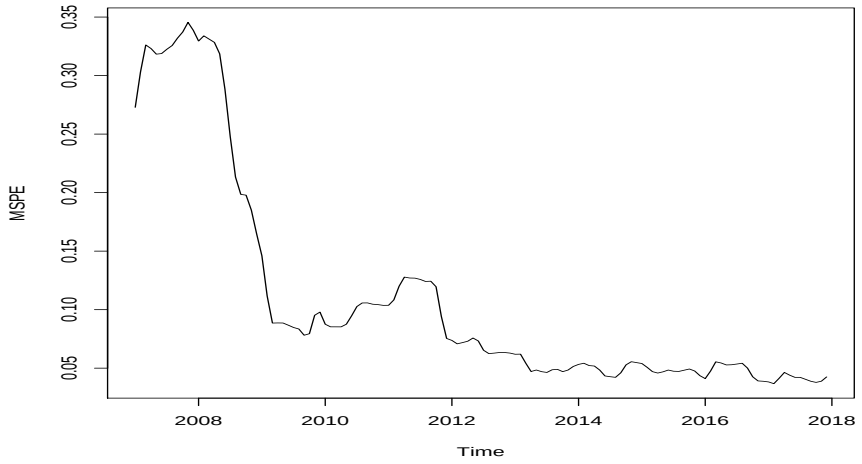


Figure 86: 24 month moving average of mean squared forecasting errors of 12-step-ahead ARd(p) forecast of CPI

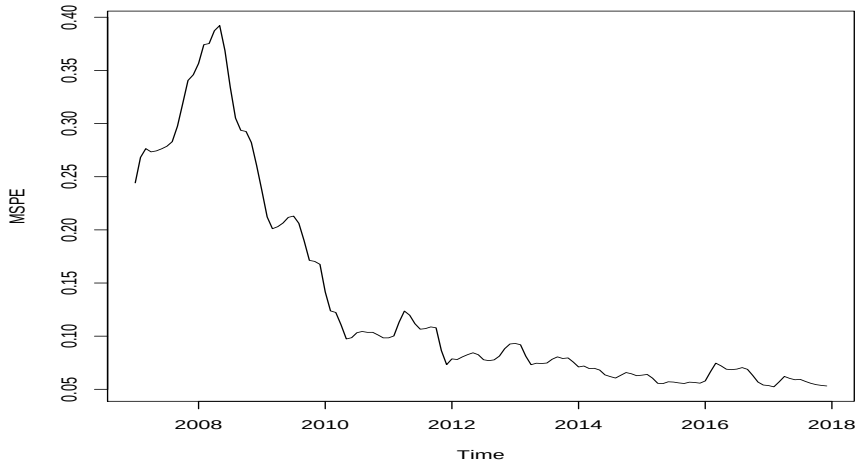


Figure 87: 24 month moving average of mean squared forecasting errors of 12-step-ahead ARMA(1,1) forecast of CPI

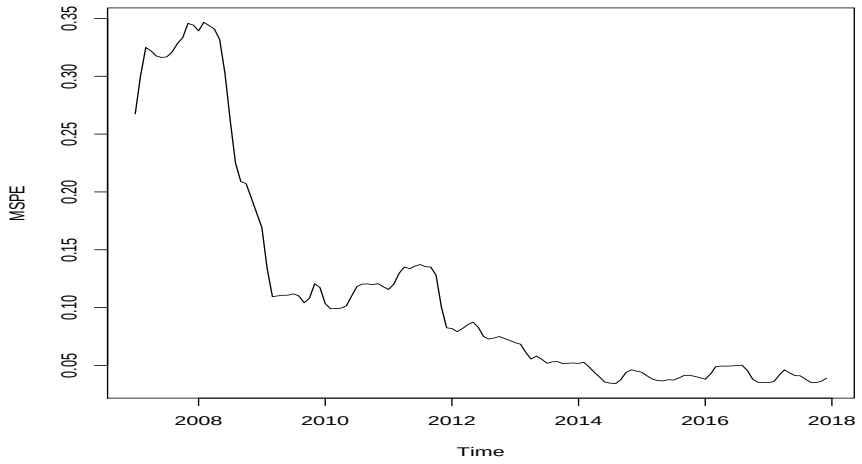


Figure 88: 24 month moving average of mean squared forecasting errors of 12-step-ahead ARMA(p,q) forecast of CPI

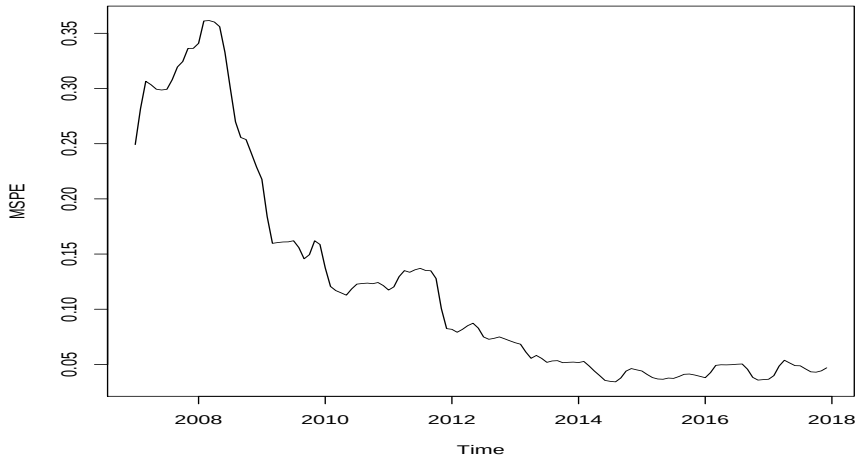


Figure 89: 24 month moving average of mean squared forecasting errors of 12-step-ahead VAR(1) forecast of CPI

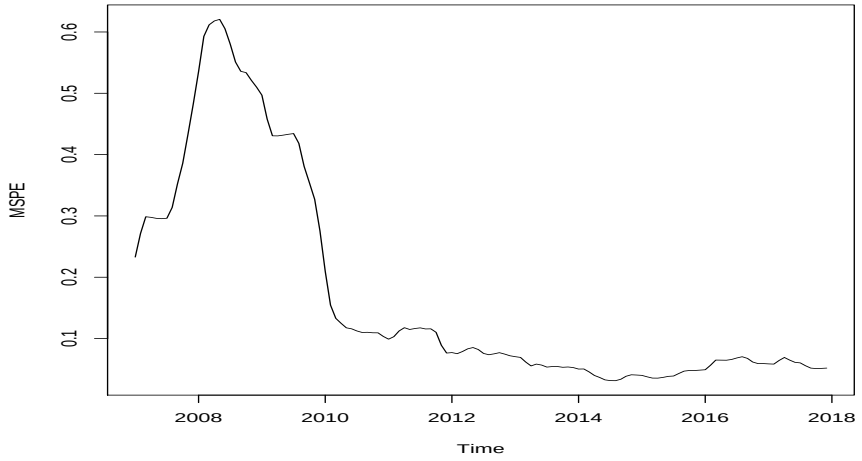


Figure 90: 24 month moving average of mean squared forecasting errors of 12-step-ahead VAR(p) forecast of CPI

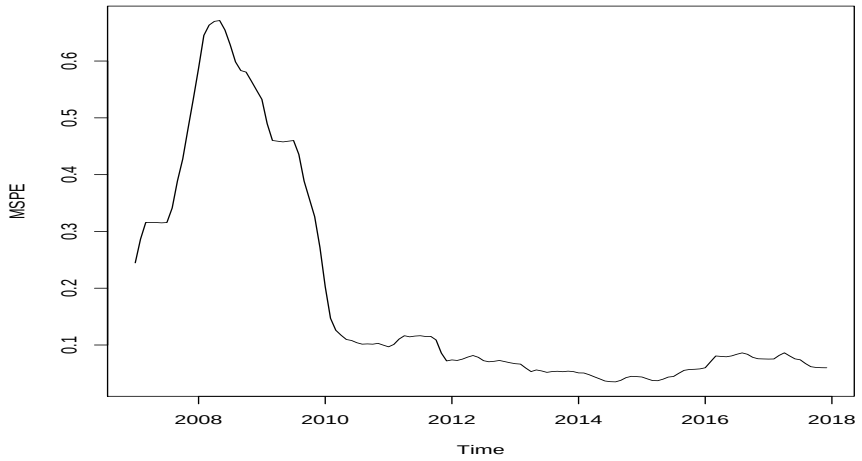


Figure 91: 24 month moving average of mean squared forecasting errors of 12-step-ahead BVAR forecast of CPI

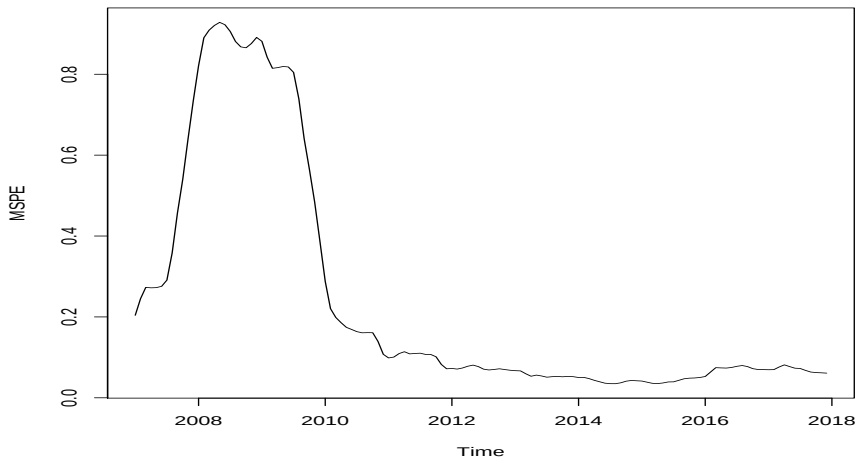


Figure 92: 24 month moving average of mean squared forecasting errors of 12-step-ahead Factor(2) forecast of CPI

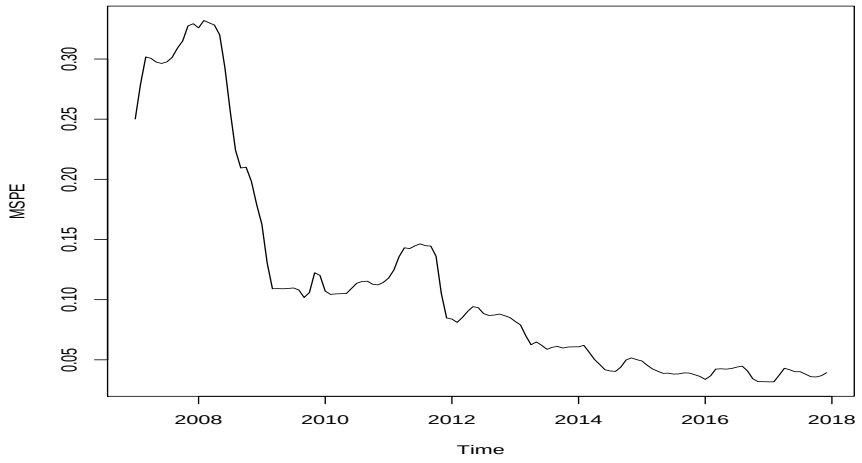


Figure 93: 24 month moving average of mean squared forecasting errors of 12-step-ahead Factor(k) forecast of CPI

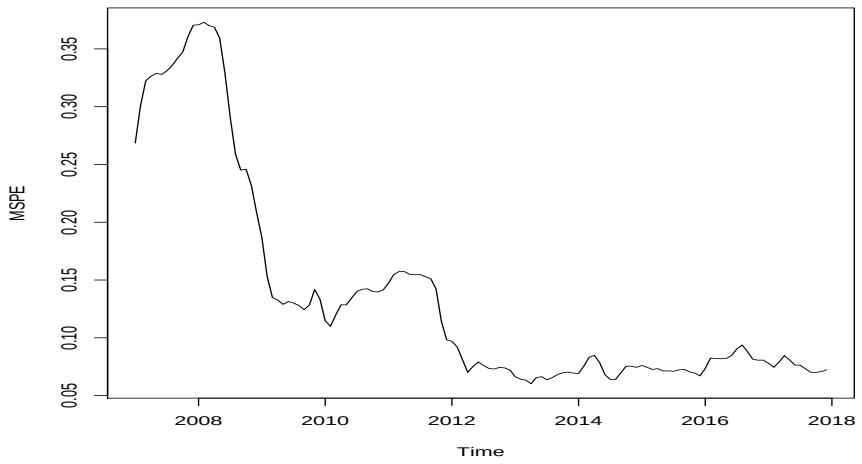


Figure 94: 24 month moving average of mean squared forecasting errors of 12-step-ahead F(2)VAR(1) forecast of CPI

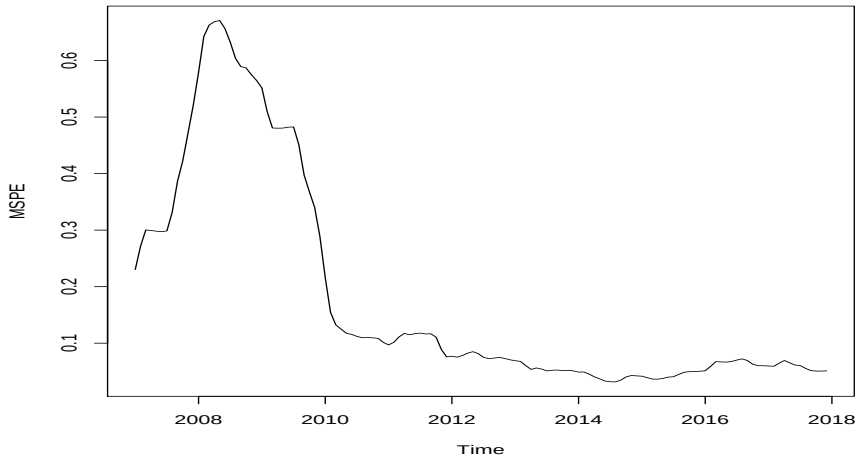
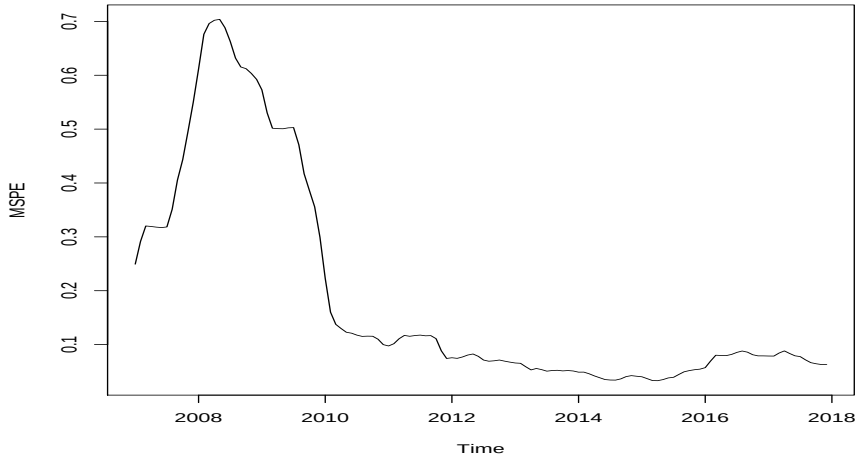


Figure 95: 24 month moving average of mean squared forecasting errors of 12-step-ahead F(2)VAR(p) forecast of CPI



3.2 PPI

3.2.1 Forecast Horizon = 1

Figure 96: 24 month moving average of mean squared forecasting errors of 1-step-ahead Mean forecast of PPI

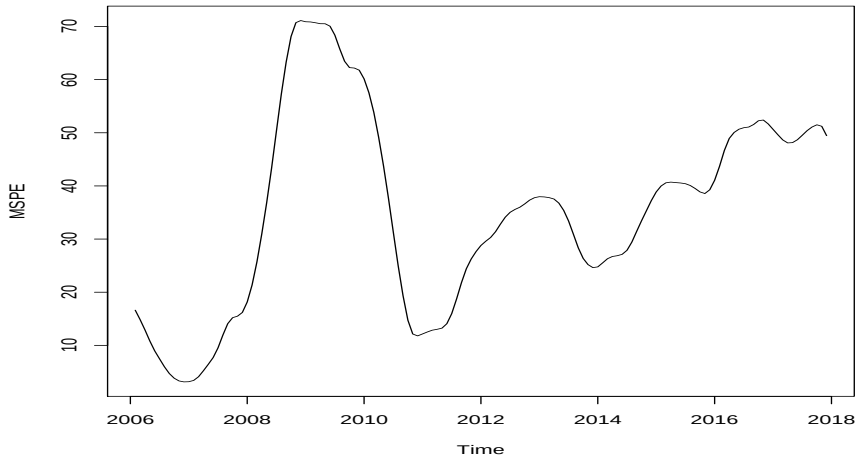


Figure 97: 24 month moving average of mean squared forecasting errors of 1-step-ahead Naive forecast of PPI

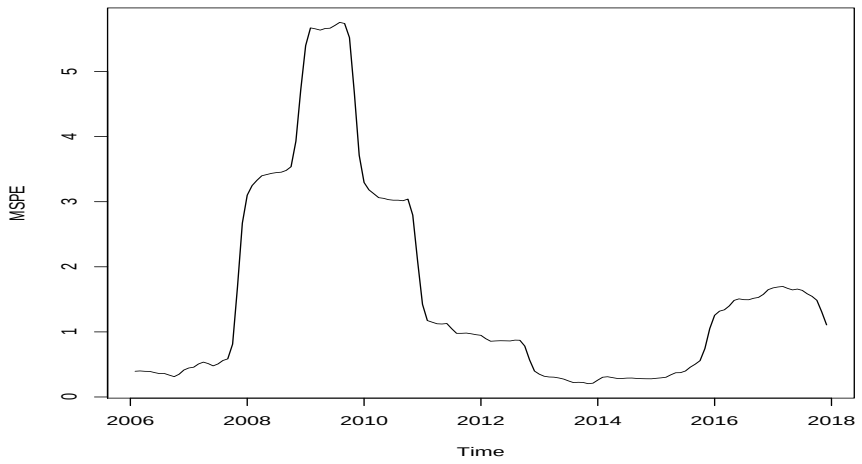


Figure 98: 24 month moving average of mean squared forecasting errors of 1-step-ahead MA forecast of PPI

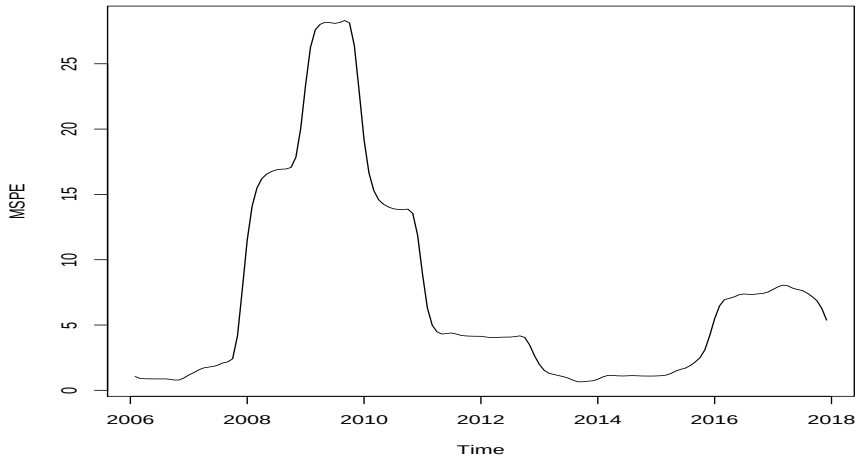


Figure 99: 24 month moving average of mean squared forecasting errors of 1-step-ahead MA-opt forecast of PPI

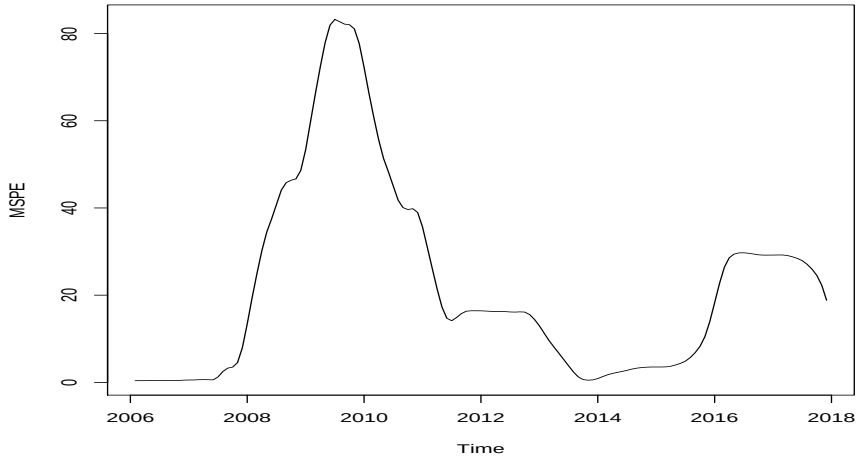


Figure 100: 24 month moving average of mean squared forecasting errors of 1-step-ahead SES forecast of PPI

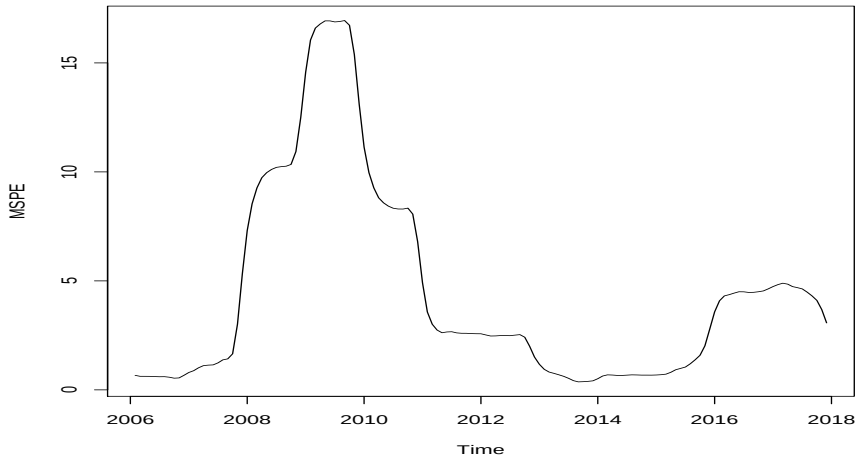


Figure 101: 24 month moving average of mean squared forecasting errors of 1-step-ahead SES-opt forecast of PPI

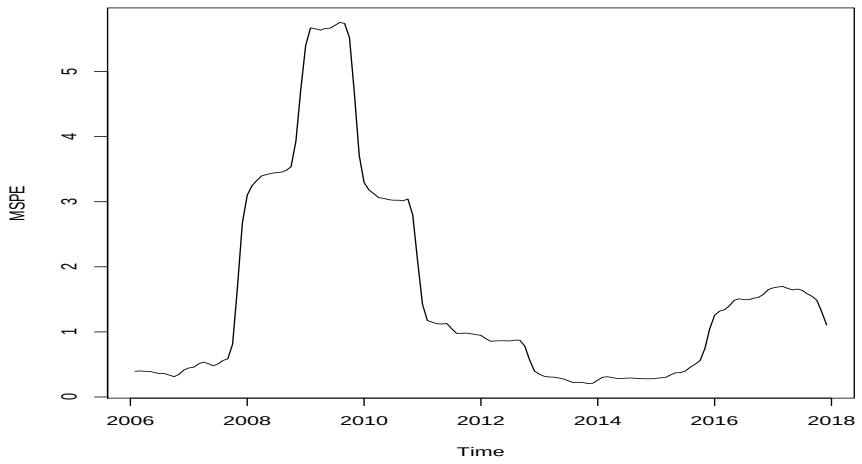


Figure 102: 24 month moving average of mean squared forecasting errors of 1-step-ahead AR(1) forecast of PPI

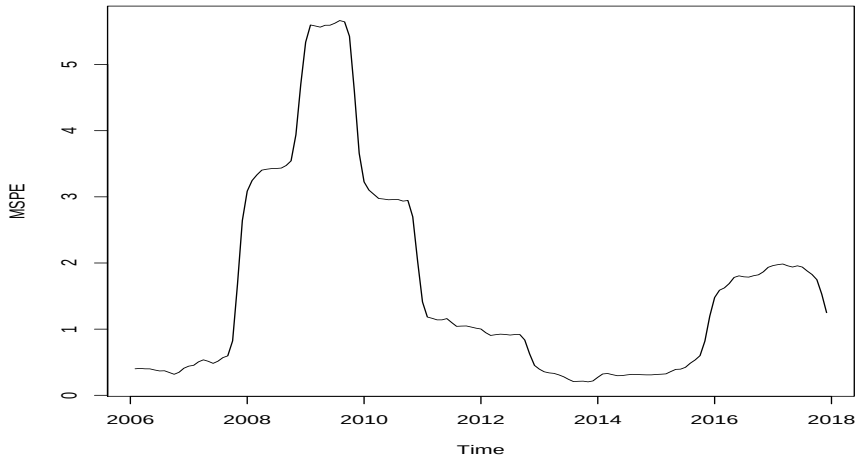


Figure 103: 24 month moving average of mean squared forecasting errors of 1-step-ahead AR(p) forecast of PPI

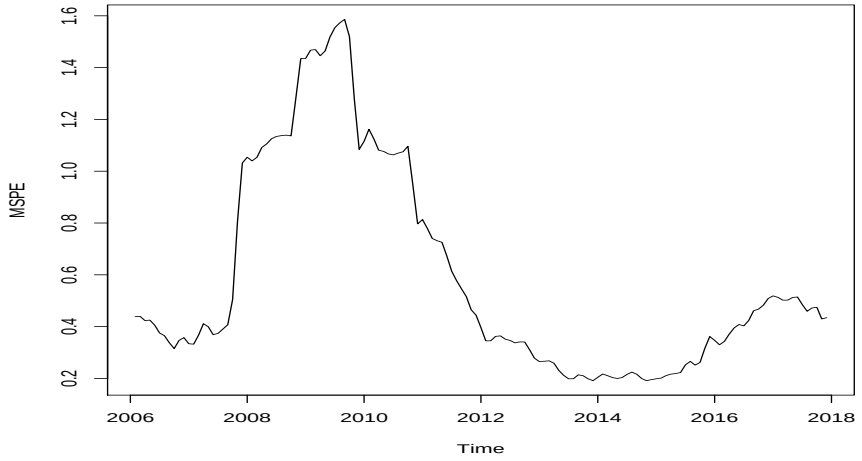


Figure 104: 24 month moving average of mean squared forecasting errors of 1-step-ahead ARd(1) forecast of PPI

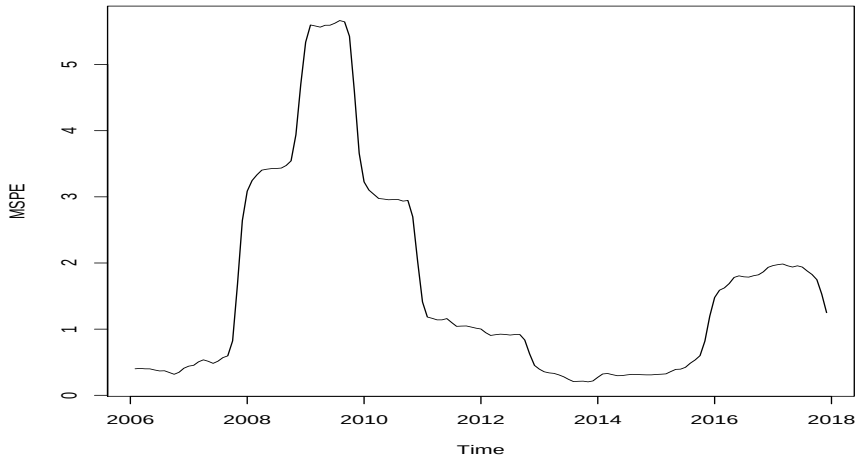


Figure 105: 24 month moving average of mean squared forecasting errors of 1-step-ahead ARd(p) forecast of PPI

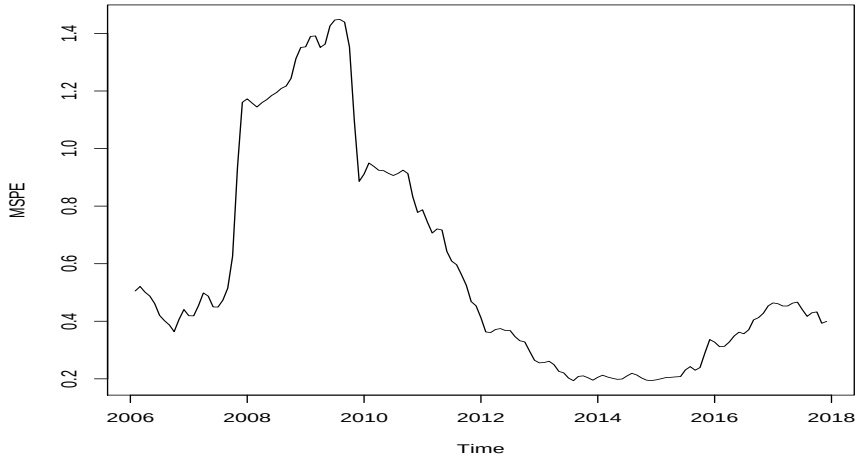


Figure 106: 24 month moving average of mean squared forecasting errors of 1-step-ahead ARMA(1,1) forecast of PPI

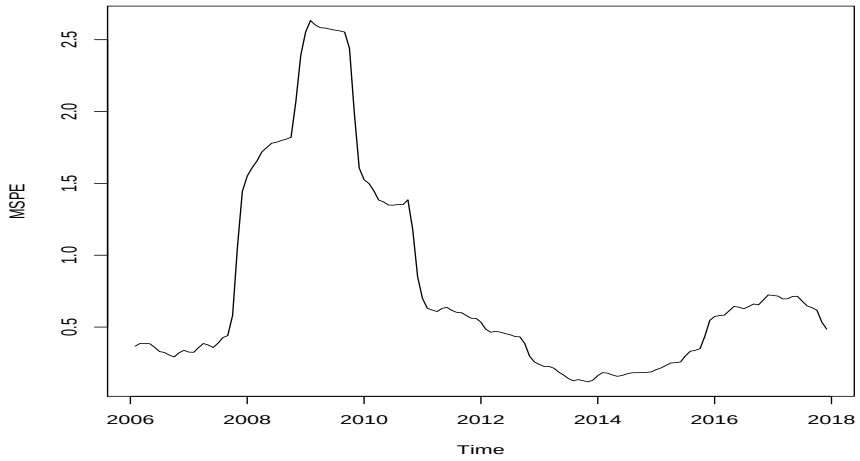


Figure 107: 24 month moving average of mean squared forecasting errors of 1-step-ahead ARMA(p,q) forecast of PPI

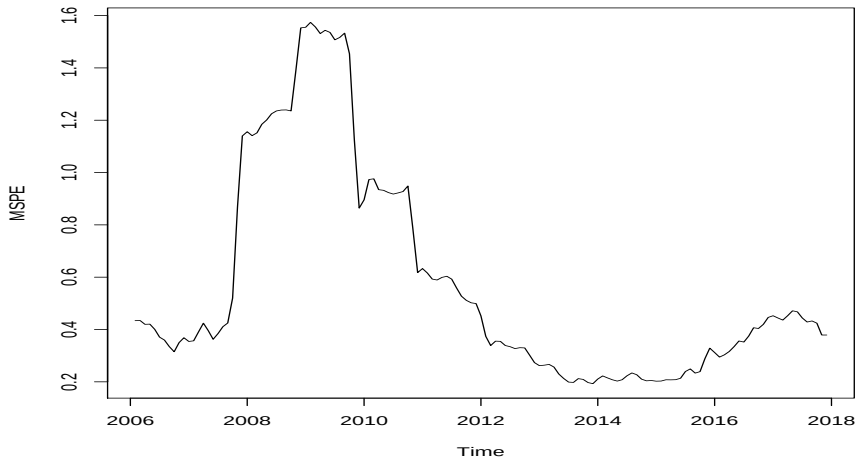


Figure 108: 24 month moving average of mean squared forecasting errors of 1-step-ahead VAR(1) forecast of PPI

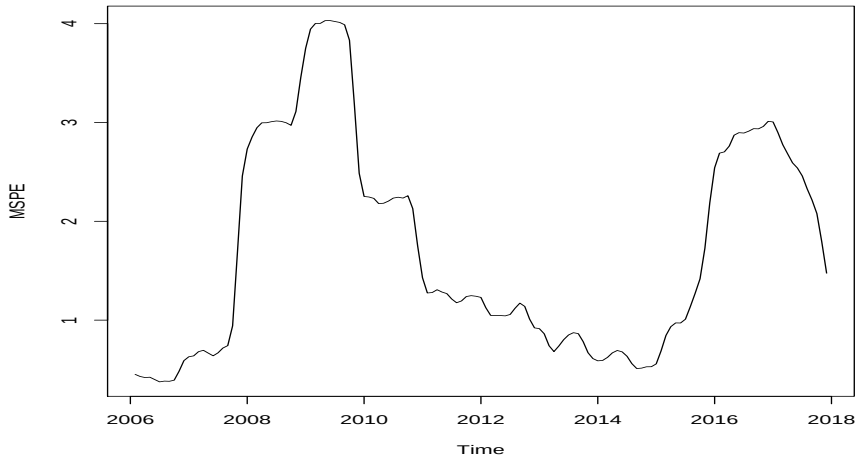


Figure 109: 24 month moving average of mean squared forecasting errors of 1-step-ahead VAR(p) forecast of PPI

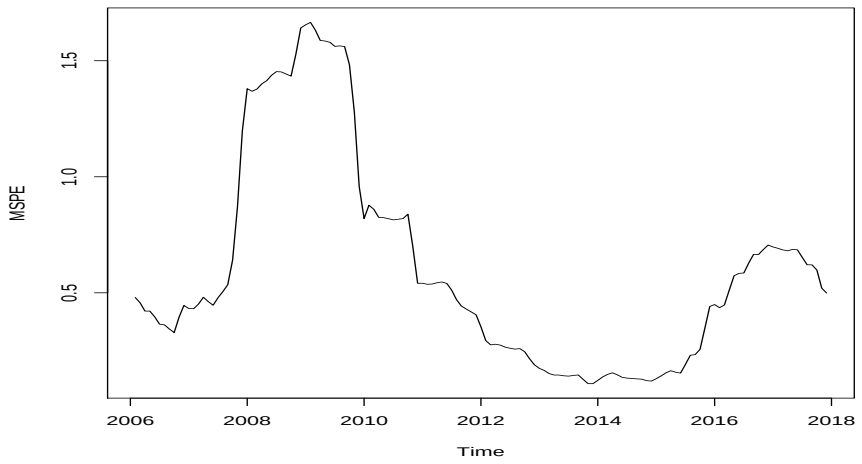


Figure 110: 24 month moving average of mean squared forecasting errors of 1-step-ahead BVAR forecast of PPI

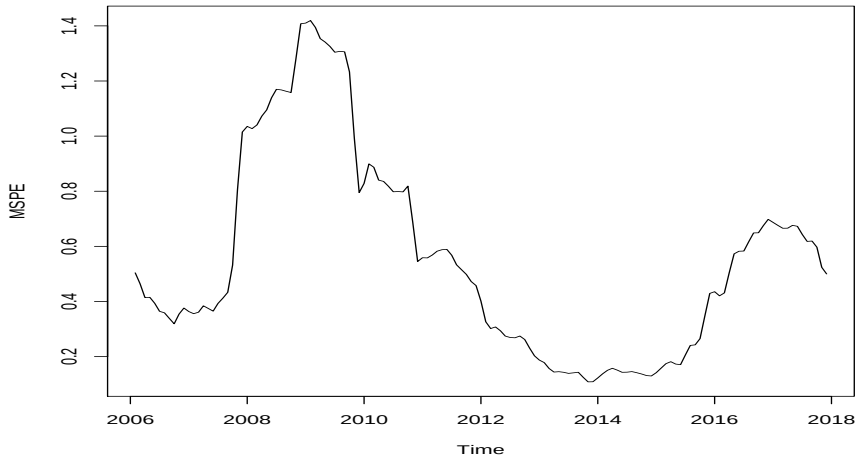


Figure 111: 24 month moving average of mean squared forecasting errors of 1-step-ahead Factor(2) forecast of PPI

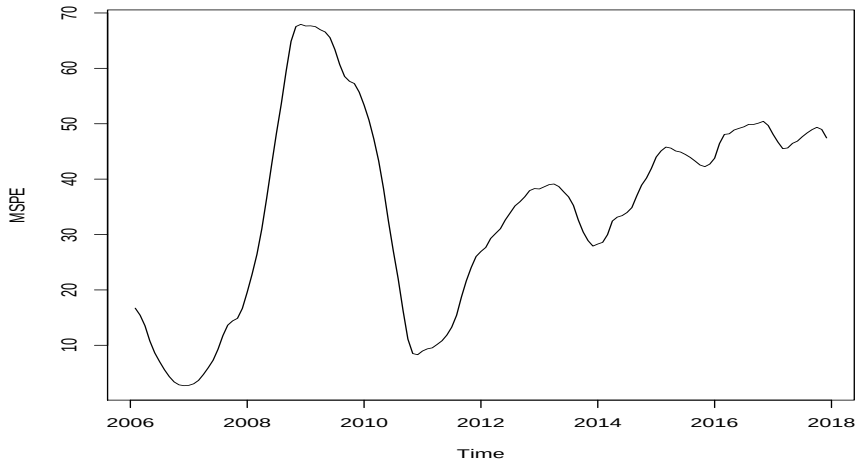


Figure 112: 24 month moving average of mean squared forecasting errors of 1-step-ahead Factor(k) forecast of PPI

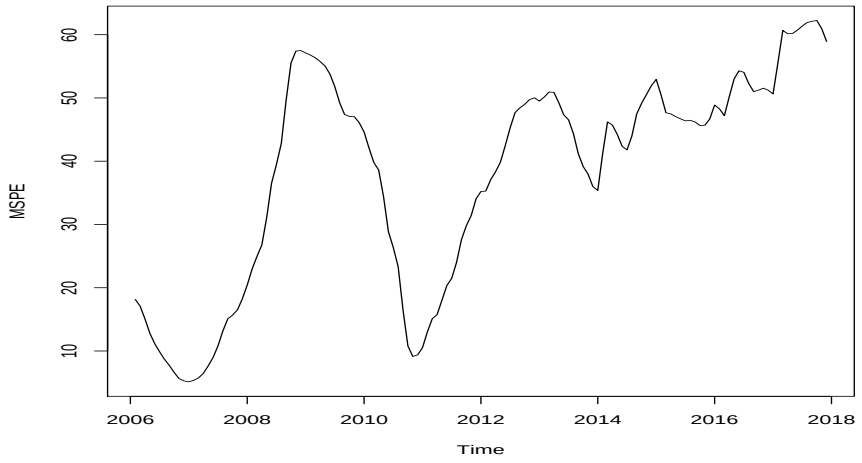


Figure 113: 24 month moving average of mean squared forecasting errors of 1-step-ahead F(2)VAR(1) forecast of PPI

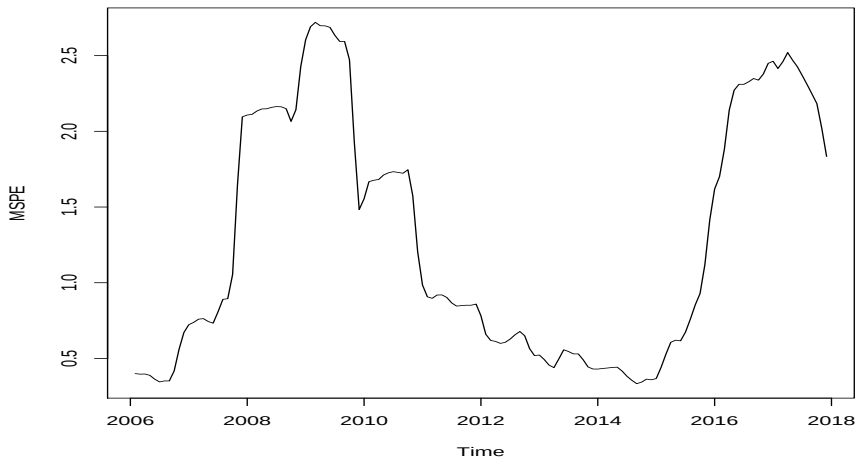
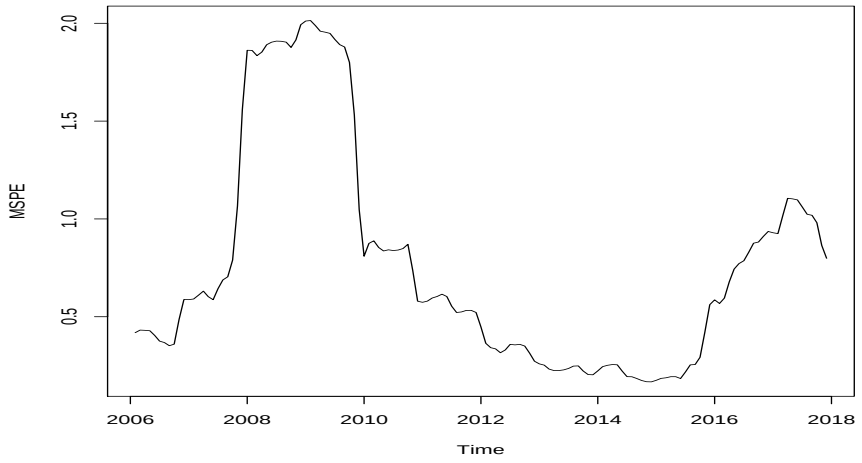


Figure 114: 24 month moving average of mean squared forecasting errors of 1-step-ahead F(2)VAR(p) forecast of PPI



3.2.2 Forecast Horizon = 3

Figure 115: 24 month moving average of mean squared forecasting errors of 3-step-ahead Mean forecast of PPI

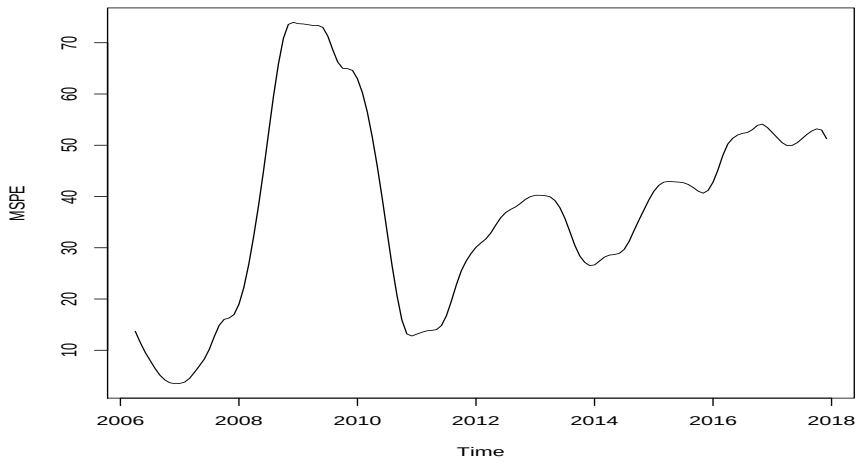


Figure 116: 24 month moving average of mean squared forecasting errors of 3-step-ahead Naive forecast of PPI

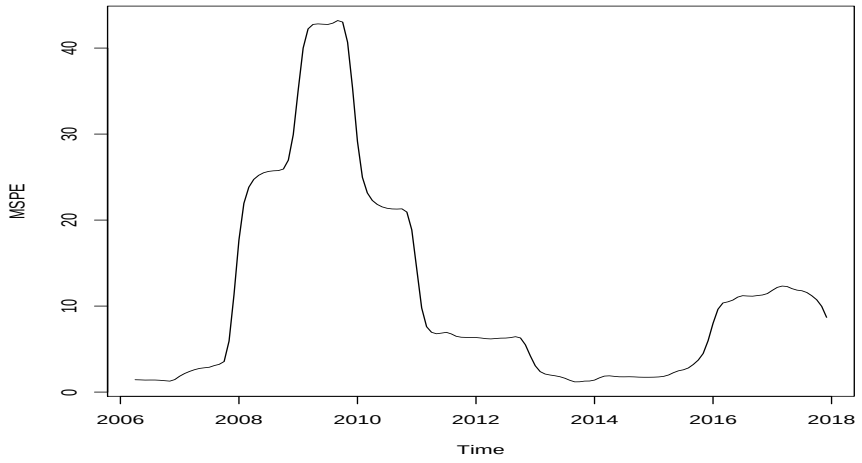


Figure 117: 24 month moving average of mean squared forecasting errors of 3-step-ahead MA forecast of PPI

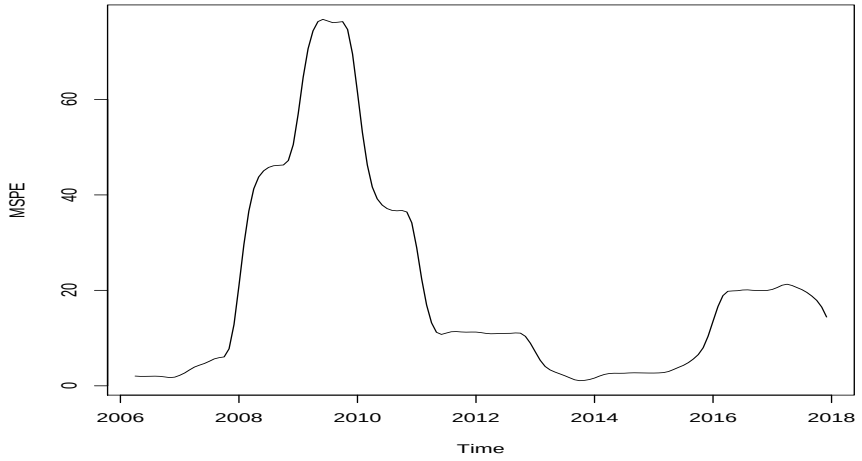


Figure 118: 24 month moving average of mean squared forecasting errors of 3-step-ahead MA-opt forecast of PPI

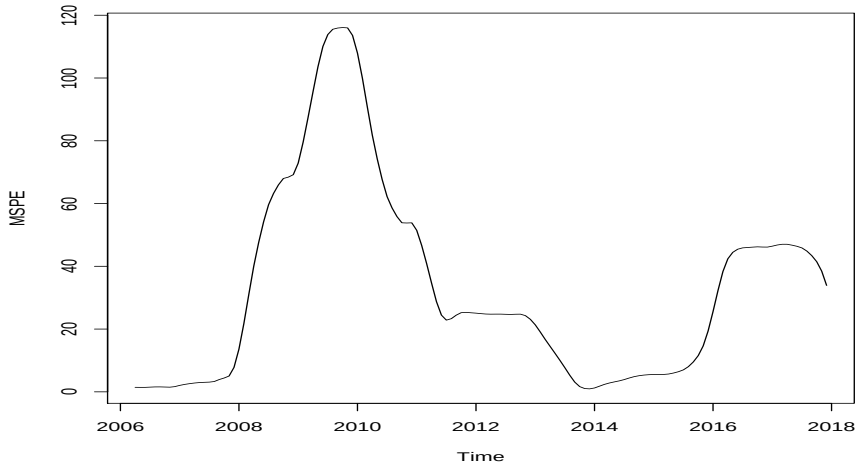


Figure 119: 24 month moving average of mean squared forecasting errors of 3-step-ahead SES forecast of PPI

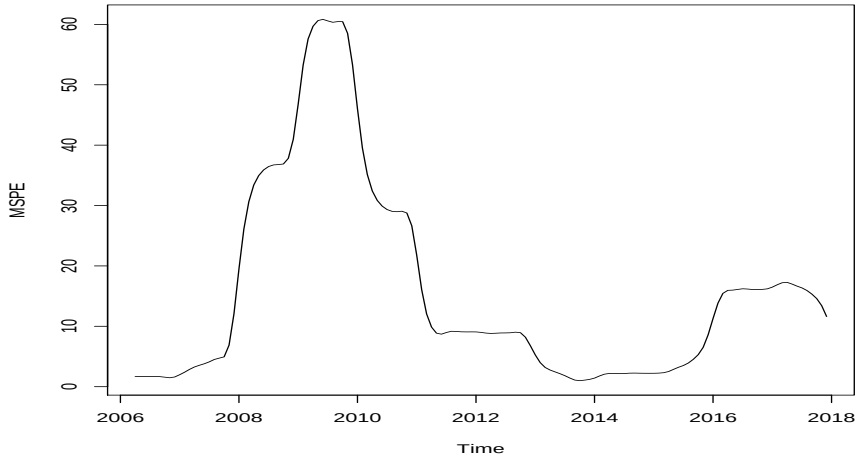


Figure 120: 24 month moving average of mean squared forecasting errors of 3-step-ahead SES-opt forecast of PPI

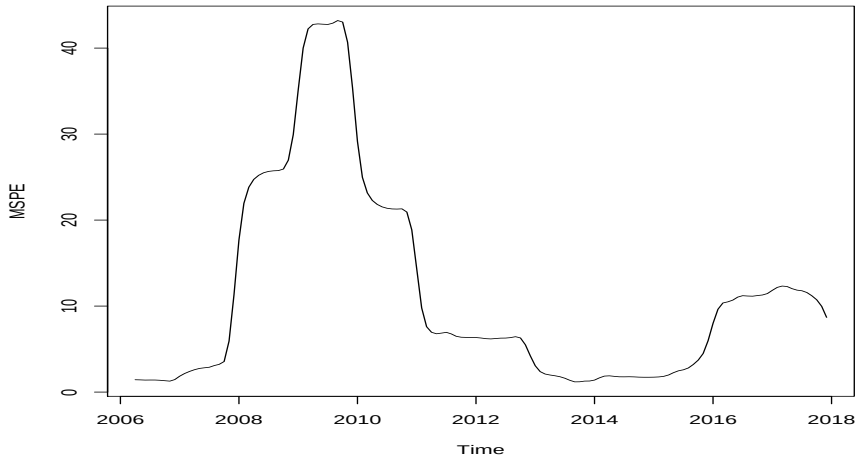


Figure 121: 24 month moving average of mean squared forecasting errors of 3-step-ahead AR(1) forecast of PPI

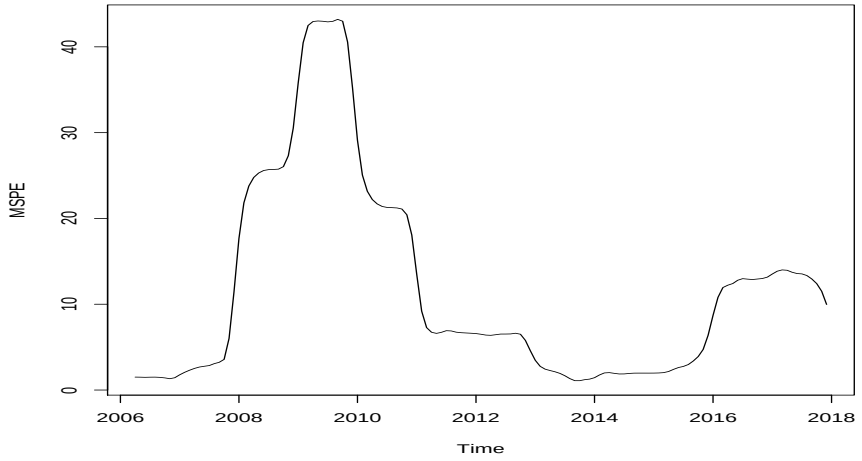


Figure 122: 24 month moving average of mean squared forecasting errors of 3-step-ahead AR(p) forecast of PPI

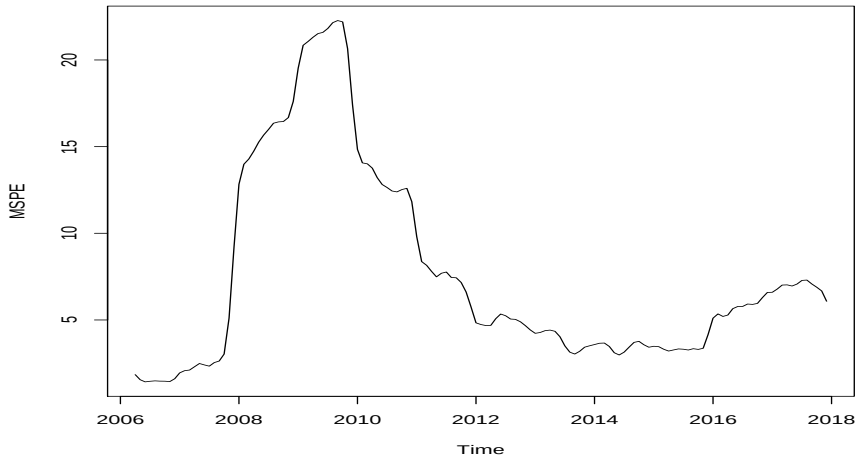


Figure 123: 24 month moving average of mean squared forecasting errors of 3-step-ahead ARd(1) forecast of PPI

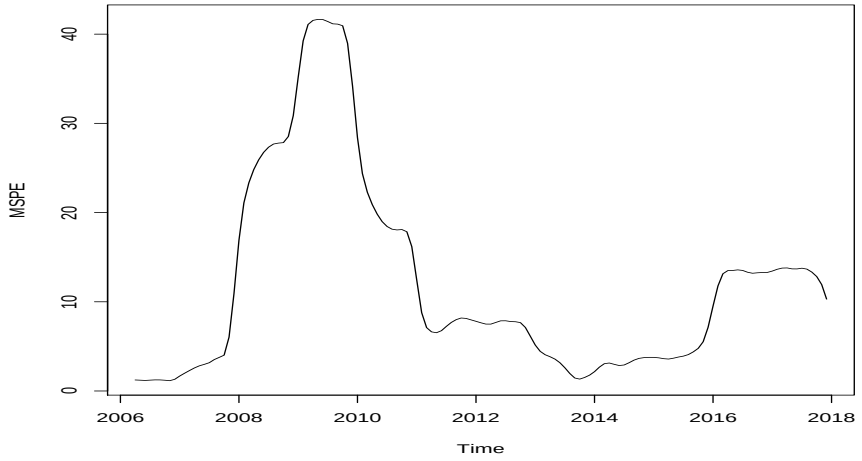


Figure 124: 24 month moving average of mean squared forecasting errors of 3-step-ahead ARd(p) forecast of PPI

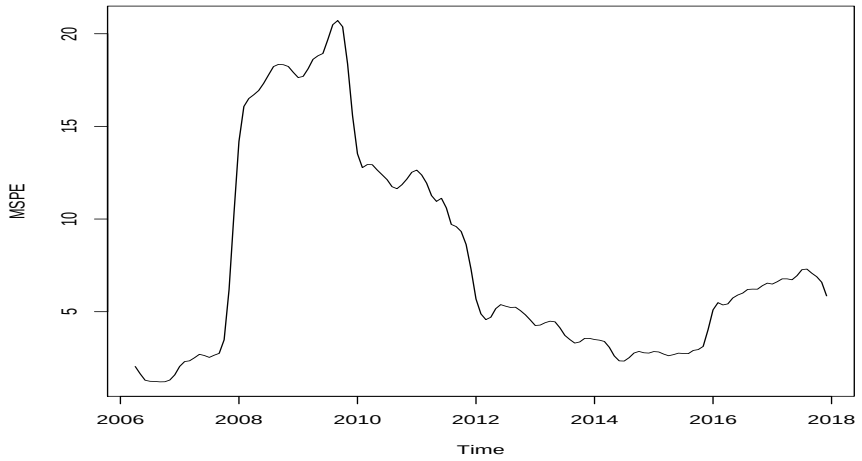


Figure 125: 24 month moving average of mean squared forecasting errors of 3-step-ahead ARMA(1,1) forecast of PPI

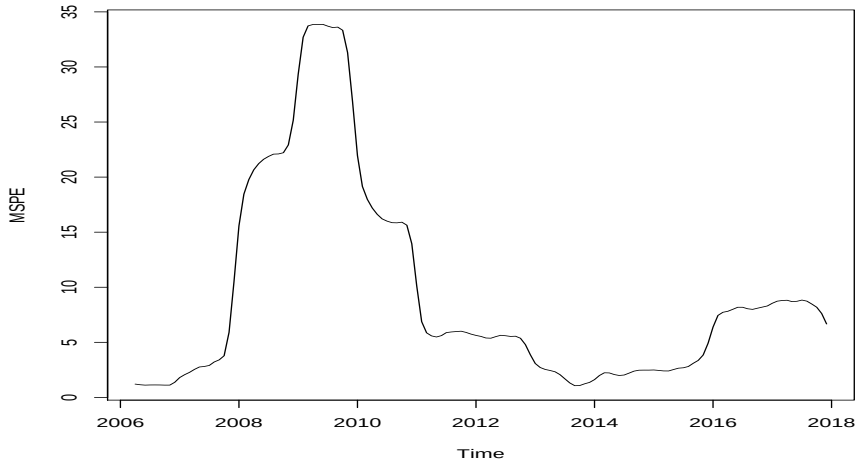


Figure 126: 24 month moving average of mean squared forecasting errors of 3-step-ahead ARMA(p,q) forecast of PPI

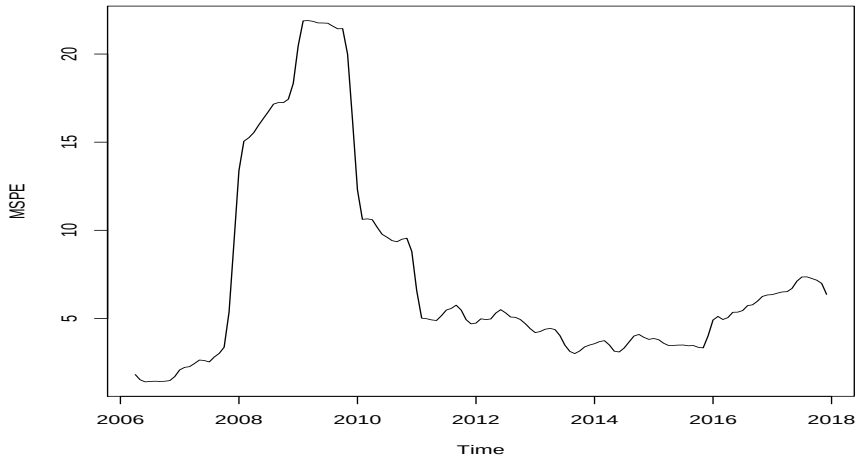


Figure 127: 24 month moving average of mean squared forecasting errors of 3-step-ahead VAR(1) forecast of PPI

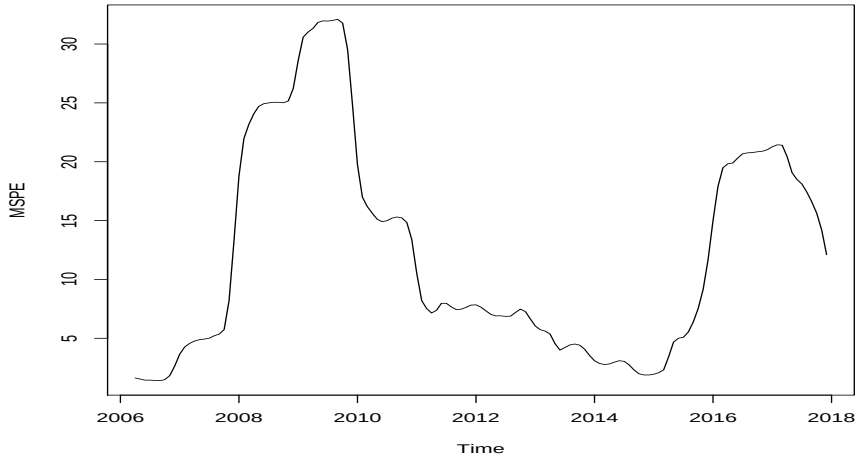


Figure 128: 24 month moving average of mean squared forecasting errors of 3-step-ahead VAR(p) forecast of PPI

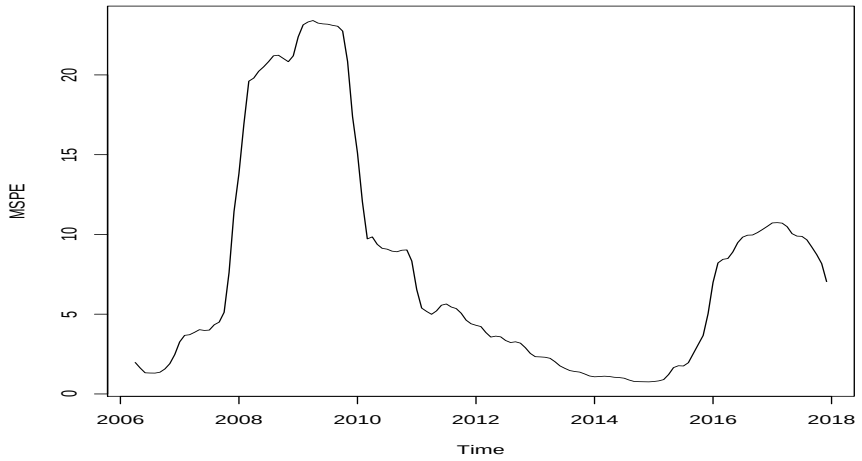


Figure 129: 24 month moving average of mean squared forecasting errors of 3-step-ahead BVAR forecast of PPI

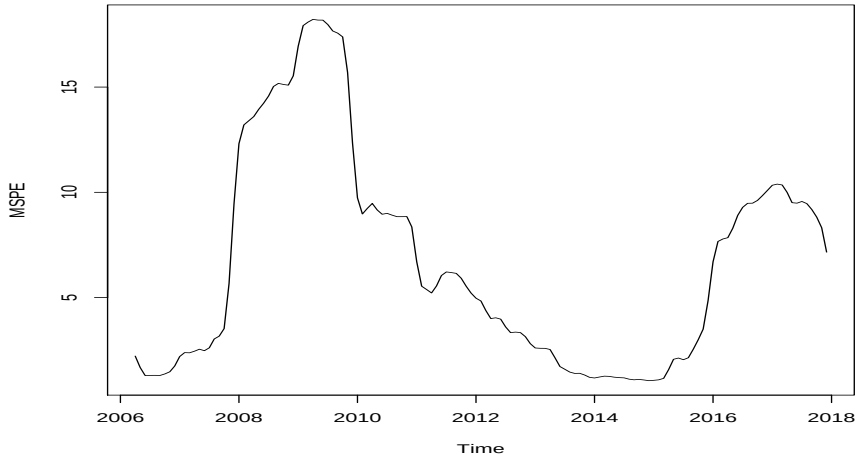


Figure 130: 24 month moving average of mean squared forecasting errors of 3-step-ahead Factor(2) forecast of PPI

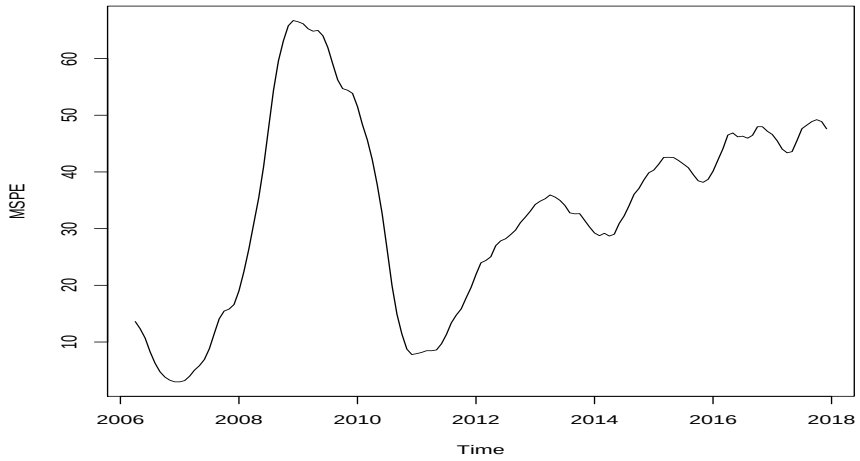


Figure 131: 24 month moving average of mean squared forecasting errors of 3-step-ahead Factor(k) forecast of PPI

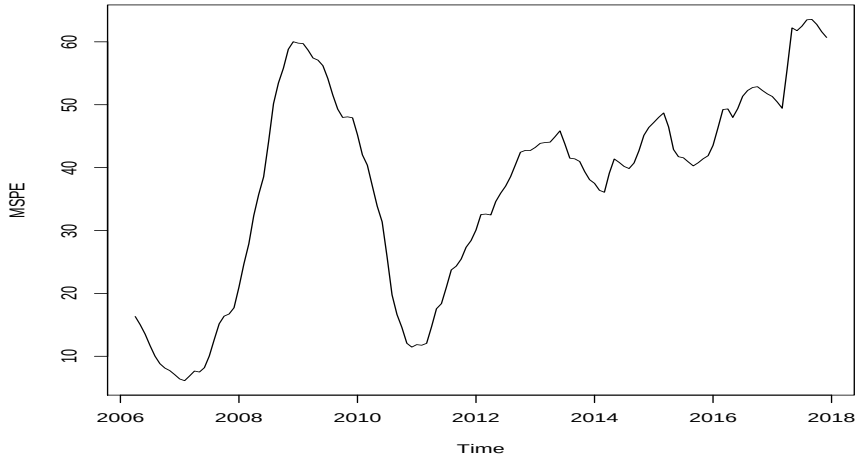


Figure 132: 24 month moving average of mean squared forecasting errors of 3-step-ahead F(2)VAR(1) forecast of PPI

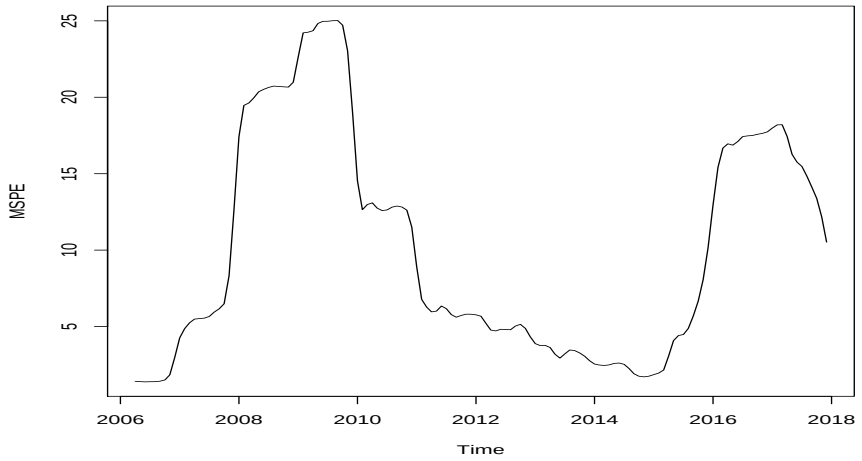
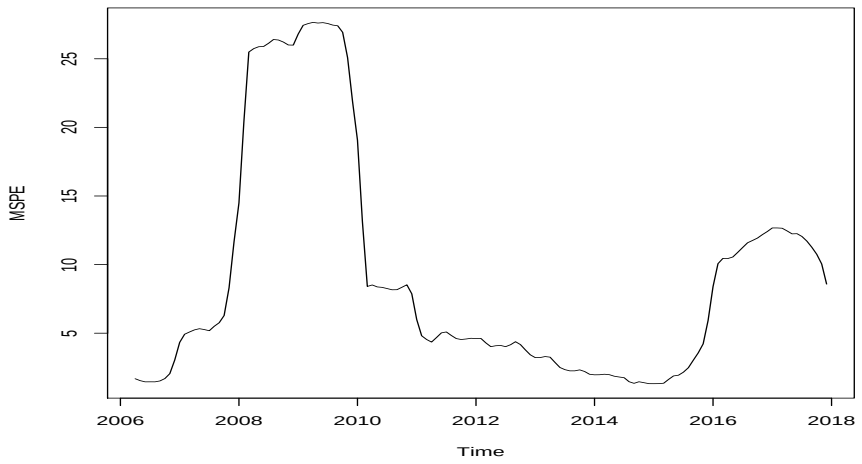


Figure 133: 24 month moving average of mean squared forecasting errors of 3-step-ahead F(2)VAR(p) forecast of PPI



3.2.3 Forecast Horizon = 6

Figure 134: 24 month moving average of mean squared forecasting errors of 6-step-ahead Mean forecast of PPI

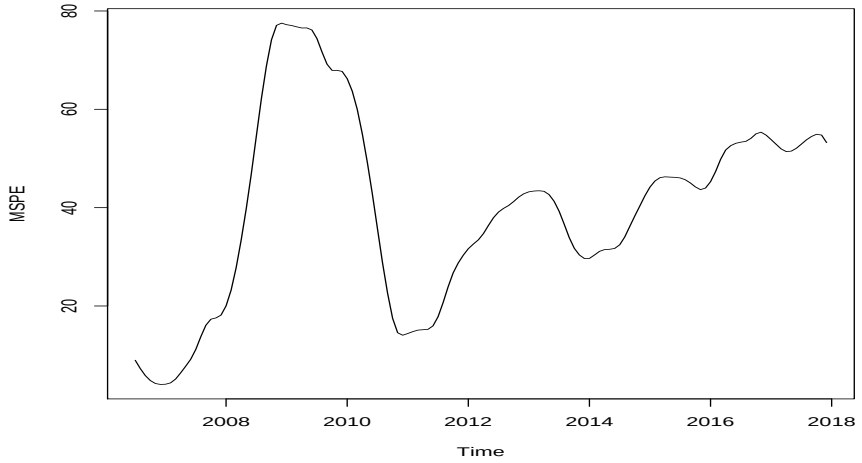


Figure 135: 24 month moving average of mean squared forecasting errors of 6-step-ahead Naive forecast of PPI

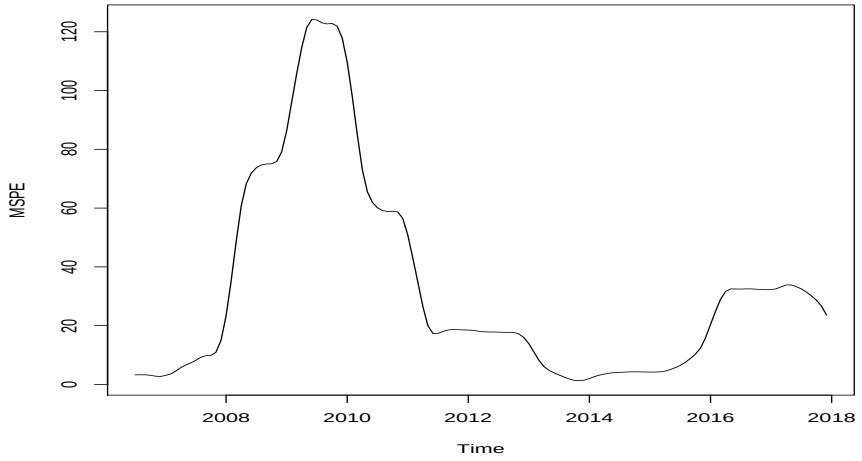


Figure 136: 24 month moving average of mean squared forecasting errors of 6-step-ahead MA forecast of PPI

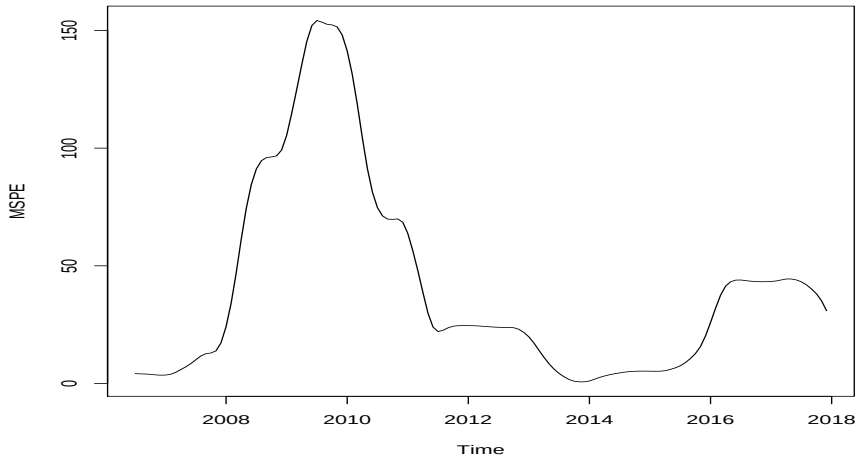


Figure 137: 24 month moving average of mean squared forecasting errors of 6-step-ahead MA-opt forecast of PPI

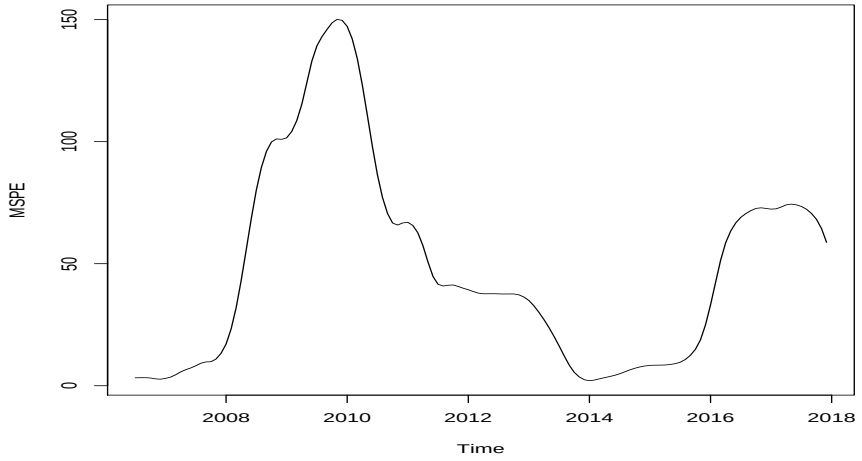


Figure 138: 24 month moving average of mean squared forecasting errors of 6-step-ahead SES forecast of PPI

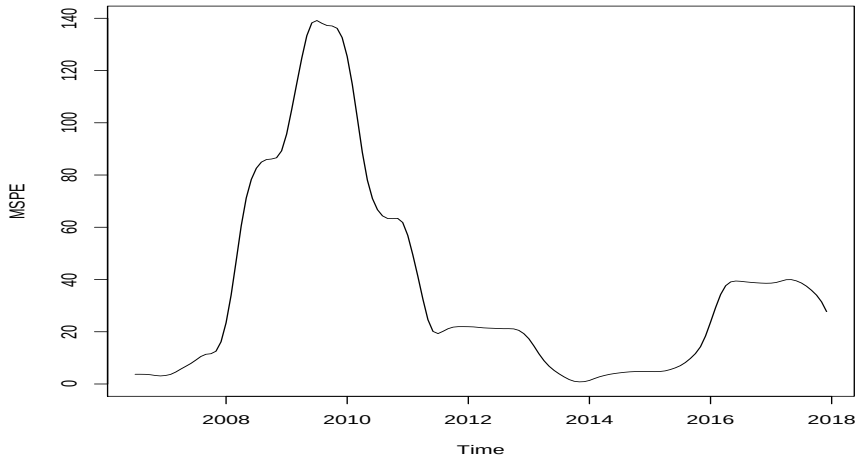


Figure 139: 24 month moving average of mean squared forecasting errors of 6-step-ahead SES-opt forecast of PPI

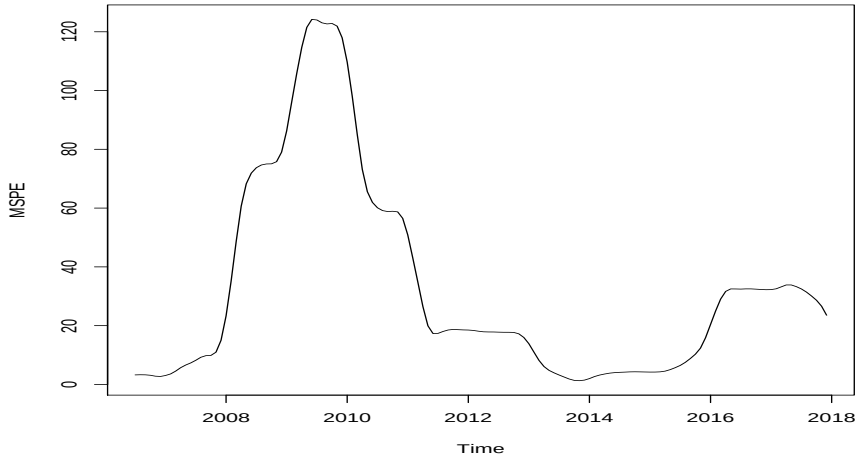


Figure 140: 24 month moving average of mean squared forecasting errors of 6-step-ahead AR(1) forecast of PPI

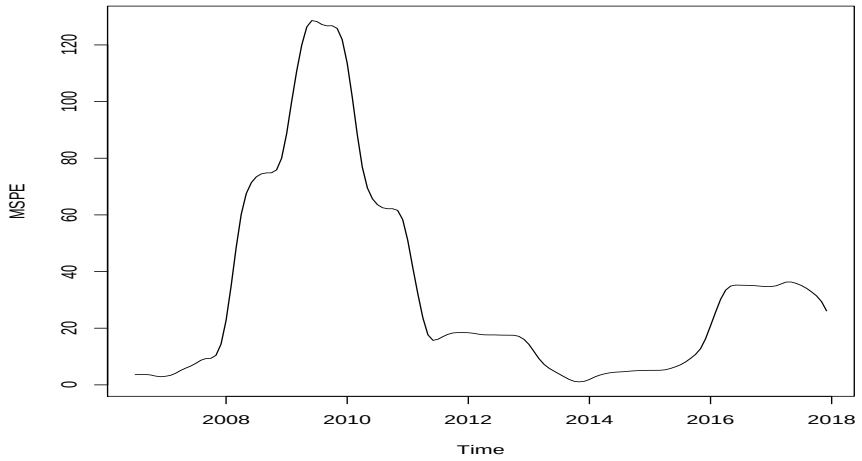


Figure 141: 24 month moving average of mean squared forecasting errors of 6-step-ahead AR(p) forecast of PPI

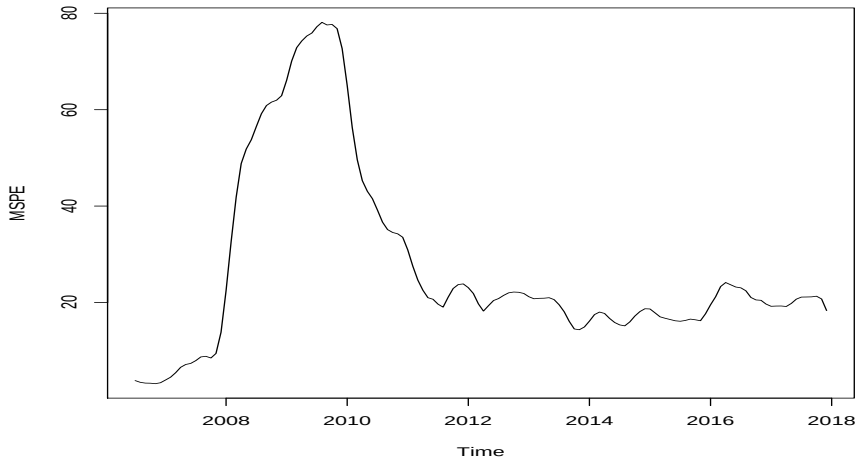


Figure 142: 24 month moving average of mean squared forecasting errors of 6-step-ahead ARd(1) forecast of PPI

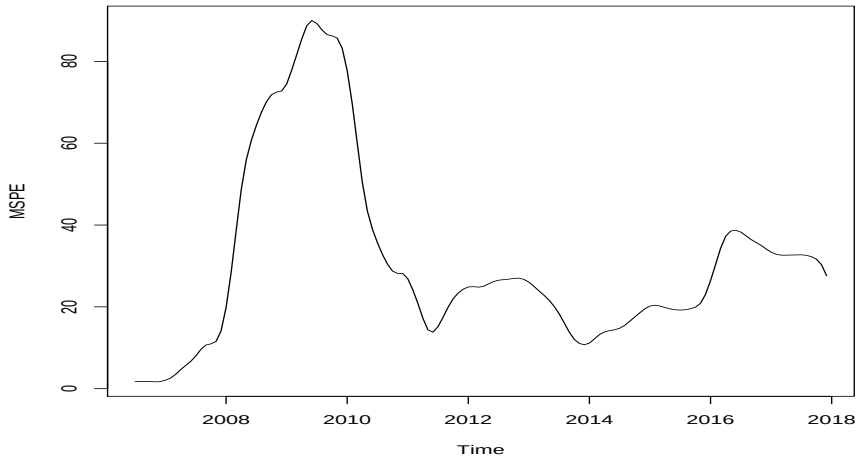


Figure 143: 24 month moving average of mean squared forecasting errors of 6-step-ahead ARd(p) forecast of PPI

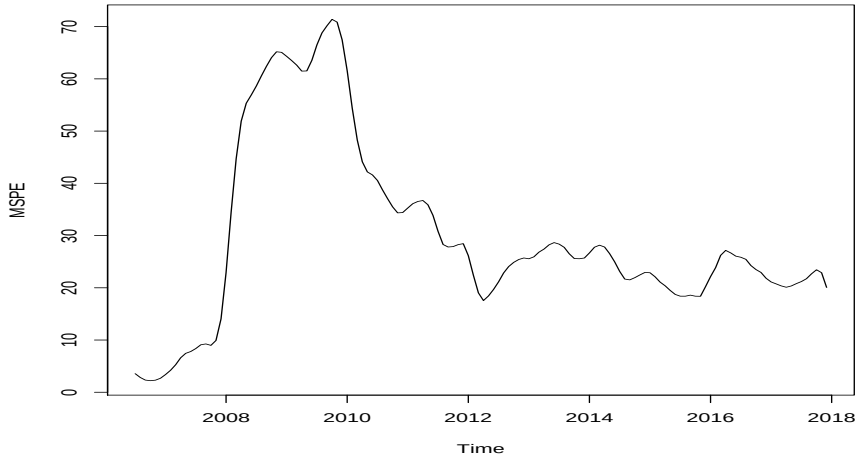


Figure 144: 24 month moving average of mean squared forecasting errors of 6-step-ahead ARMA(1,1) forecast of PPI

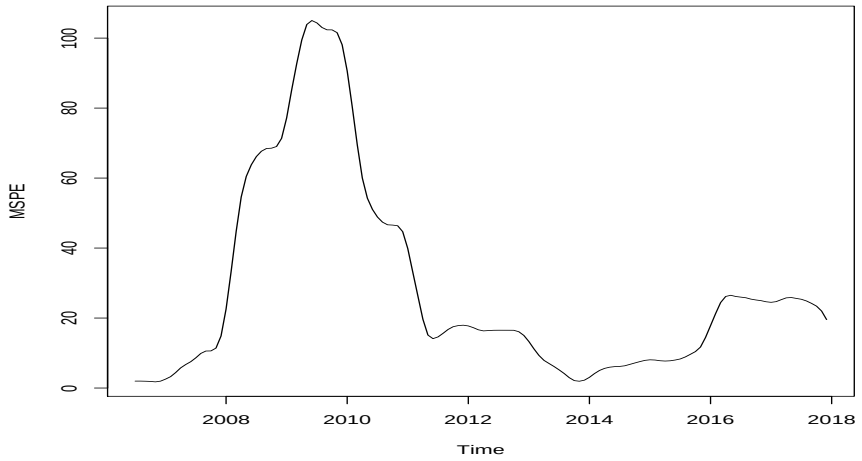


Figure 145: 24 month moving average of mean squared forecasting errors of 6-step-ahead ARMA(p,q) forecast of PPI

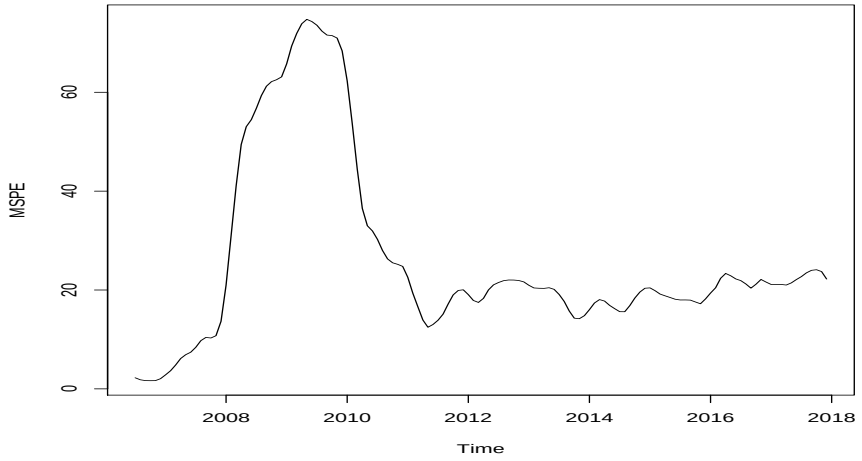


Figure 146: 24 month moving average of mean squared forecasting errors of 6-step-ahead VAR(1) forecast of PPI

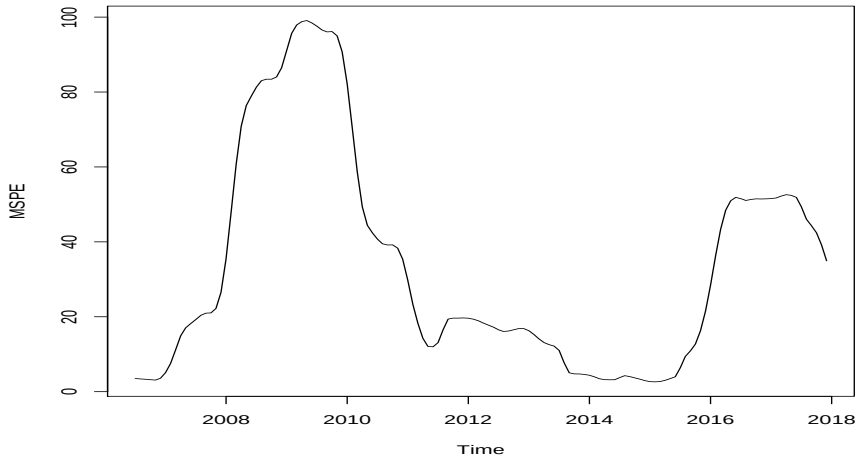


Figure 147: 24 month moving average of mean squared forecasting errors of 6-step-ahead VAR(p) forecast of PPI

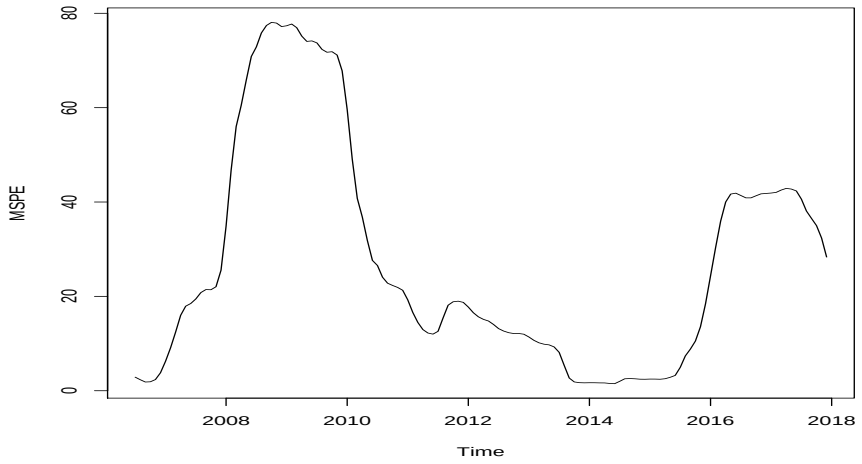


Figure 148: 24 month moving average of mean squared forecasting errors of 6-step-ahead BVAR forecast of PPI

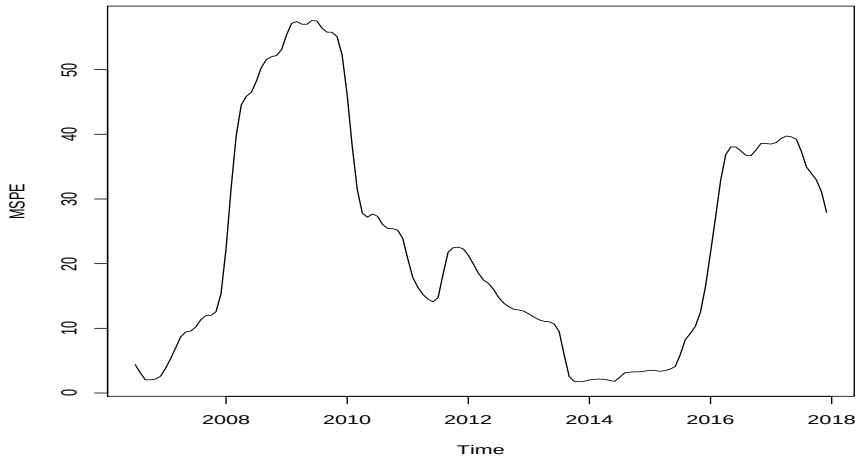


Figure 149: 24 month moving average of mean squared forecasting errors of 6-step-ahead Factor(2) forecast of PPI

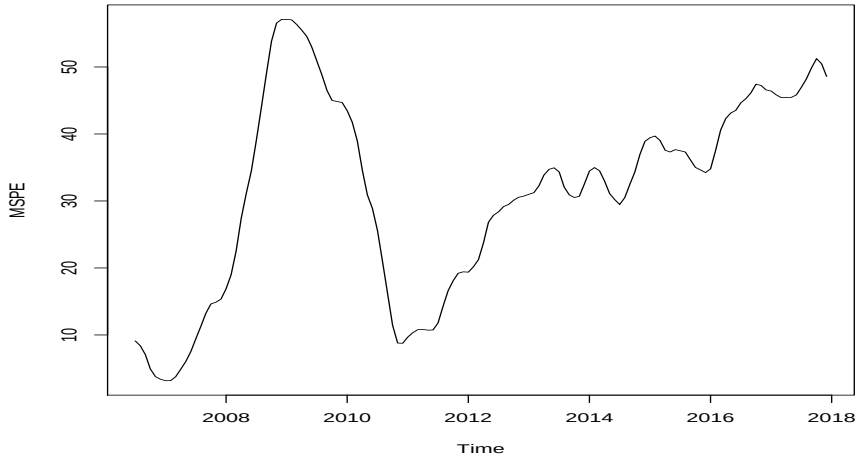


Figure 150: 24 month moving average of mean squared forecasting errors of 6-step-ahead Factor(k) forecast of PPI

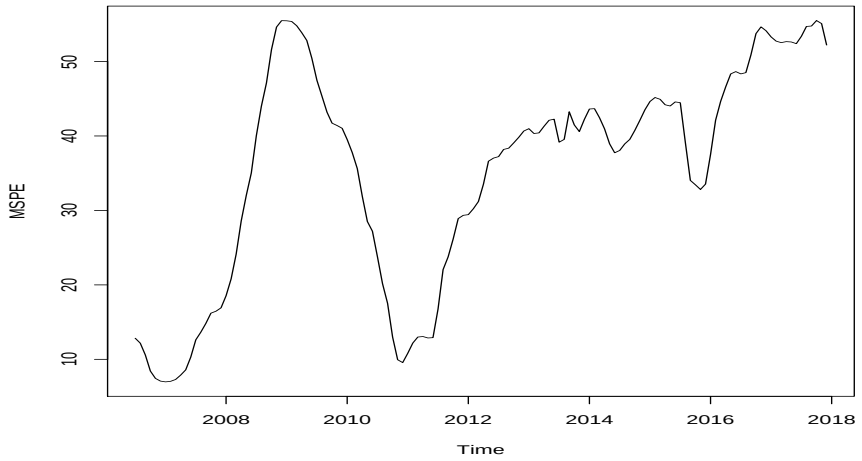


Figure 151: 24 month moving average of mean squared forecasting errors of 6-step-ahead F(2)VAR(1) forecast of PPI

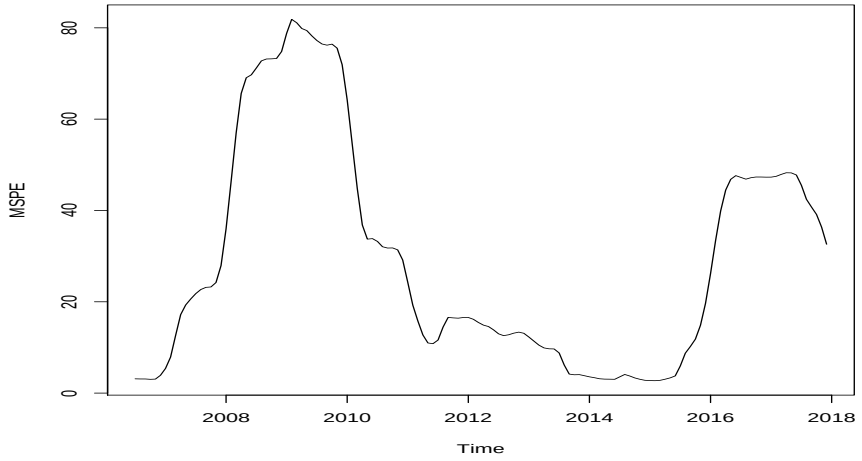
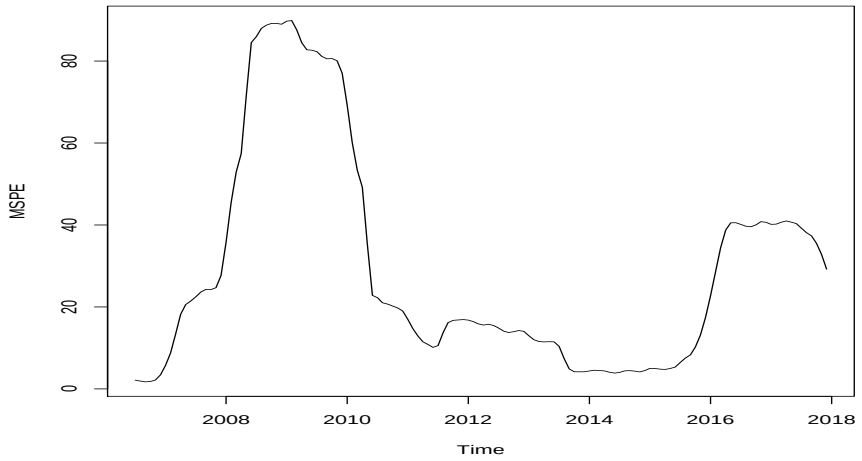


Figure 152: 24 month moving average of mean squared forecasting errors of 6-step-ahead F(2)VAR(p) forecast of PPI



3.2.4 Forecast Horizon = 9

Figure 153: 24 month moving average of mean squared forecasting errors of 9-step-ahead Mean forecast of PPI

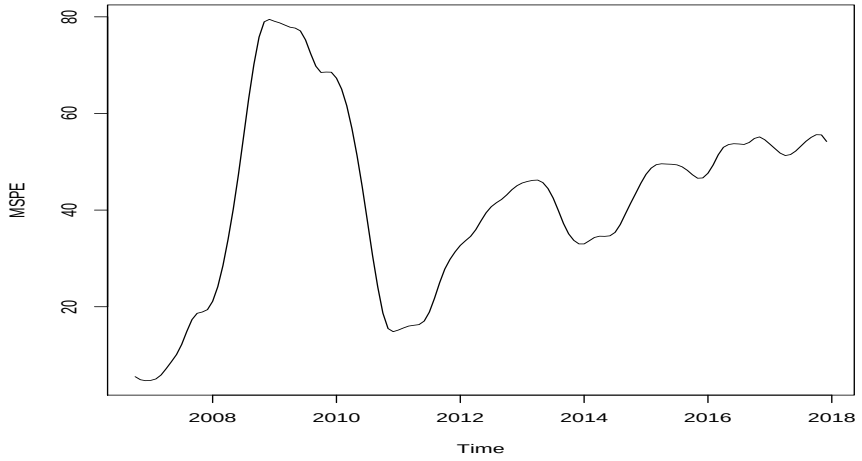


Figure 154: 24 month moving average of mean squared forecasting errors of 9-step-ahead Naive forecast of PPI

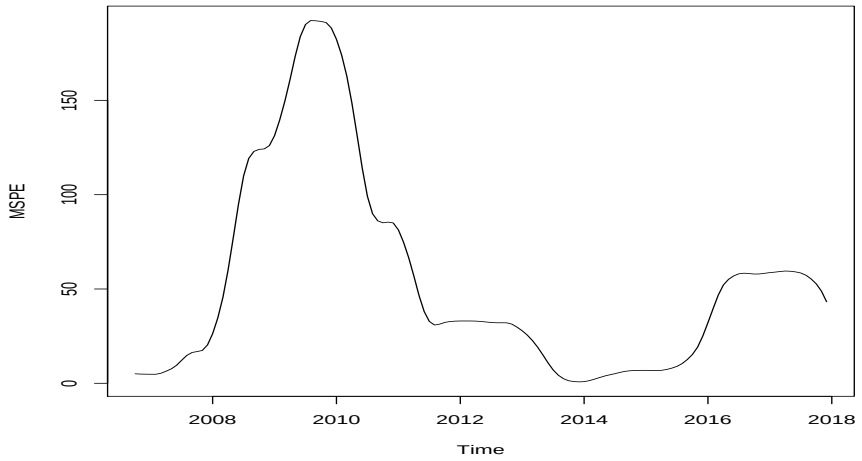


Figure 155: 24 month moving average of mean squared forecasting errors of 9-step-ahead MA forecast of PPI

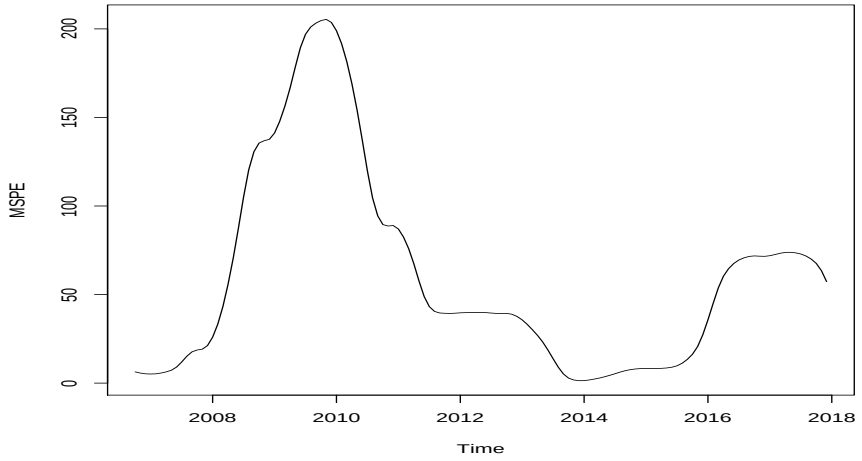


Figure 156: 24 month moving average of mean squared forecasting errors of 9-step-ahead MA-opt forecast of PPI

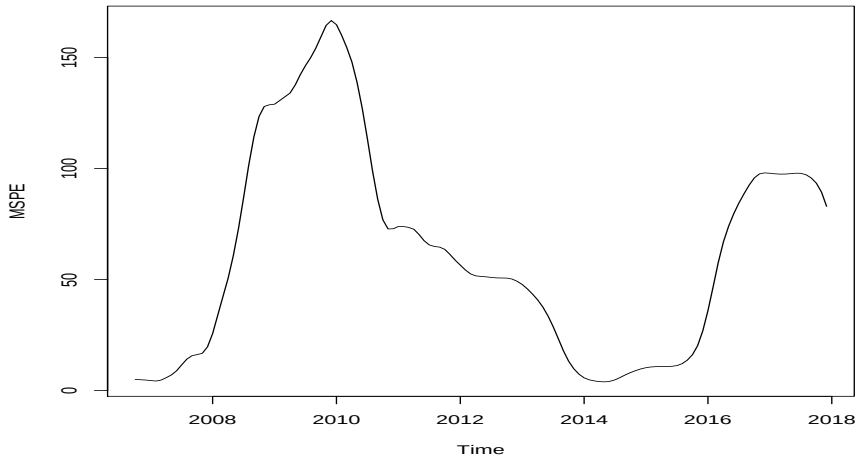


Figure 157: 24 month moving average of mean squared forecasting errors of 9-step-ahead SES forecast of PPI

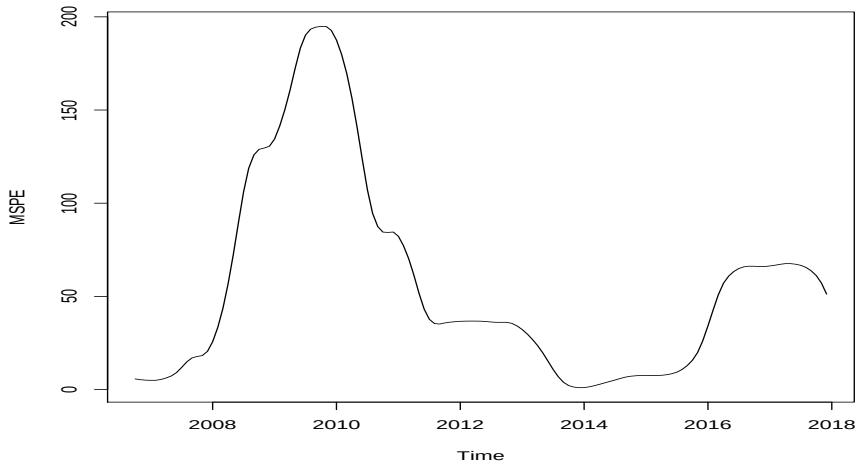


Figure 158: 24 month moving average of mean squared forecasting errors of 9-step-ahead SES-opt forecast of PPI

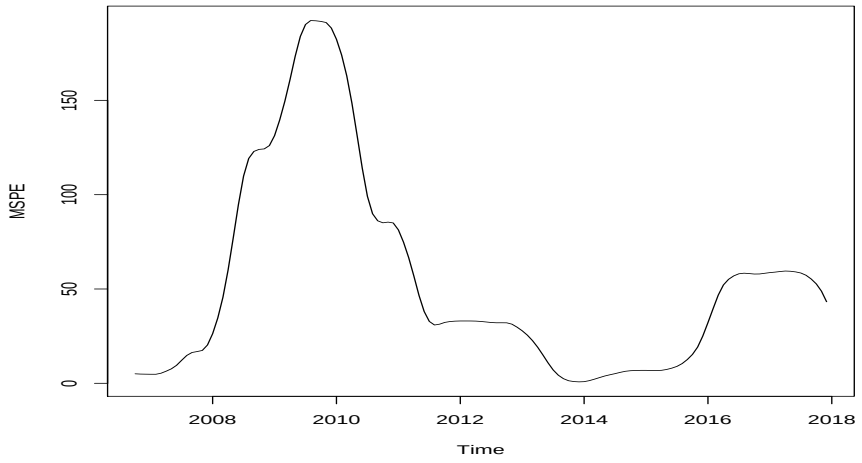


Figure 159: 24 month moving average of mean squared forecasting errors of 9-step-ahead AR(1) forecast of PPI

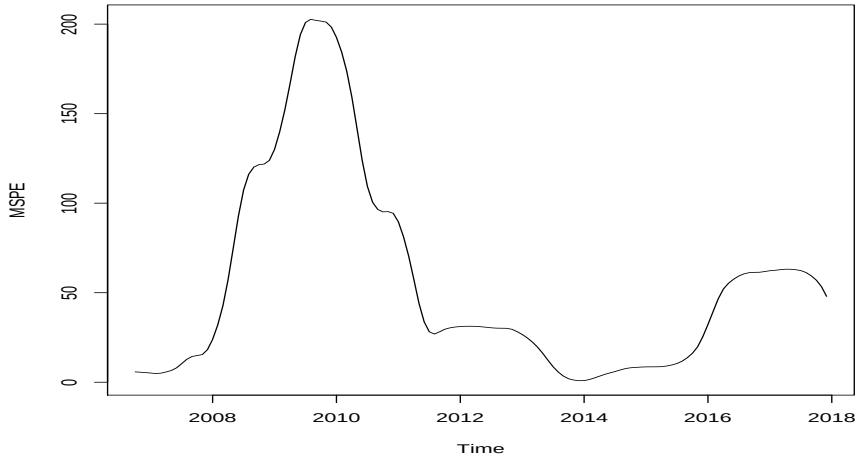


Figure 160: 24 month moving average of mean squared forecasting errors of 9-step-ahead AR(p) forecast of PPI

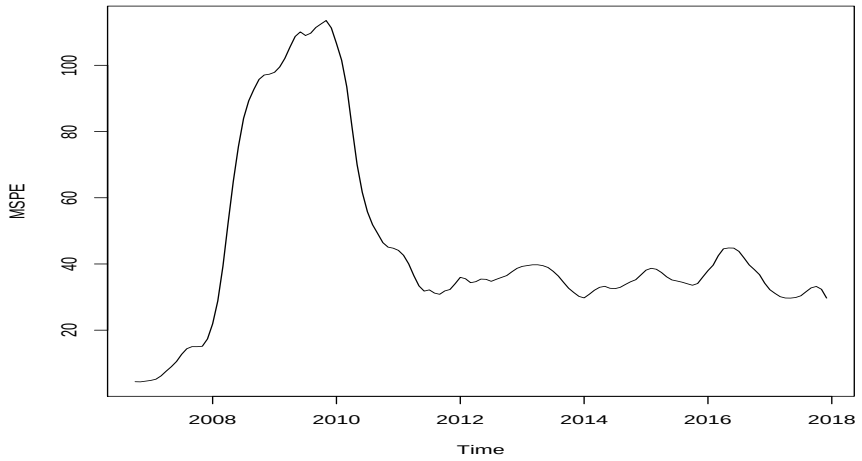


Figure 161: 24 month moving average of mean squared forecasting errors of 9-step-ahead ARd(1) forecast of PPI

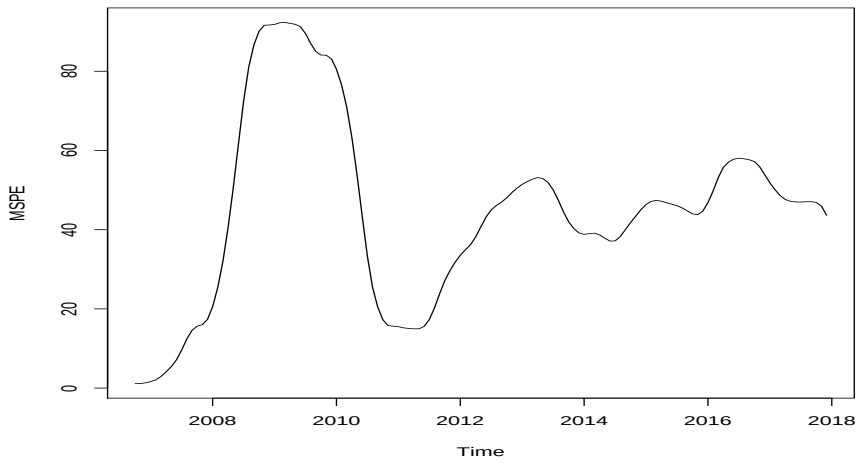


Figure 162: 24 month moving average of mean squared forecasting errors of 9-step-ahead ARd(p) forecast of PPI

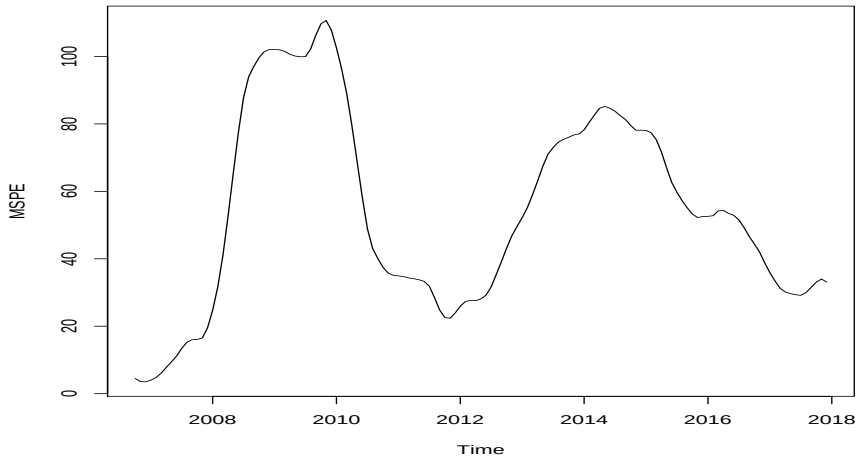


Figure 163: 24 month moving average of mean squared forecasting errors of 9-step-ahead ARMA(1,1) forecast of PPI

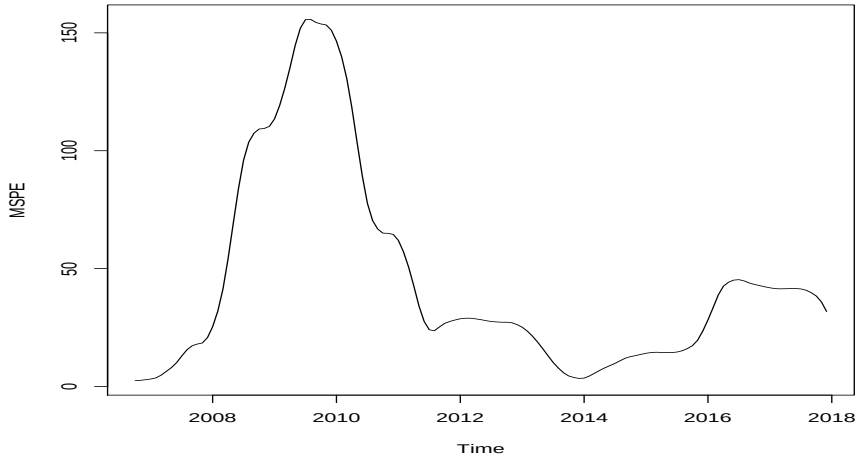


Figure 164: 24 month moving average of mean squared forecasting errors of 9-step-ahead ARMA(p,q) forecast of PPI

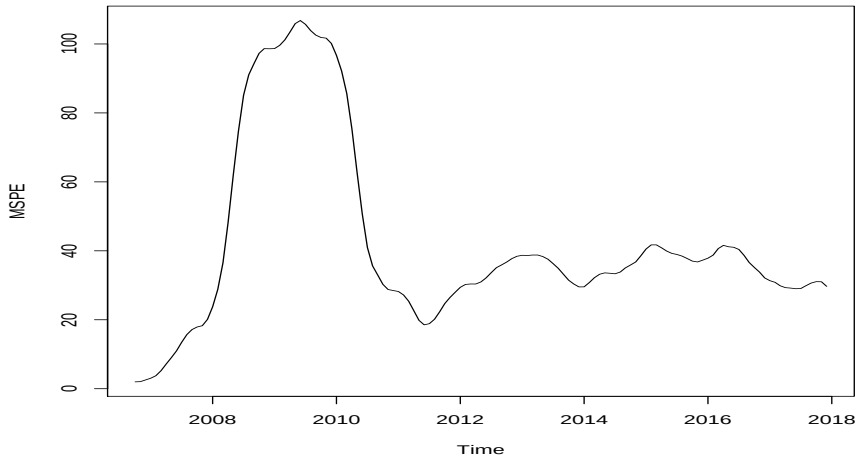


Figure 165: 24 month moving average of mean squared forecasting errors of 9-step-ahead VAR(1) forecast of PPI

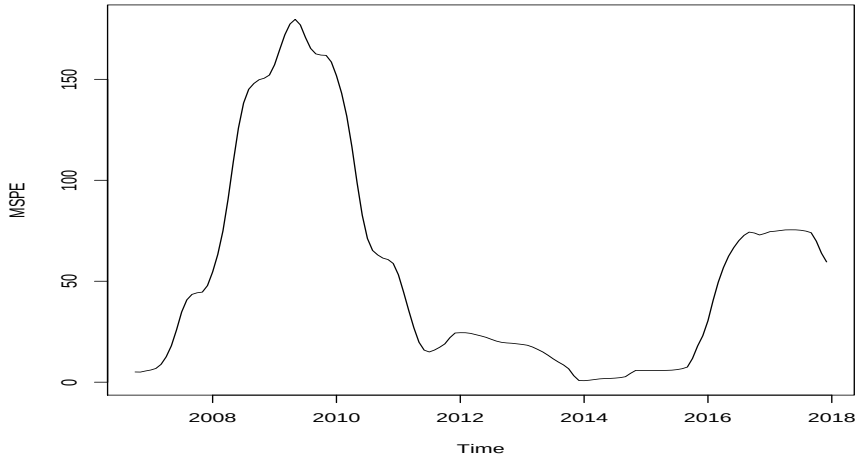


Figure 166: 24 month moving average of mean squared forecasting errors of 9-step-ahead VAR(p) forecast of PPI

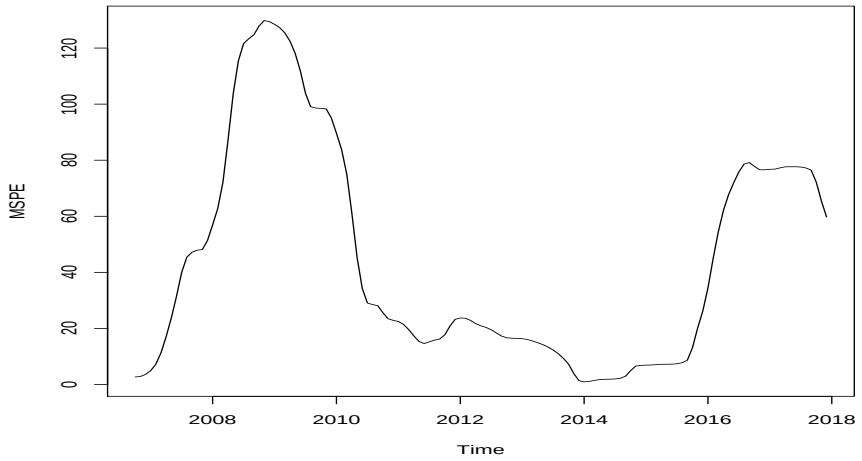


Figure 167: 24 month moving average of mean squared forecasting errors of 9-step-ahead BVAR forecast of PPI

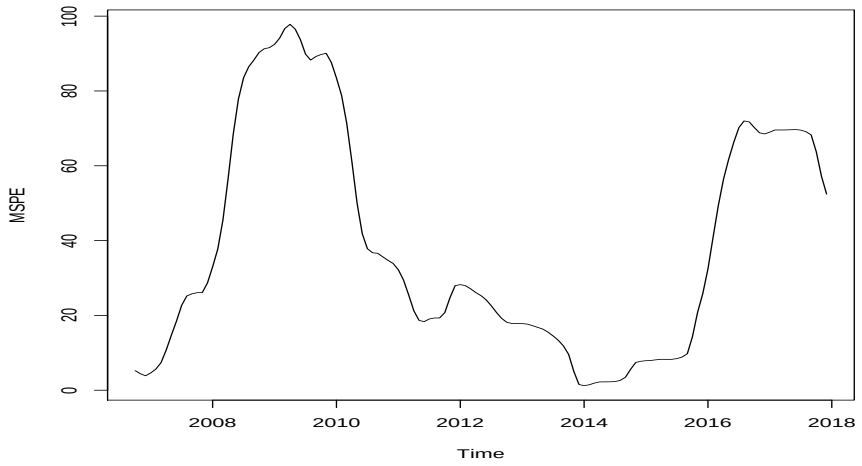


Figure 168: 24 month moving average of mean squared forecasting errors of 9-step-ahead Factor(2) forecast of PPI

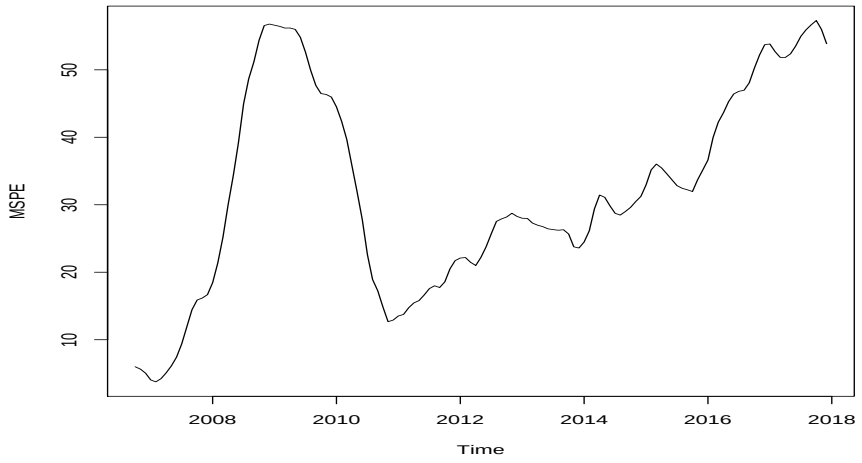


Figure 169: 24 month moving average of mean squared forecasting errors of 9-step-ahead Factor(k) forecast of PPI

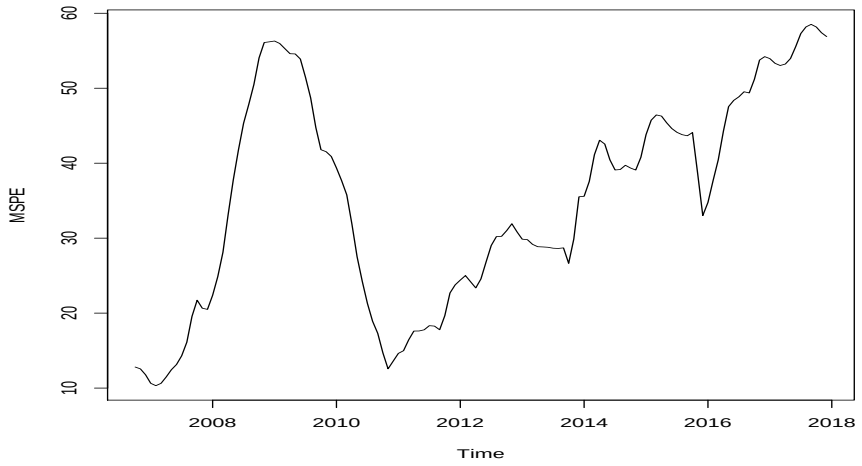


Figure 170: 24 month moving average of mean squared forecasting errors of 9-step-ahead F(2)VAR(1) forecast of PPI

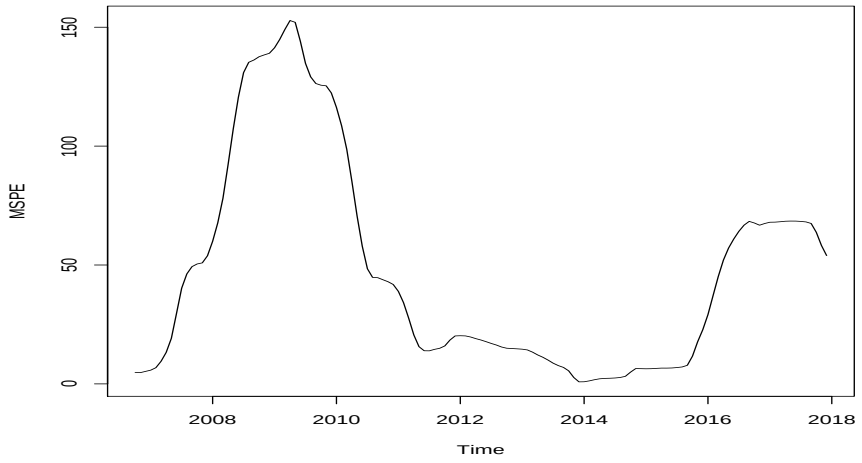
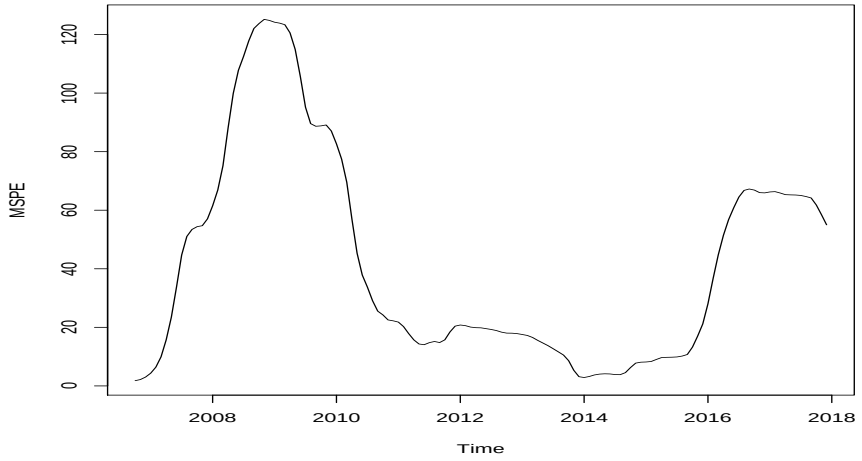


Figure 171: 24 month moving average of mean squared forecasting errors of 9-step-ahead F(2)VAR(p) forecast of PPI



3.2.5 Forecast Horizon = 12

Figure 172: 24 month moving average of mean squared forecasting errors of 12-step-ahead Mean forecast of PPI

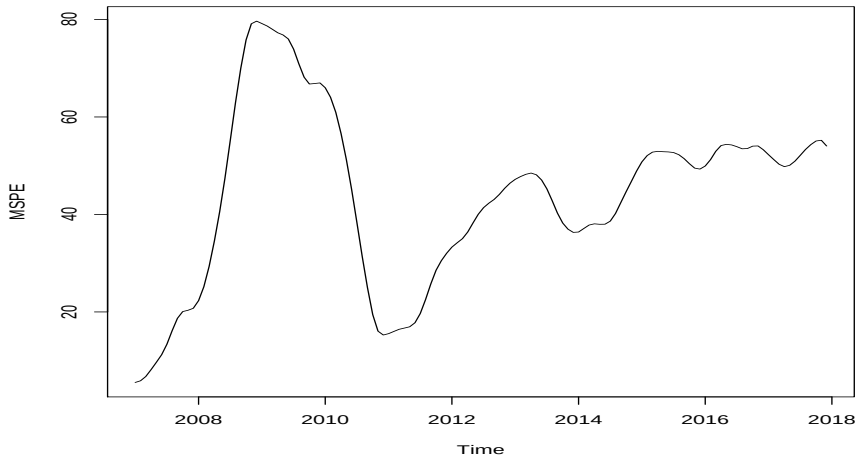


Figure 173: 24 month moving average of mean squared forecasting errors of 12-step-ahead Naive forecast of PPI

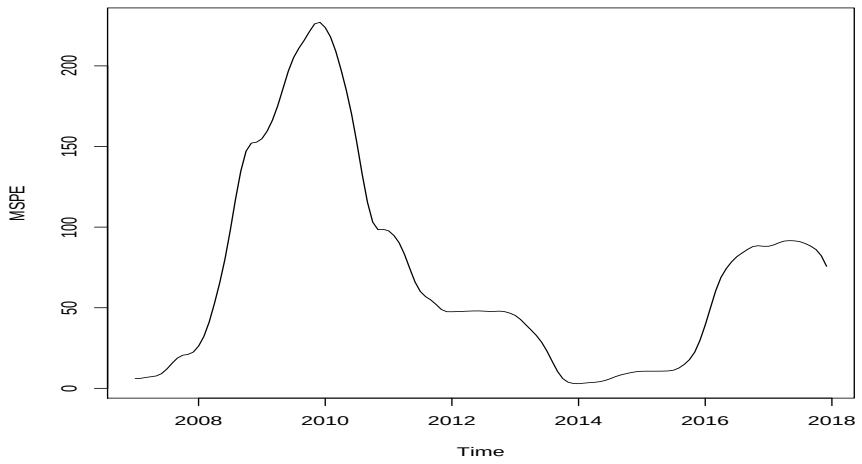


Figure 174: 24 month moving average of mean squared forecasting errors of 12-step-ahead MA forecast of PPI

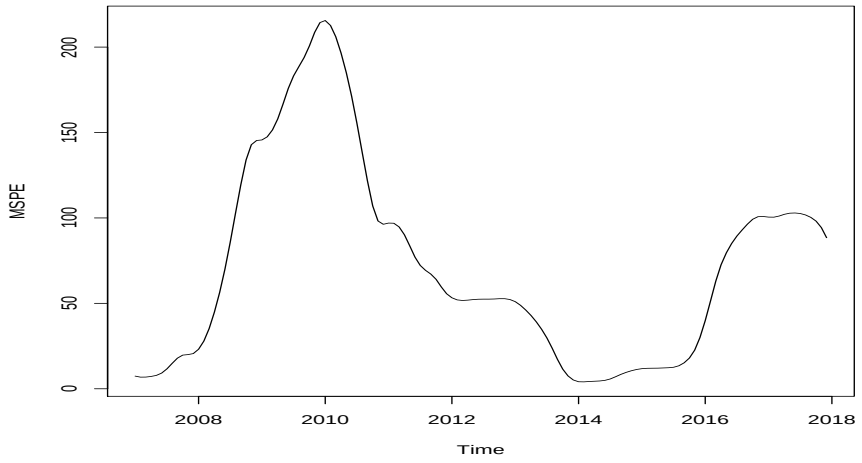


Figure 175: 24 month moving average of mean squared forecasting errors of 12-step-ahead MA-opt forecast of PPI

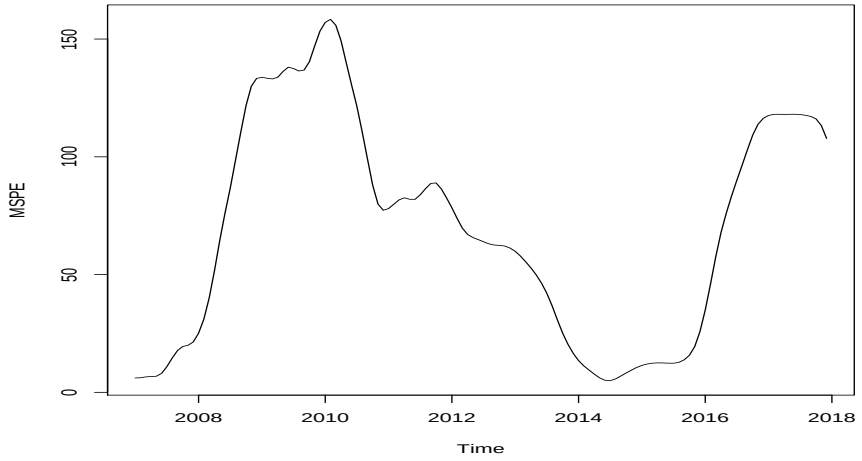


Figure 176: 24 month moving average of mean squared forecasting errors of 12-step-ahead SES forecast of PPI

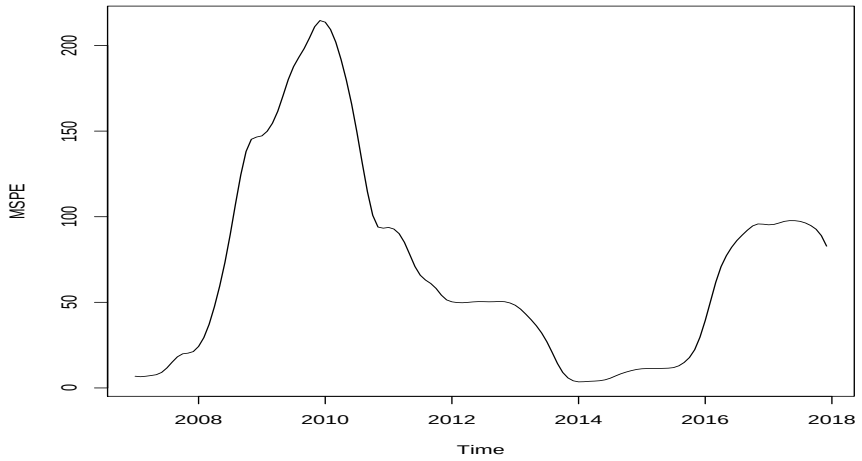


Figure 177: 24 month moving average of mean squared forecasting errors of 12-step-ahead SES-opt forecast of PPI

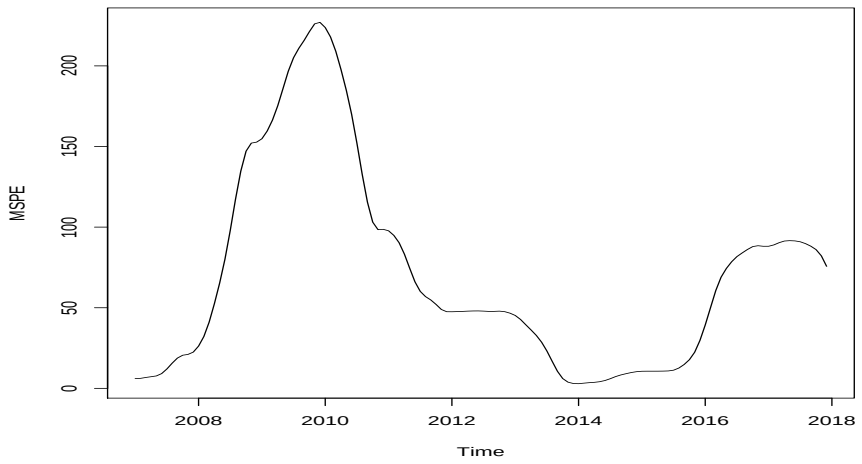


Figure 178: 24 month moving average of mean squared forecasting errors of 12-step-ahead AR(1) forecast of PPI

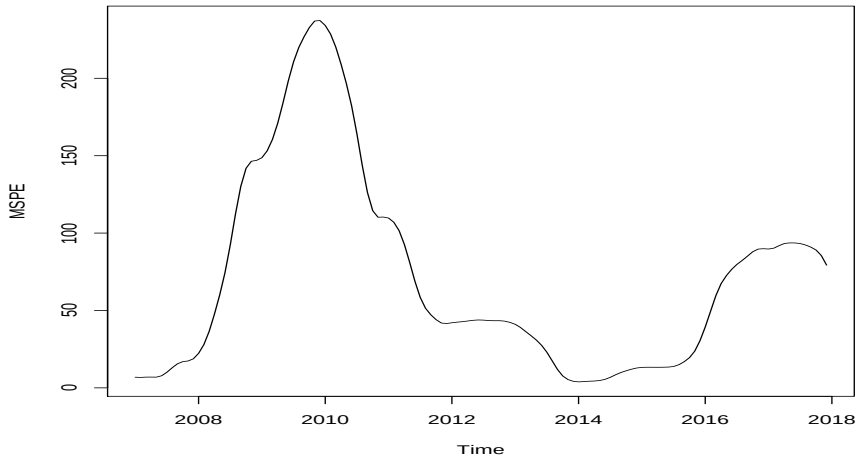


Figure 179: 24 month moving average of mean squared forecasting errors of 12-step-ahead AR(p) forecast of PPI

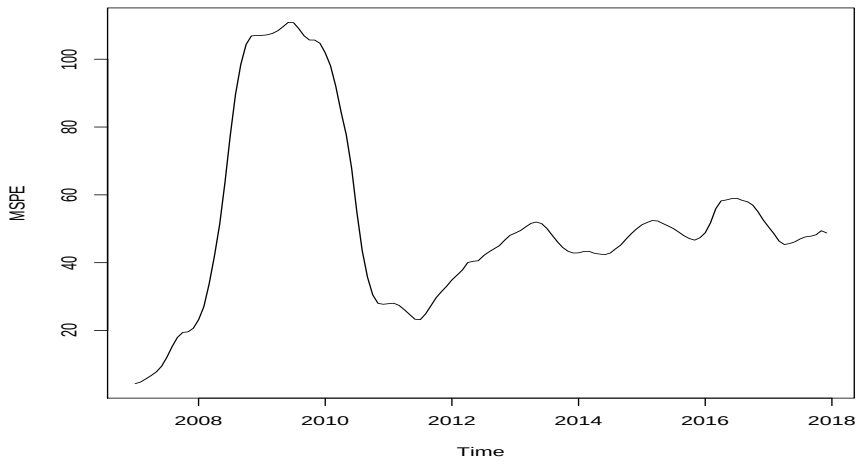


Figure 180: 24 month moving average of mean squared forecasting errors of 12-step-ahead ARd(1) forecast of PPI

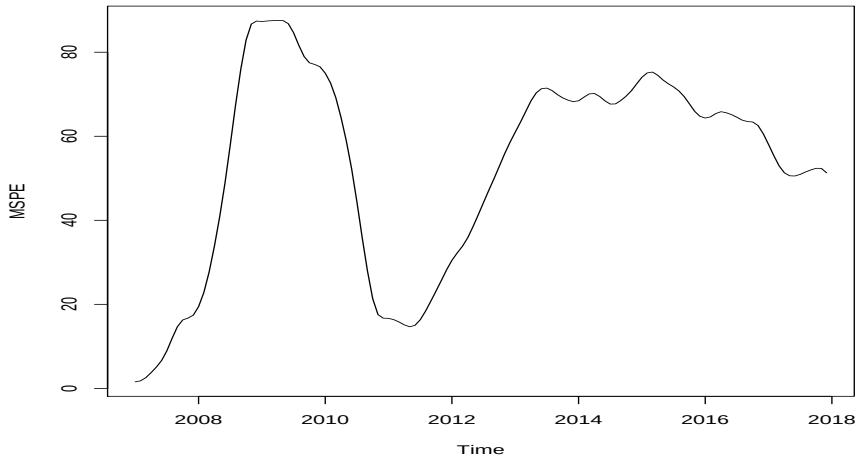


Figure 181: 24 month moving average of mean squared forecasting errors of 12-step-ahead ARd(p) forecast of PPI

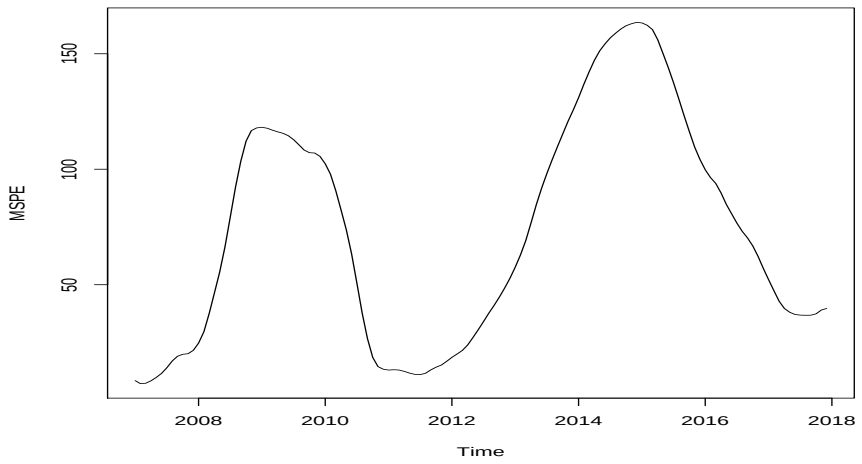


Figure 182: 24 month moving average of mean squared forecasting errors of 12-step-ahead ARMA(1,1) forecast of PPI

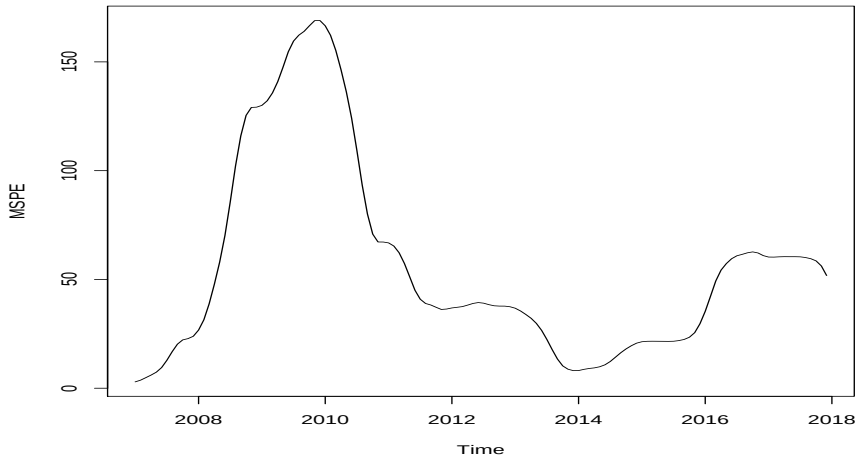


Figure 183: 24 month moving average of mean squared forecasting errors of 12-step-ahead ARMA(p,q) forecast of PPI

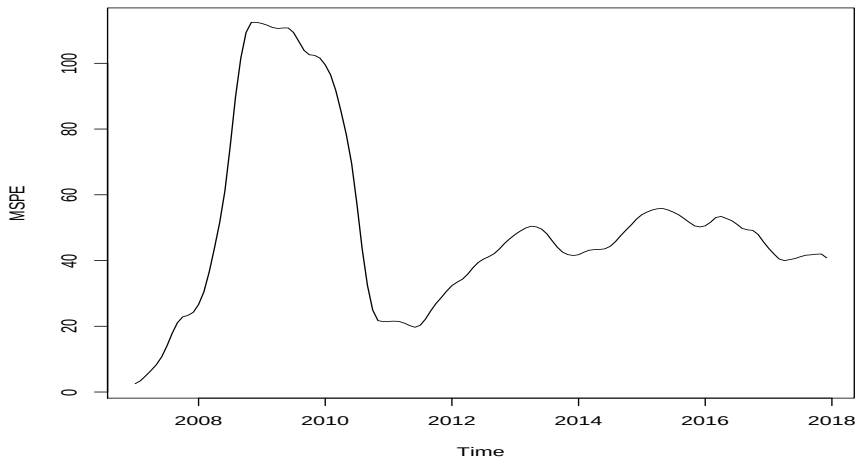


Figure 184: 24 month moving average of mean squared forecasting errors of 12-step-ahead VAR(1) forecast of PPI

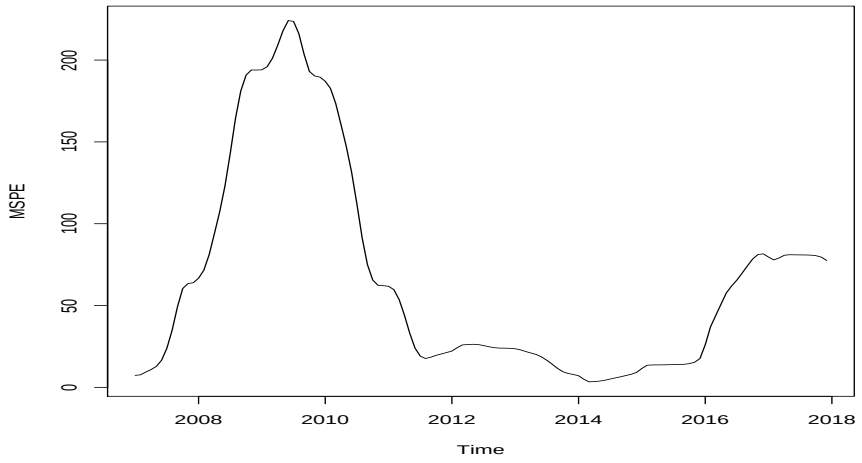


Figure 185: 24 month moving average of mean squared forecasting errors of 12-step-ahead VAR(p) forecast of PPI

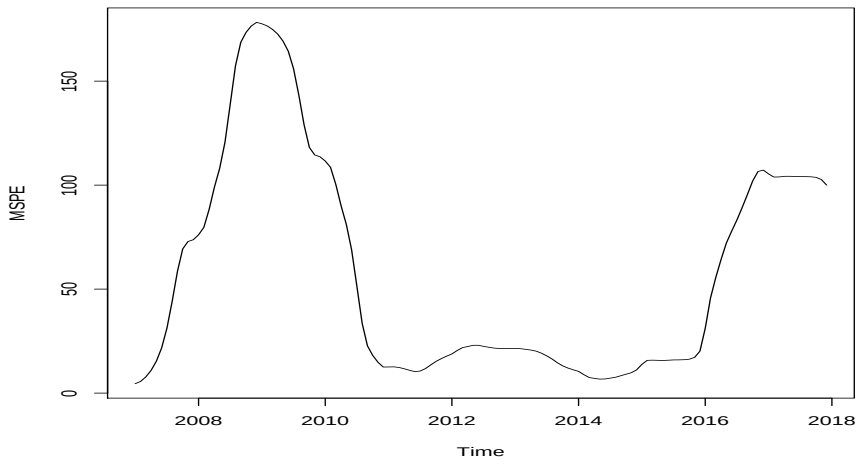


Figure 186: 24 month moving average of mean squared forecasting errors of 12-step-ahead BVAR forecast of PPI

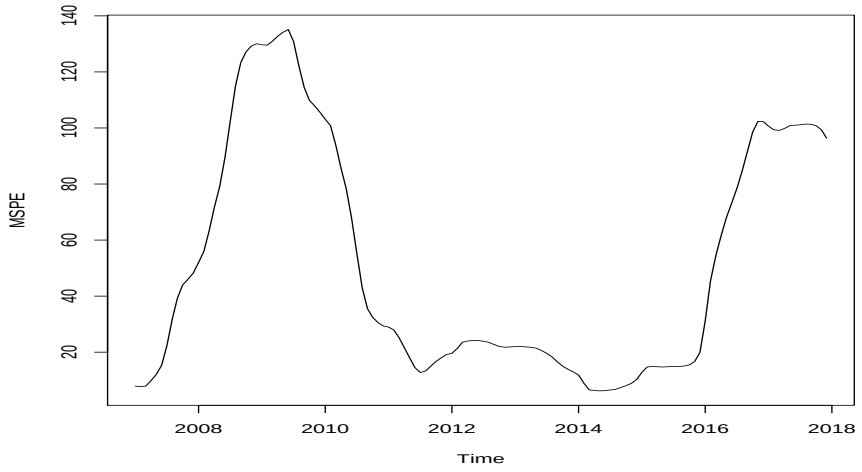


Figure 187: 24 month moving average of mean squared forecasting errors of 12-step-ahead Factor(2) forecast of PPI

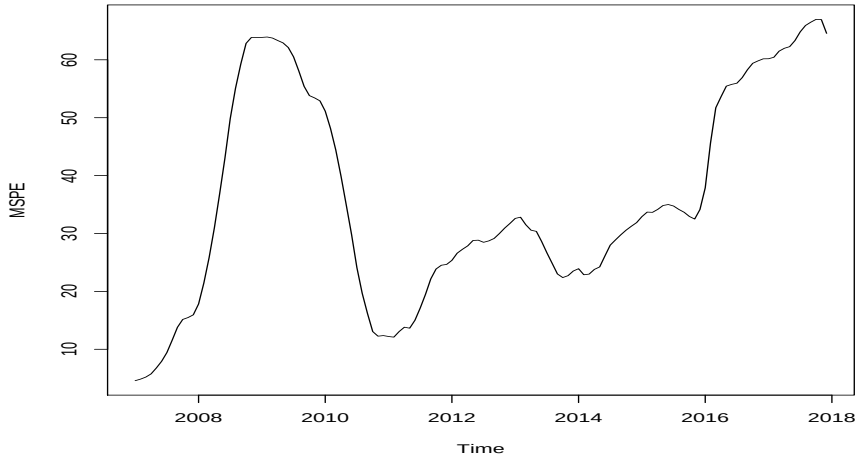


Figure 188: 24 month moving average of mean squared forecasting errors of 12-step-ahead Factor(k) forecast of PPI

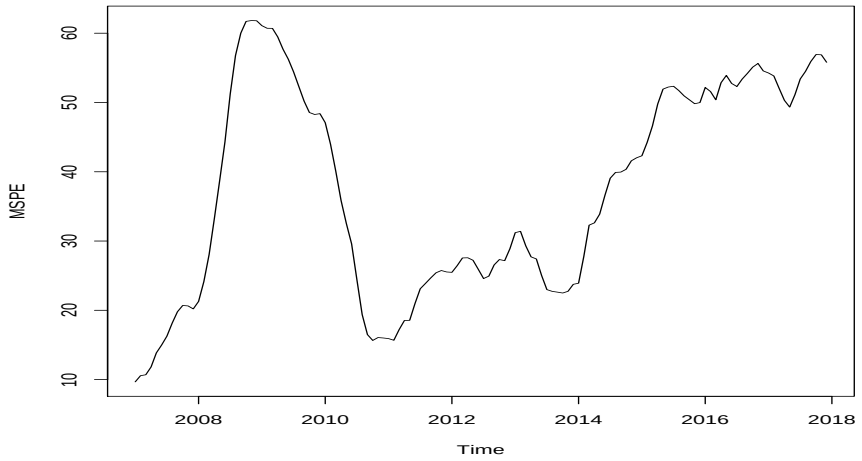


Figure 189: 24 month moving average of mean squared forecasting errors of 12-step-ahead F(2)VAR(1) forecast of PPI

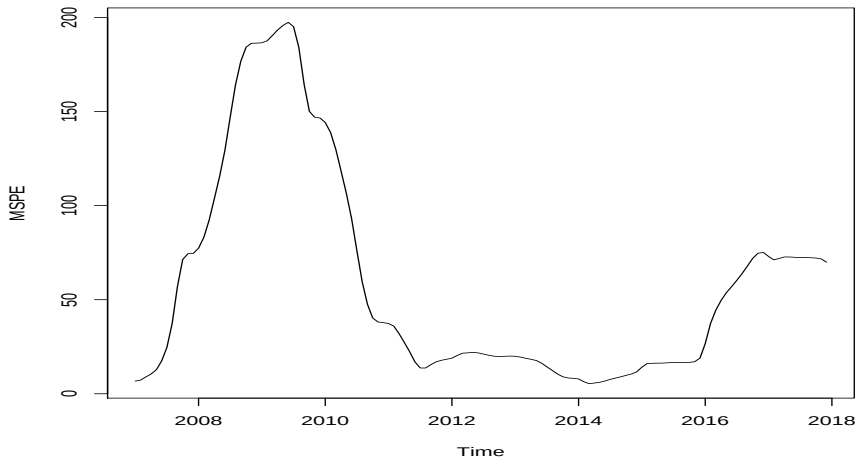
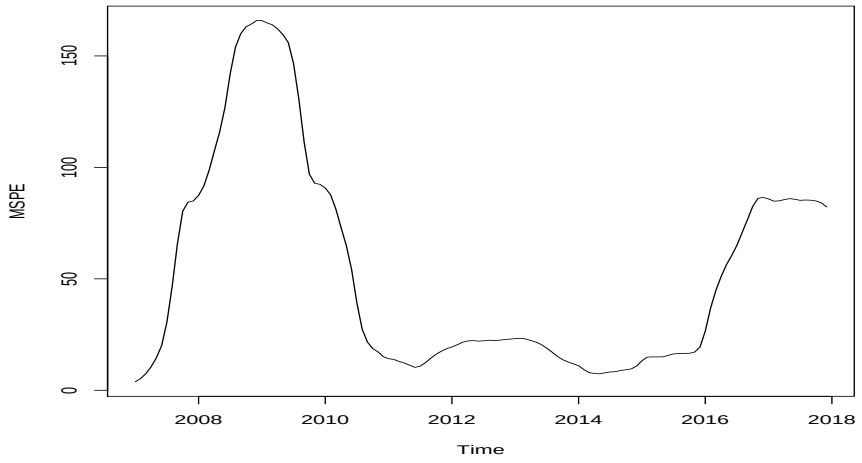


Figure 190: 24 month moving average of mean squared forecasting errors of 12-step-ahead F(2)VAR(p) forecast of PPI



3.3 IP

3.3.1 Forecast Horizon = 1

Figure 191: 24 month moving average of mean squared forecasting errors of 1-step-ahead Mean forecast of IP

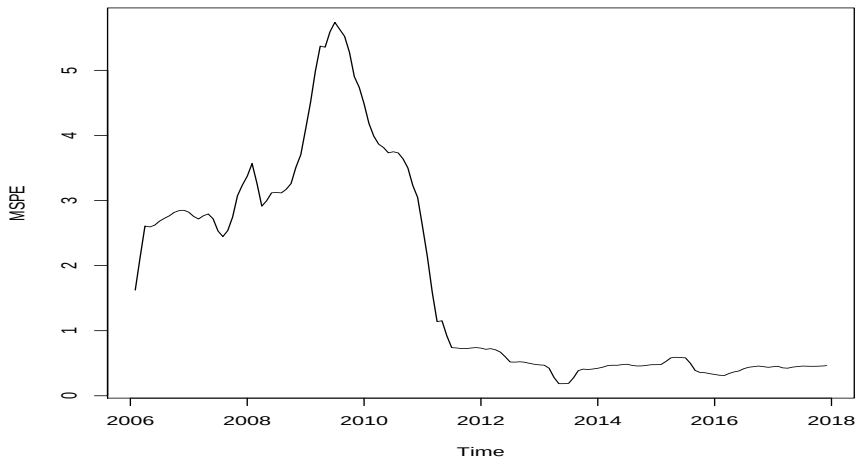


Figure 192: 24 month moving average of mean squared forecasting errors of 1-step-ahead Naive forecast of IP

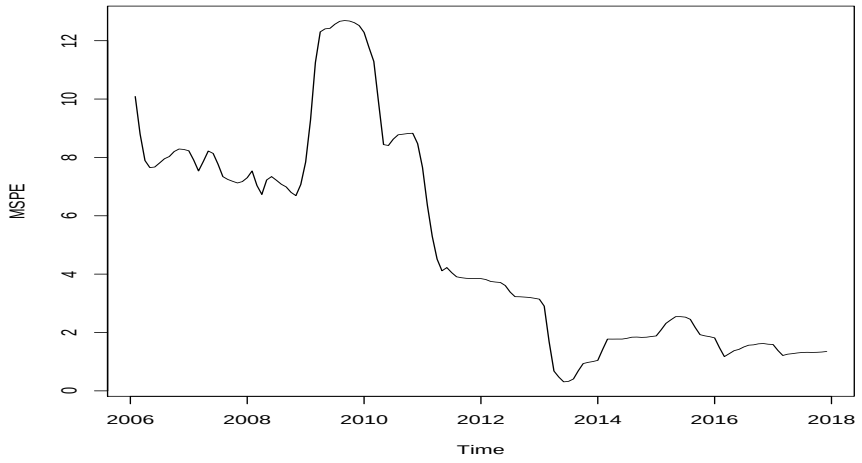


Figure 193: 24 month moving average of mean squared forecasting errors of 1-step-ahead MA forecast of IP

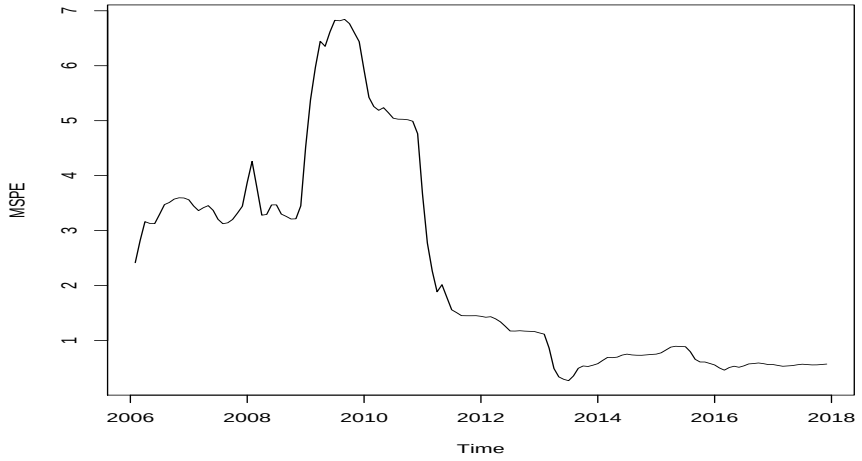


Figure 194: 24 month moving average of mean squared forecasting errors of 1-step-ahead MA-opt forecast of IP

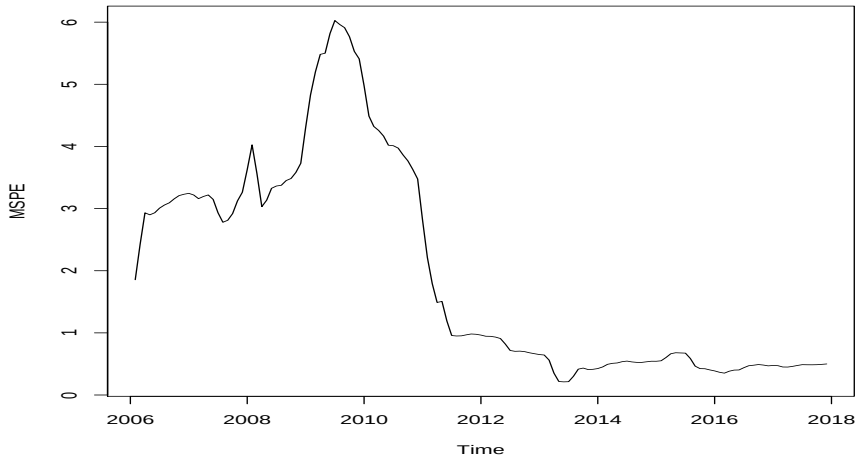


Figure 195: 24 month moving average of mean squared forecasting errors of 1-step-ahead SES forecast of IP

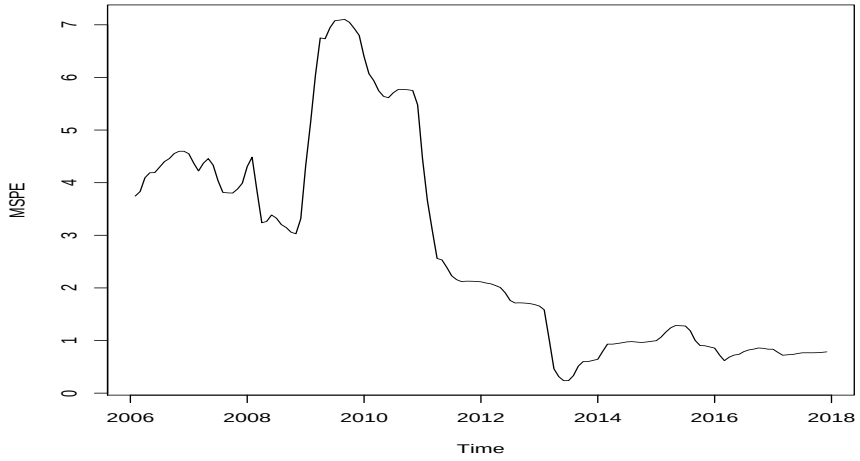


Figure 196: 24 month moving average of mean squared forecasting errors of 1-step-ahead SES-opt forecast of IP

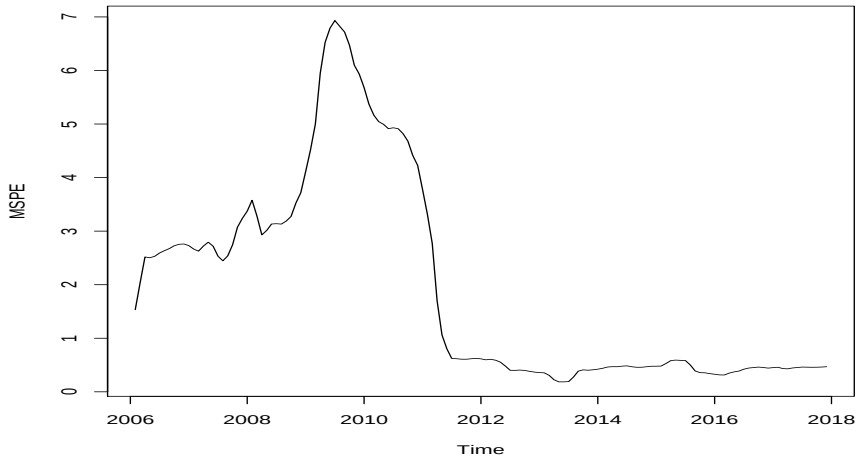


Figure 197: 24 month moving average of mean squared forecasting errors of 1-step-ahead AR(1) forecast of IP

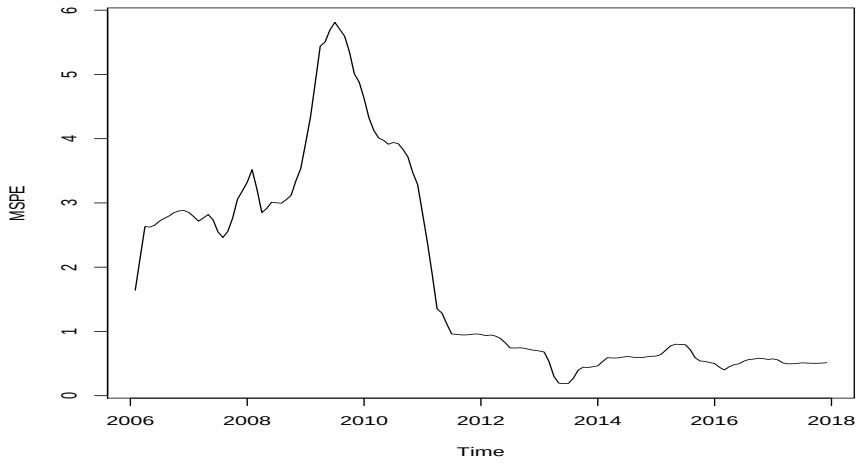


Figure 198: 24 month moving average of mean squared forecasting errors of 1-step-ahead AR(p) forecast of IP

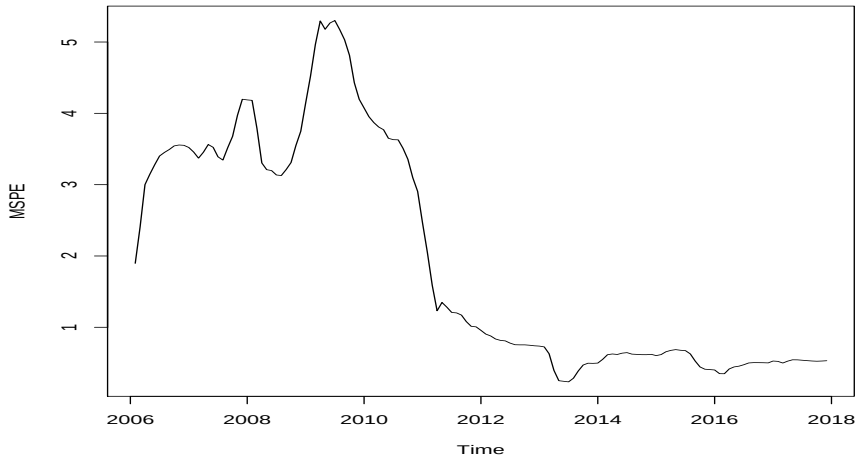


Figure 199: 24 month moving average of mean squared forecasting errors of 1-step-ahead ARd(1) forecast of IP

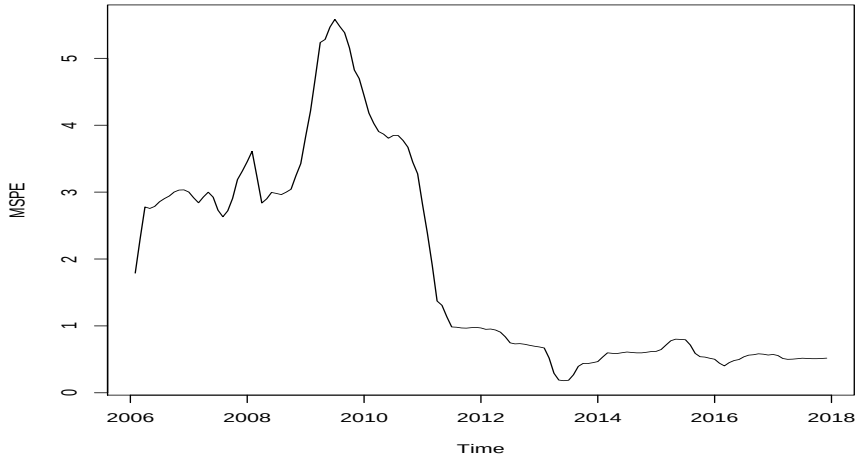


Figure 200: 24 month moving average of mean squared forecasting errors of 1-step-ahead ARd(p) forecast of IP

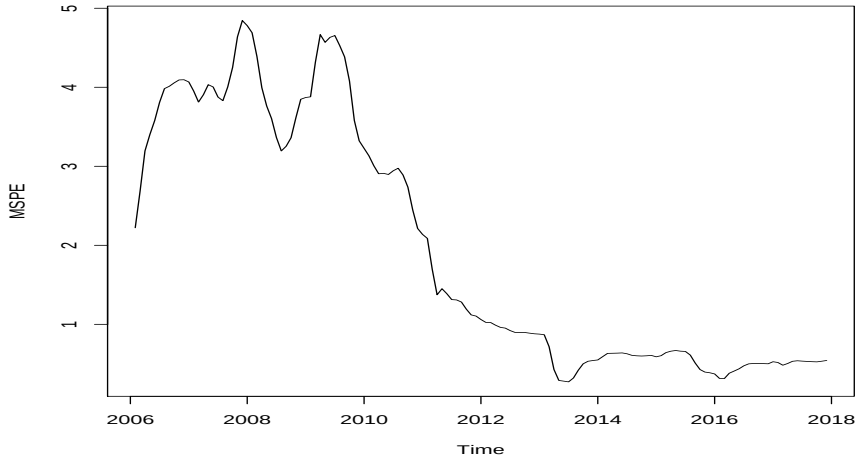


Figure 201: 24 month moving average of mean squared forecasting errors of 1-step-ahead ARMA(1,1) forecast of IP

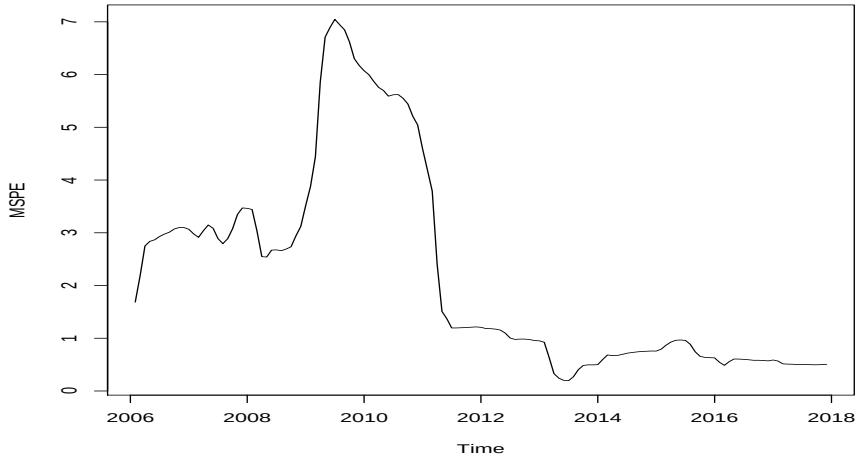


Figure 202: 24 month moving average of mean squared forecasting errors of 1-step-ahead ARMA(p,q) forecast of IP

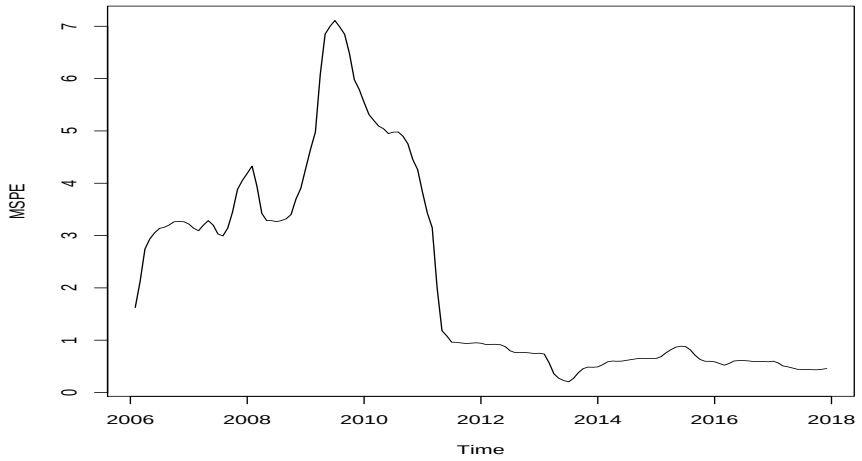


Figure 203: 24 month moving average of mean squared forecasting errors of 1-step-ahead VAR(1) forecast of IP

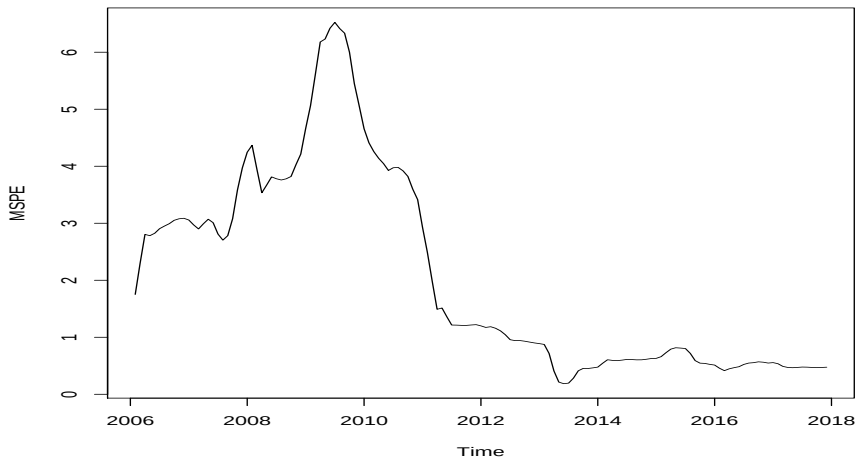


Figure 204: 24 month moving average of mean squared forecasting errors of 1-step-ahead VAR(p) forecast of IP

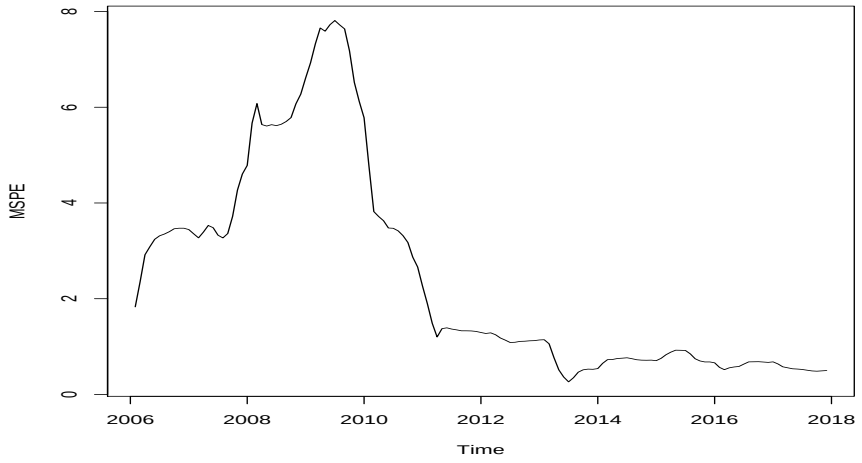


Figure 205: 24 month moving average of mean squared forecasting errors of 1-step-ahead BVAR forecast of IP

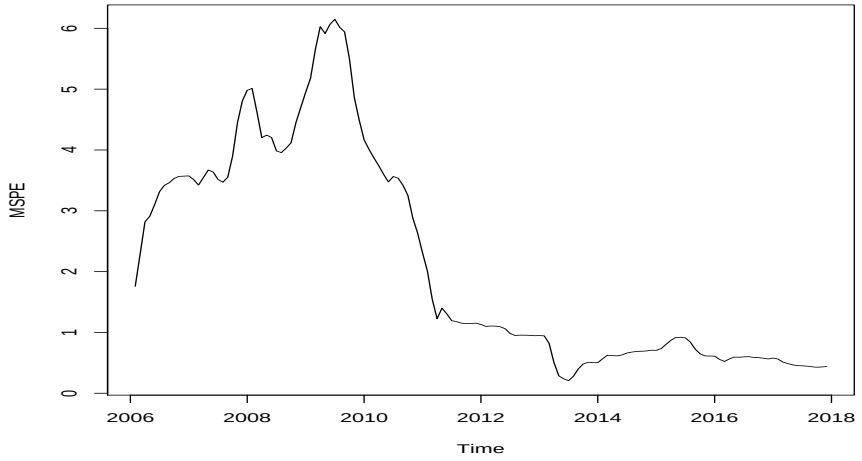


Figure 206: 24 month moving average of mean squared forecasting errors of 1-step-ahead Factor(2) forecast of IP

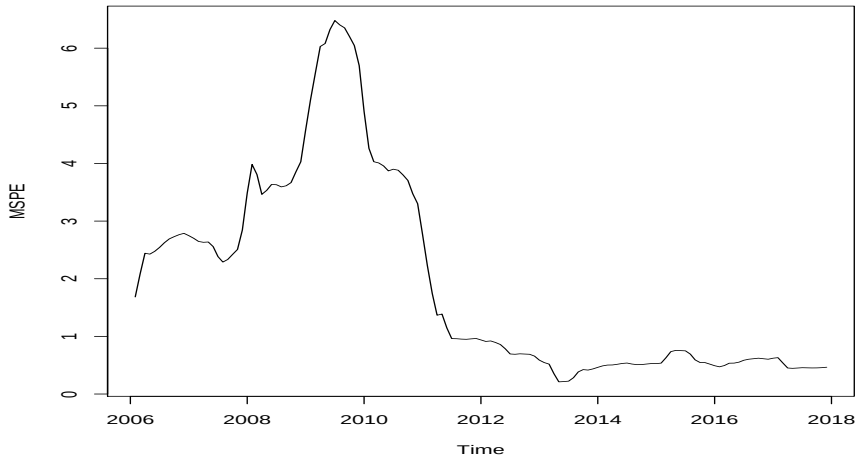


Figure 207: 24 month moving average of mean squared forecasting errors of 1-step-ahead Factor(k) forecast of IP

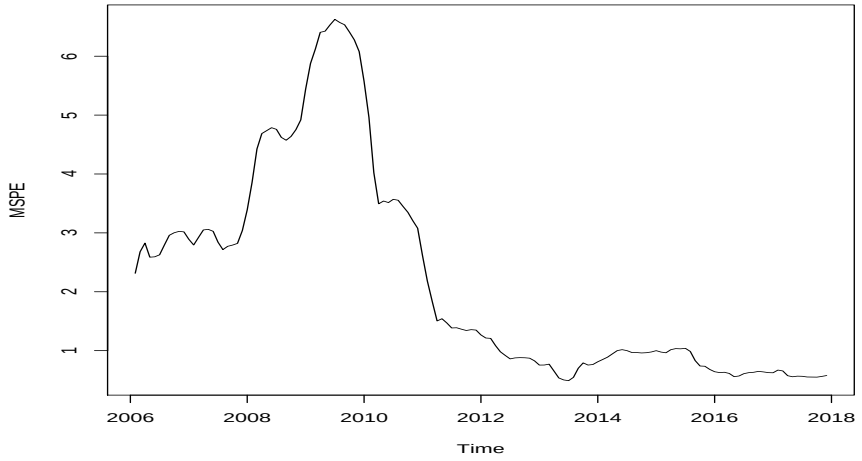


Figure 208: 24 month moving average of mean squared forecasting errors of 1-step-ahead F(2)VAR(1) forecast of IP

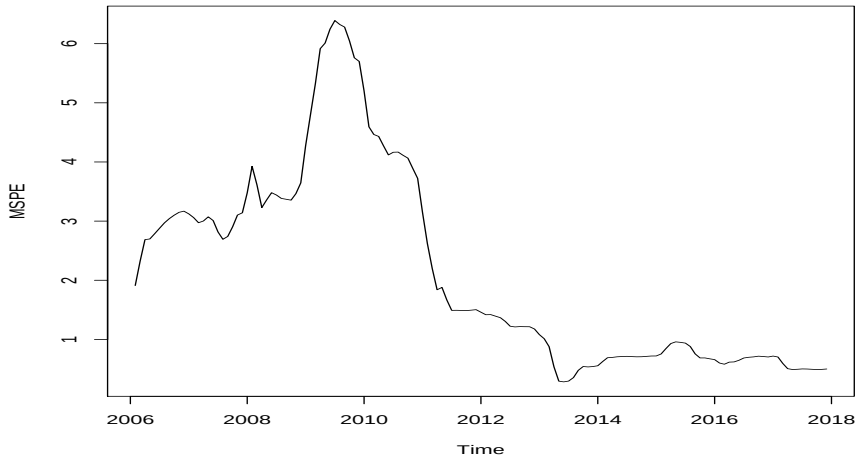
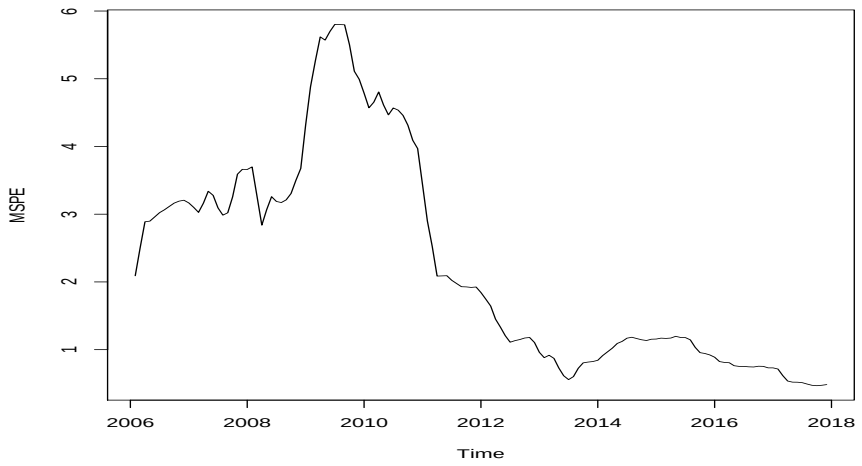


Figure 209: 24 month moving average of mean squared forecasting errors of 1-step-ahead F(2)VAR(p) forecast of IP



3.3.2 Forecast Horizon = 3

Figure 210: 24 month moving average of mean squared forecasting errors of 3-step-ahead Mean forecast of IP

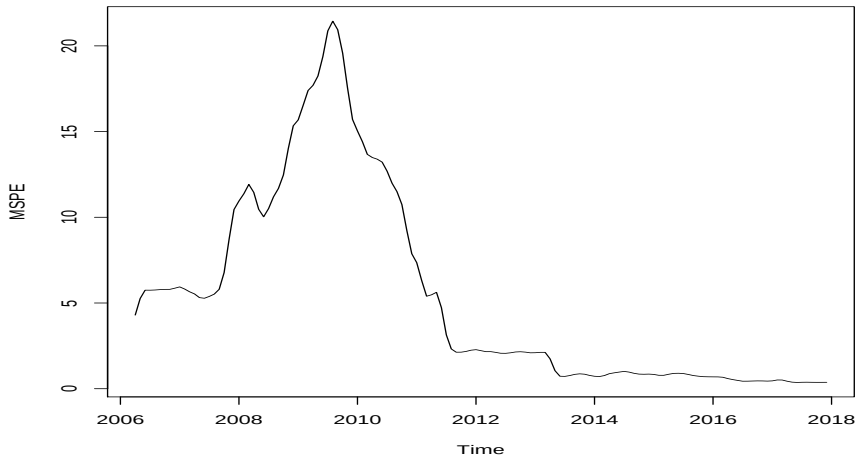


Figure 211: 24 month moving average of mean squared forecasting errors of 3-step-ahead Naive forecast of IP

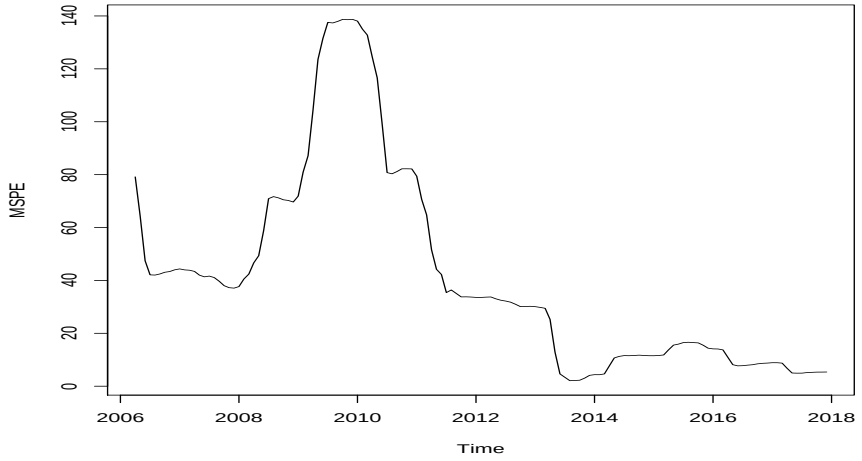


Figure 212: 24 month moving average of mean squared forecasting errors of 3-step-ahead MA forecast of IP

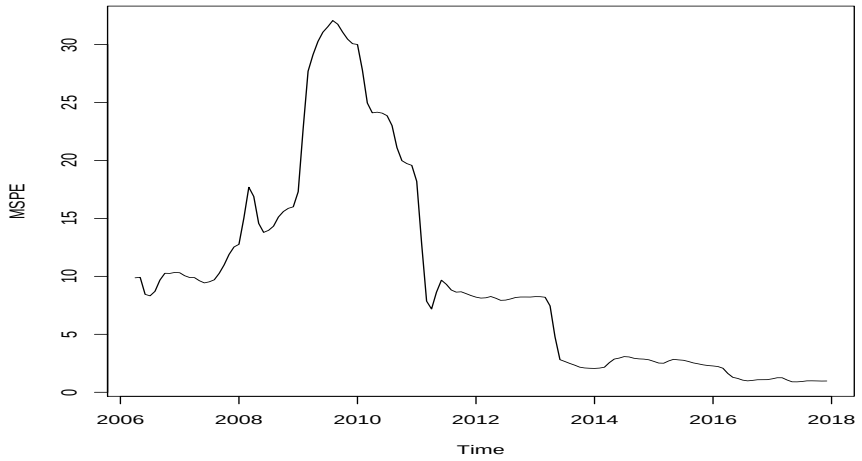


Figure 213: 24 month moving average of mean squared forecasting errors of 3-step-ahead MA-opt forecast of IP

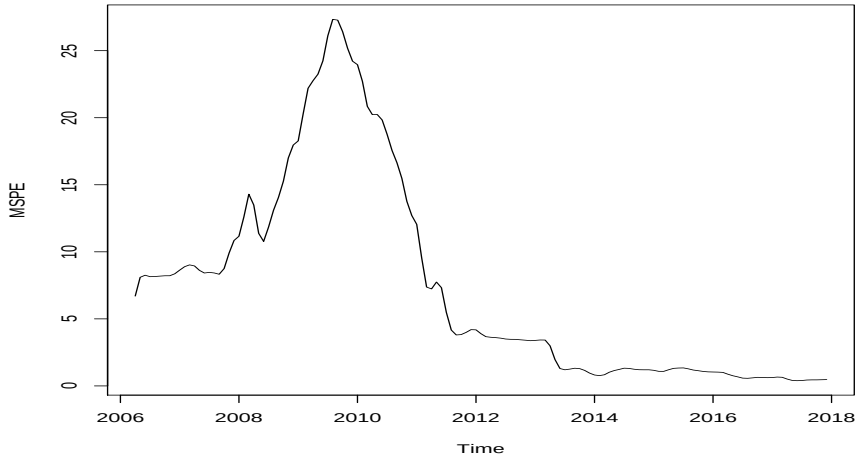


Figure 214: 24 month moving average of mean squared forecasting errors of 3-step-ahead SES forecast of IP

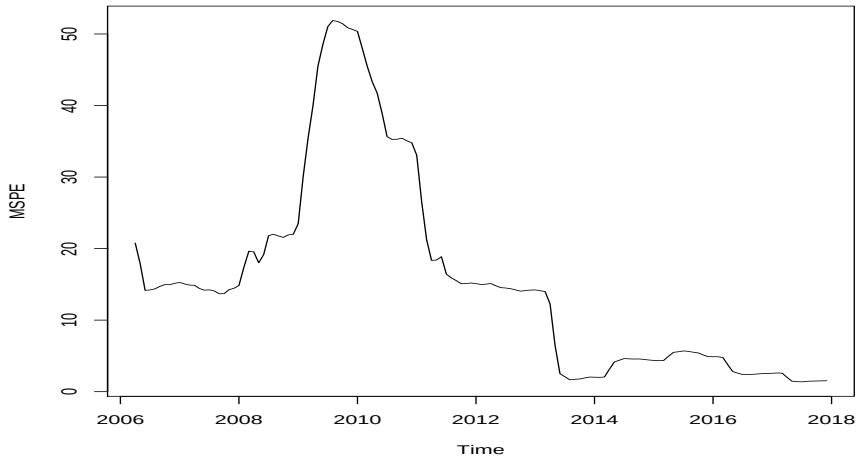


Figure 215: 24 month moving average of mean squared forecasting errors of 3-step-ahead SES-opt forecast of IP

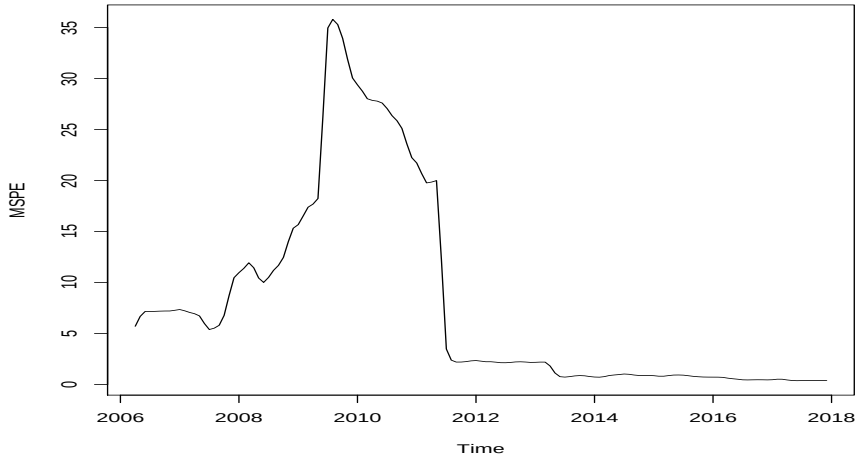


Figure 216: 24 month moving average of mean squared forecasting errors of 3-step-ahead AR(1) forecast of IP

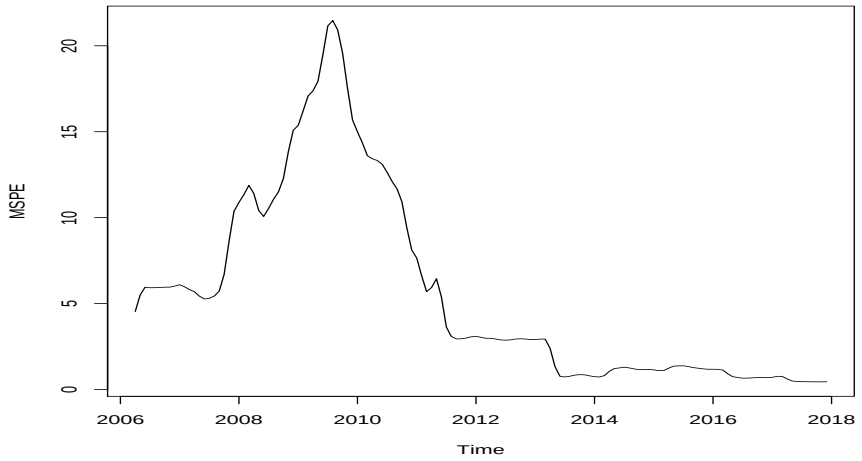


Figure 217: 24 month moving average of mean squared forecasting errors of 3-step-ahead AR(p) forecast of IP

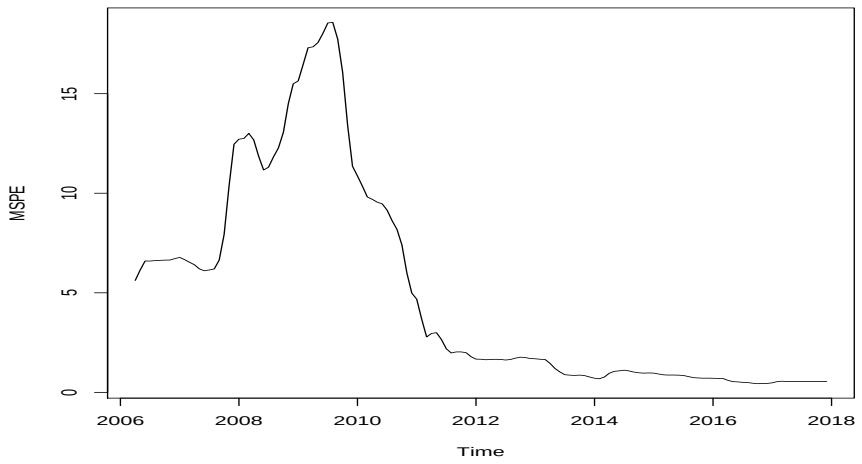


Figure 218: 24 month moving average of mean squared forecasting errors of 3-step-ahead ARd(1) forecast of IP

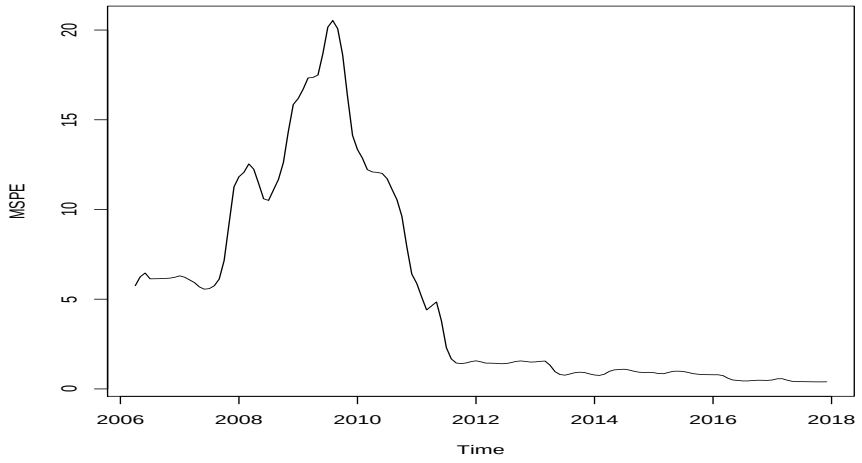


Figure 219: 24 month moving average of mean squared forecasting errors of 3-step-ahead ARd(p) forecast of IP

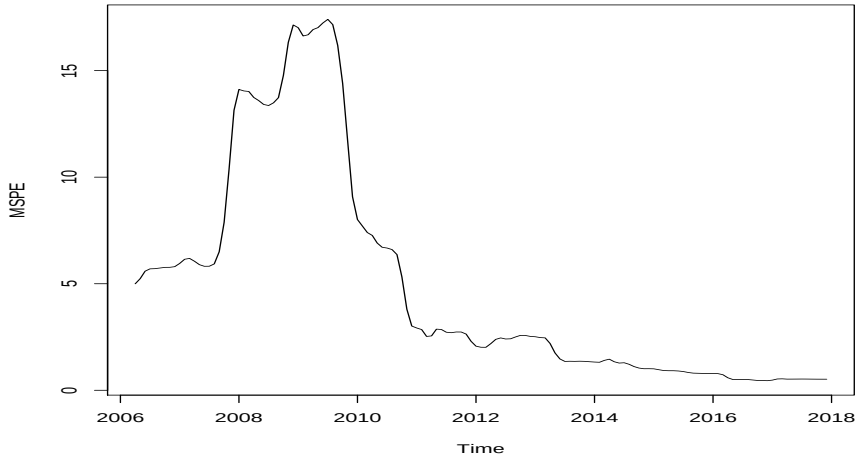


Figure 220: 24 month moving average of mean squared forecasting errors of 3-step-ahead ARMA(1,1) forecast of IP

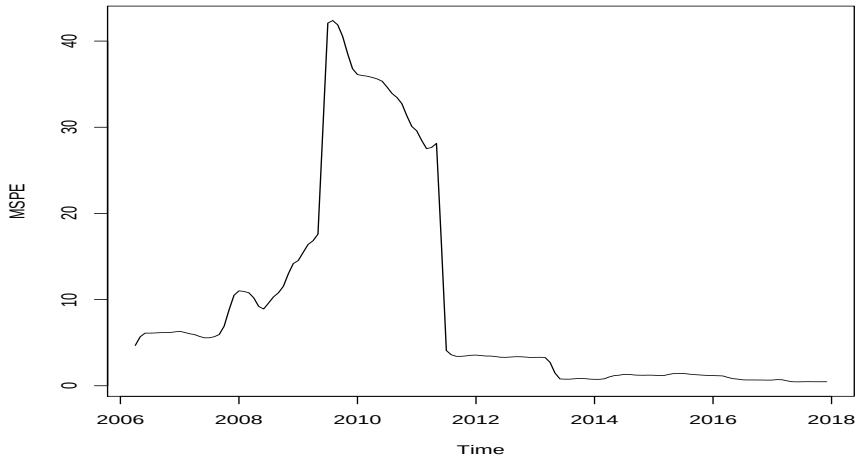


Figure 221: 24 month moving average of mean squared forecasting errors of 3-step-ahead ARMA(p,q) forecast of IP

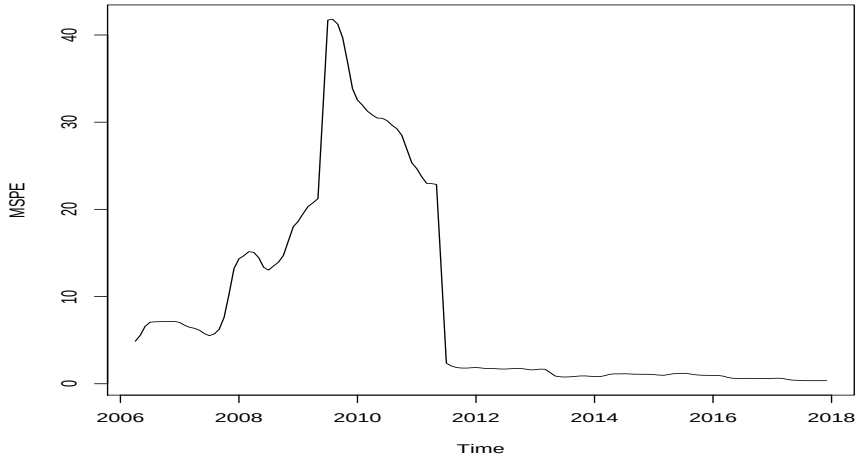


Figure 222: 24 month moving average of mean squared forecasting errors of 3-step-ahead VAR(1) forecast of IP

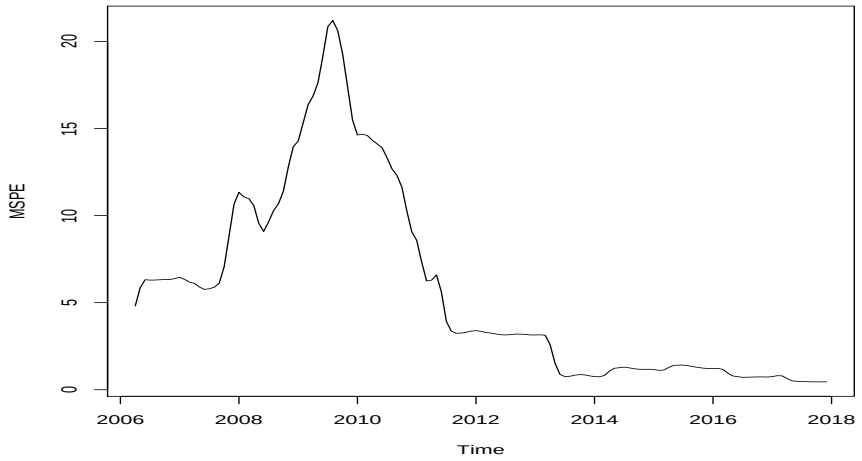


Figure 223: 24 month moving average of mean squared forecasting errors of 3-step-ahead VAR(p) forecast of IP

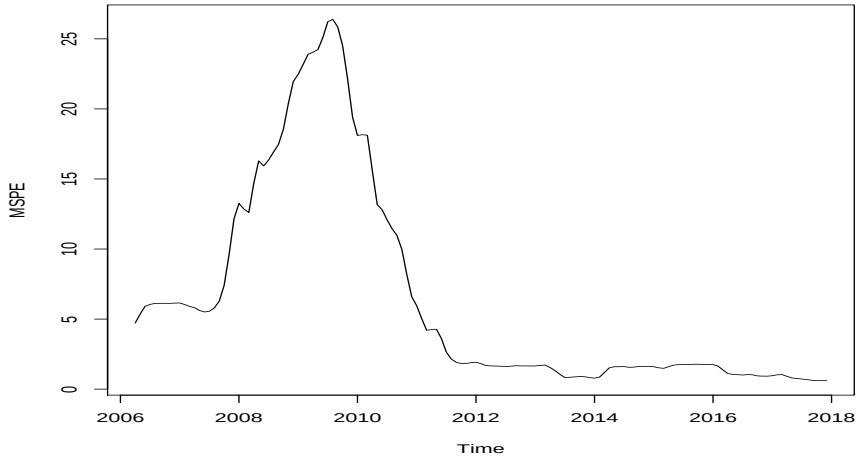


Figure 224: 24 month moving average of mean squared forecasting errors of 3-step-ahead BVAR forecast of IP

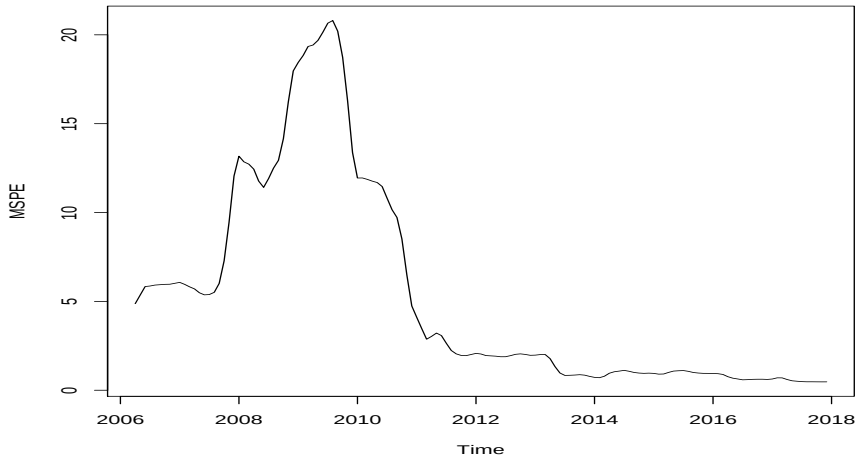


Figure 225: 24 month moving average of mean squared forecasting errors of 3-step-ahead Factor(2) forecast of IP

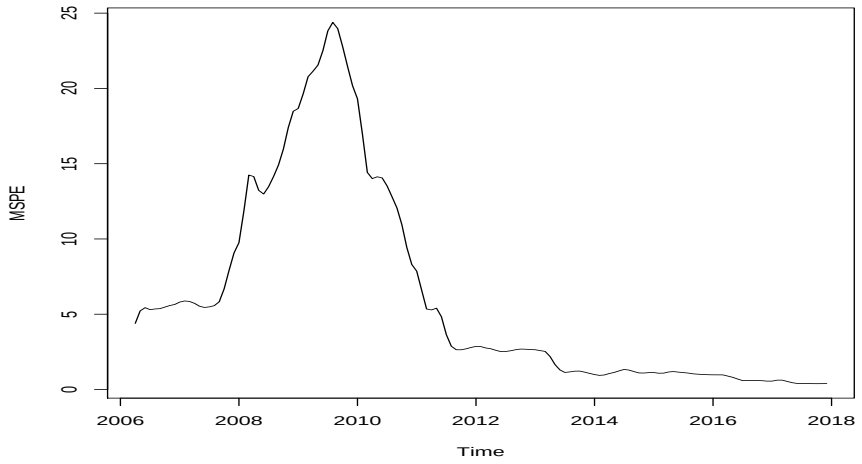


Figure 226: 24 month moving average of mean squared forecasting errors of 3-step-ahead Factor(k) forecast of IP

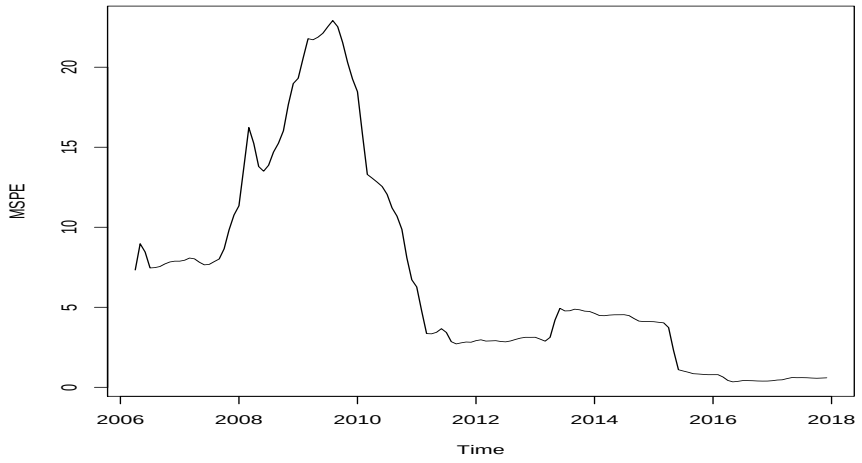


Figure 227: 24 month moving average of mean squared forecasting errors of 3-step-ahead F(2)VAR(1) forecast of IP

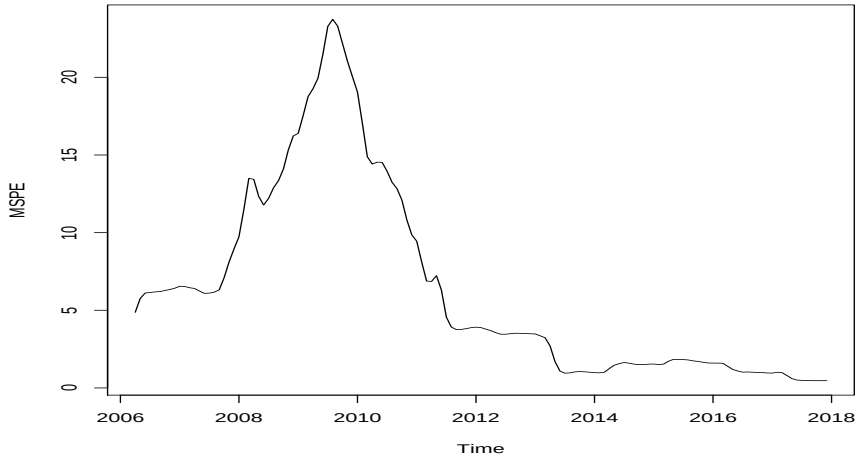
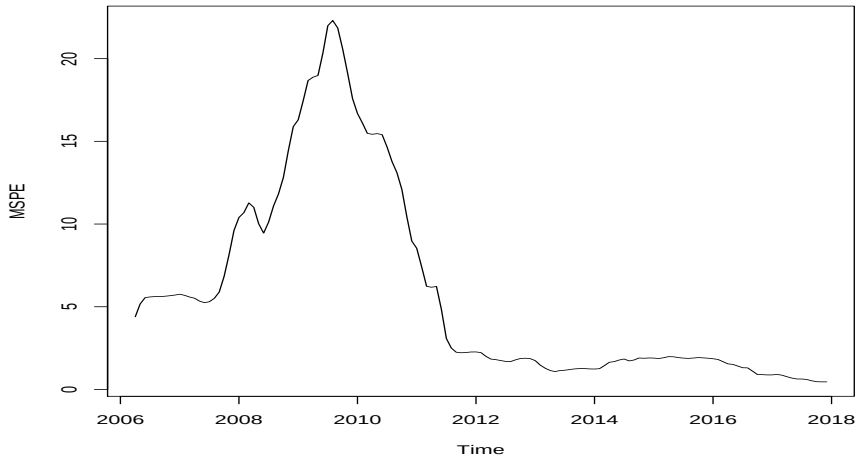


Figure 228: 24 month moving average of mean squared forecasting errors of 3-step-ahead F(2)VAR(p) forecast of IP



3.3.3 Forecast Horizon = 6

Figure 229: 24 month moving average of mean squared forecasting errors of 6-step-ahead Mean forecast of IP

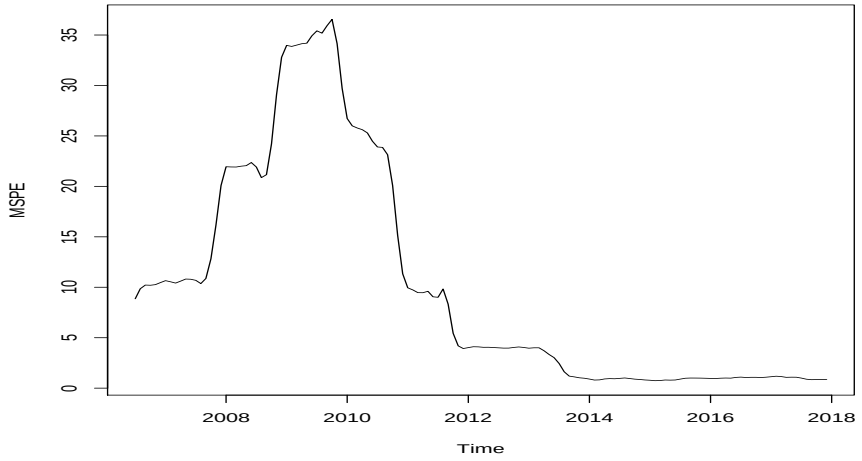


Figure 230: 24 month moving average of mean squared forecasting errors of 6-step-ahead Naive forecast of IP

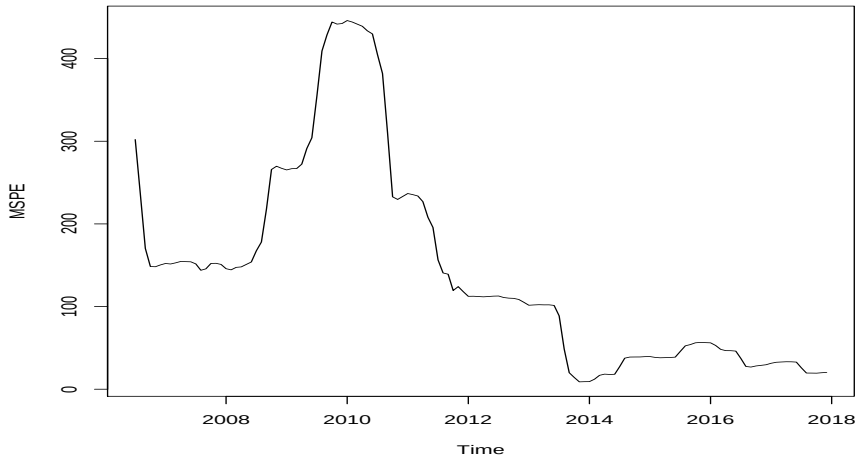


Figure 231: 24 month moving average of mean squared forecasting errors of 6-step-ahead MA forecast of IP

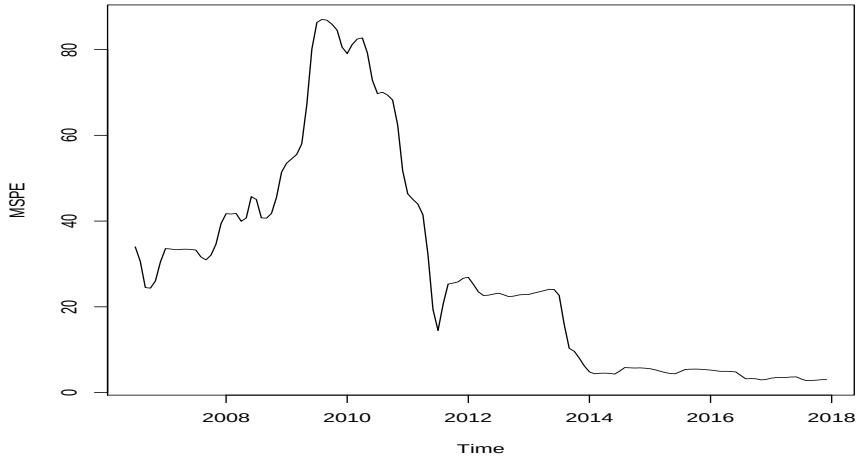


Figure 232: 24 month moving average of mean squared forecasting errors of 6-step-ahead MA-opt forecast of IP

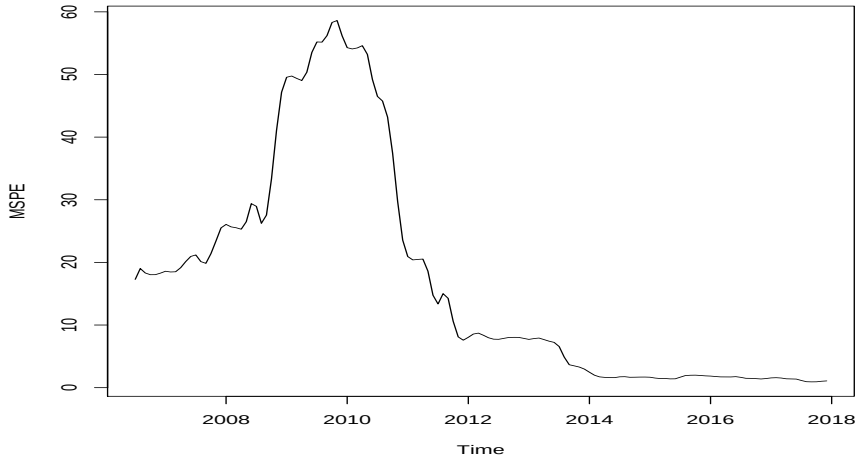


Figure 233: 24 month moving average of mean squared forecasting errors of 6-step-ahead SES forecast of IP

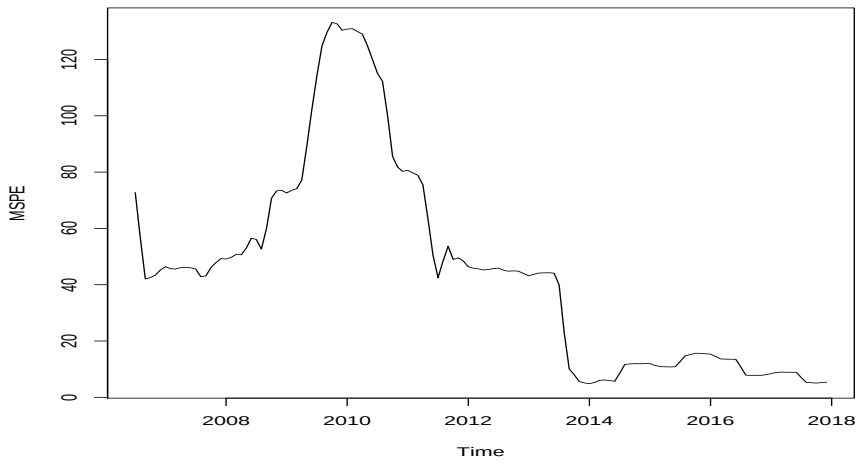


Figure 234: 24 month moving average of mean squared forecasting errors of 6-step-ahead SES-opt forecast of IP

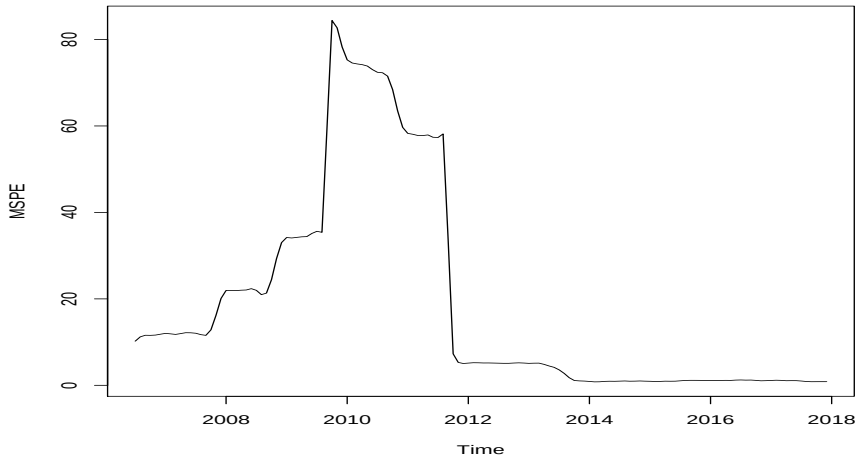


Figure 235: 24 month moving average of mean squared forecasting errors of 6-step-ahead AR(1) forecast of IP

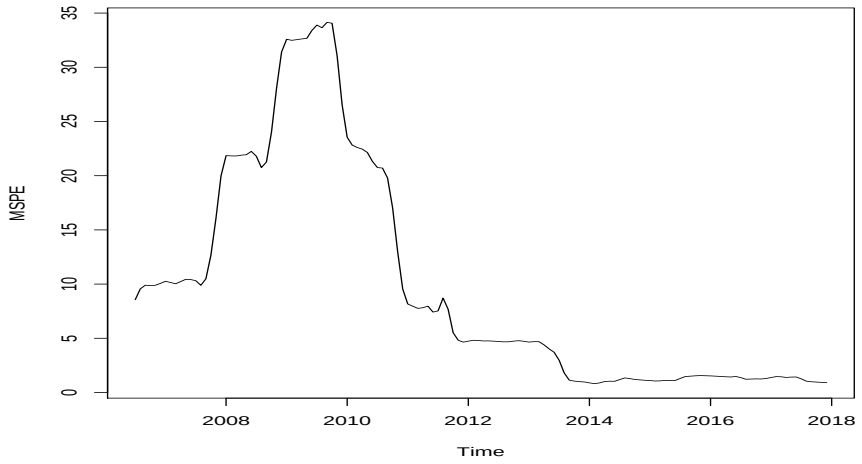


Figure 236: 24 month moving average of mean squared forecasting errors of 6-step-ahead AR(p) forecast of IP

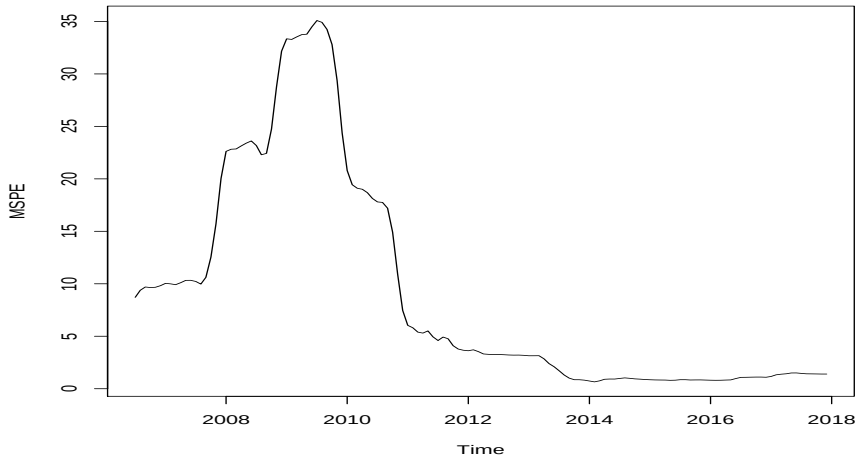


Figure 237: 24 month moving average of mean squared forecasting errors of 6-step-ahead ARd(1) forecast of IP

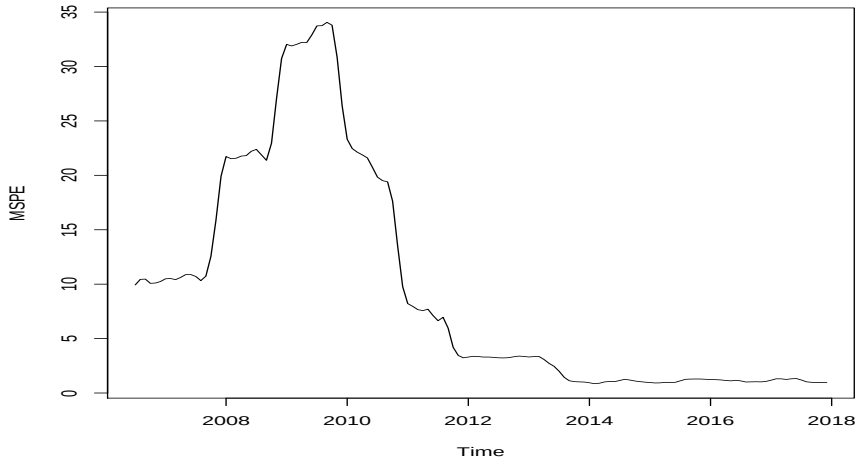


Figure 238: 24 month moving average of mean squared forecasting errors of 6-step-ahead ARd(p) forecast of IP

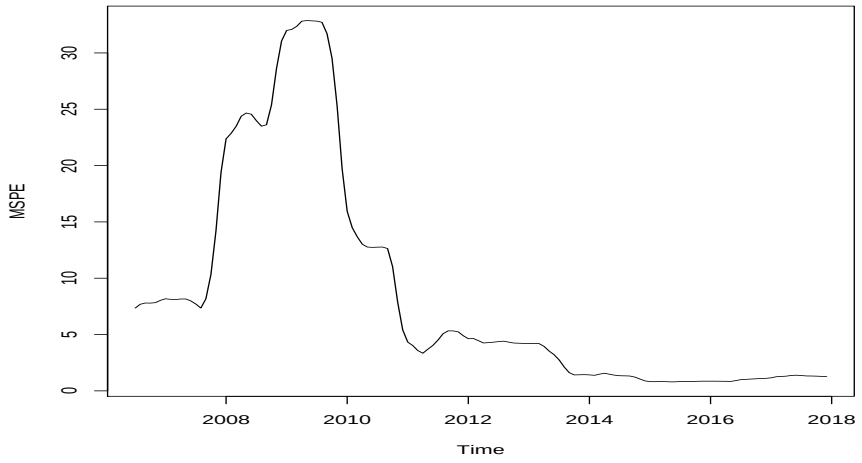


Figure 239: 24 month moving average of mean squared forecasting errors of 6-step-ahead ARMA(1,1) forecast of IP

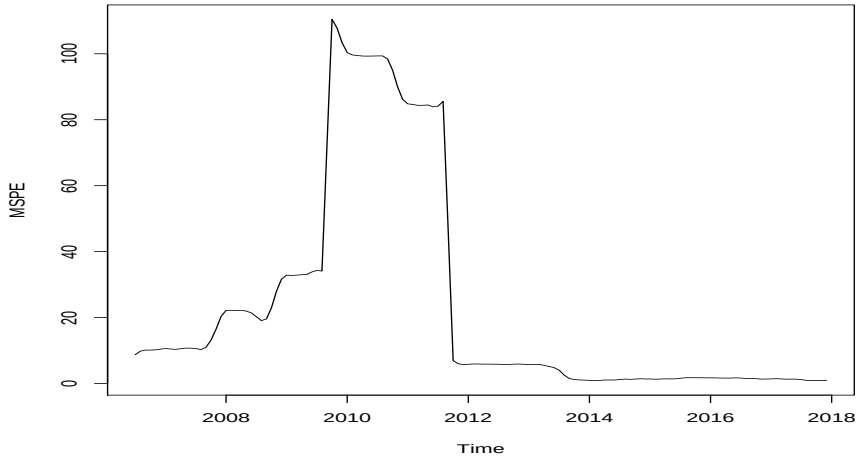


Figure 240: 24 month moving average of mean squared forecasting errors of 6-step-ahead ARMA(p,q) forecast of IP

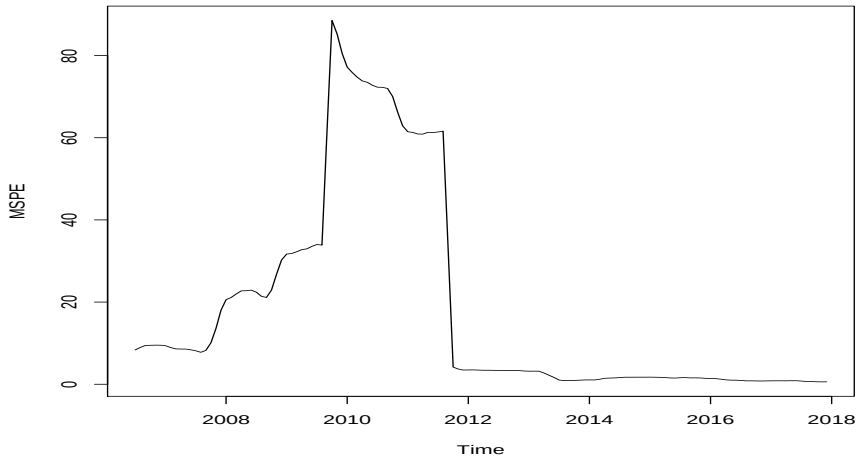


Figure 241: 24 month moving average of mean squared forecasting errors of 6-step-ahead VAR(1) forecast of IP

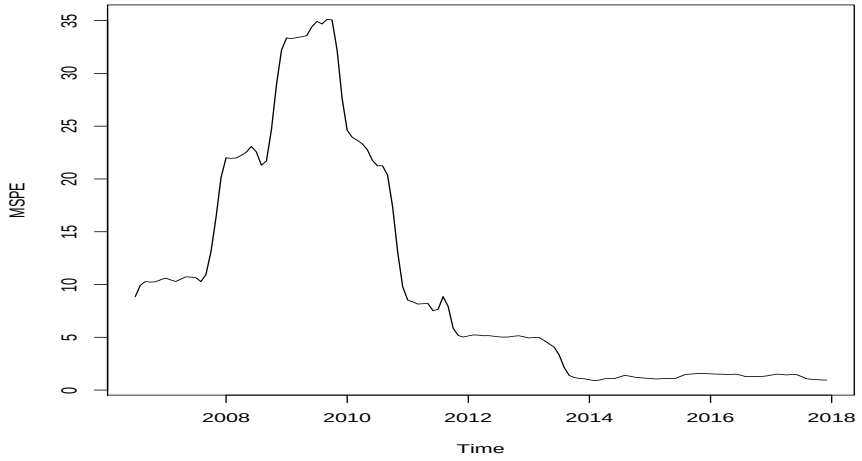


Figure 242: 24 month moving average of mean squared forecasting errors of 6-step-ahead VAR(p) forecast of IP

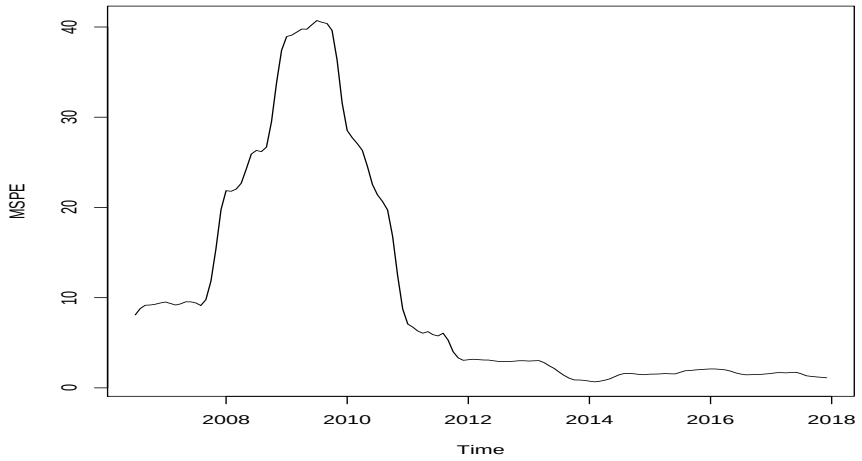


Figure 243: 24 month moving average of mean squared forecasting errors of 6-step-ahead BVAR forecast of IP

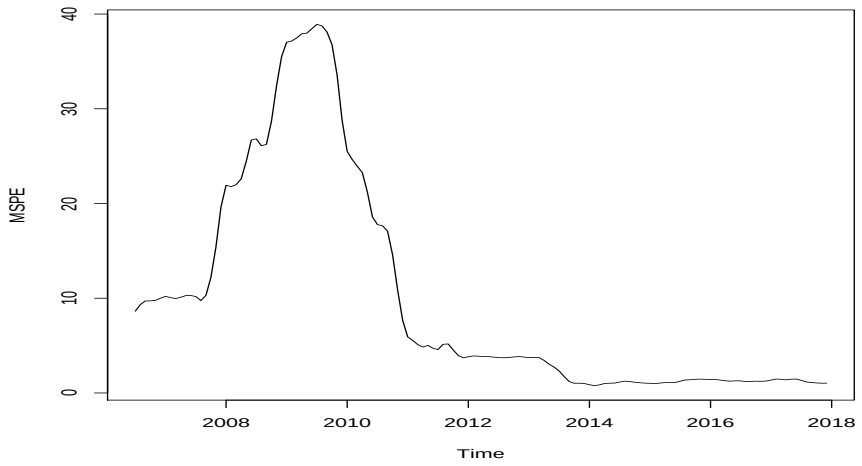


Figure 244: 24 month moving average of mean squared forecasting errors of 6-step-ahead Factor(2) forecast of IP

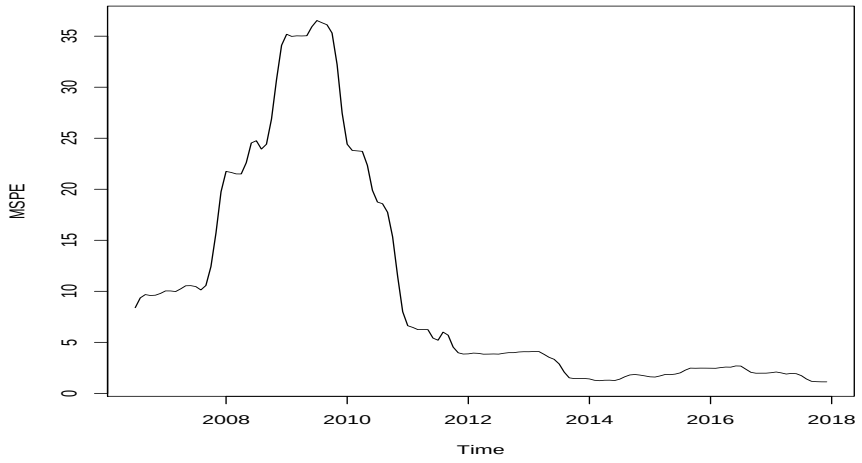


Figure 245: 24 month moving average of mean squared forecasting errors of 6-step-ahead Factor(k) forecast of IP

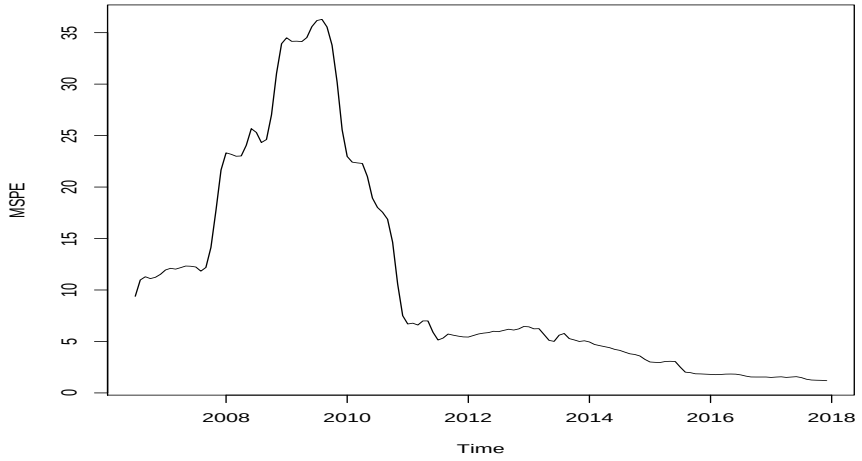


Figure 246: 24 month moving average of mean squared forecasting errors of 6-step-ahead F(2)VAR(1) forecast of IP

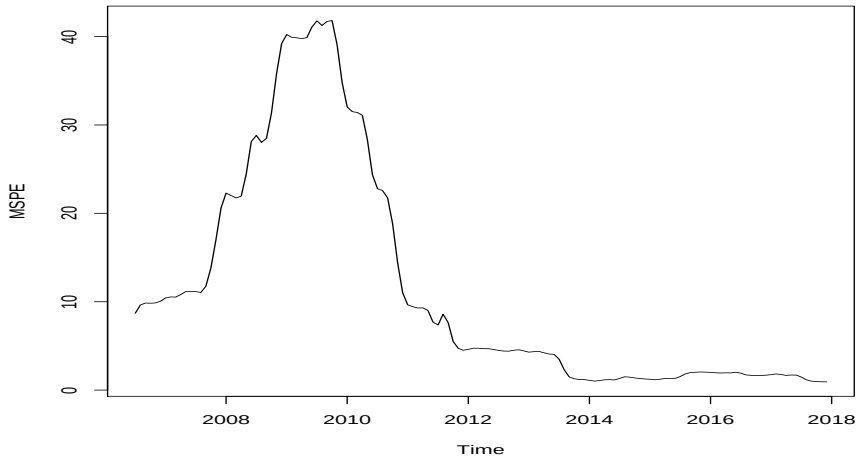
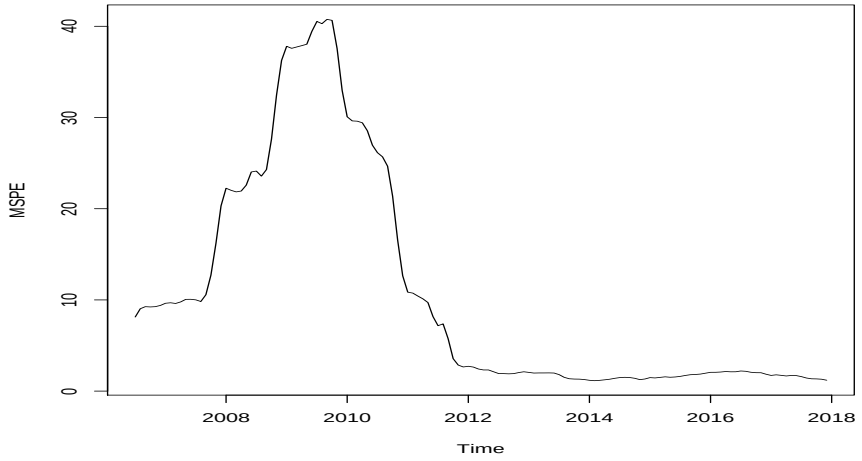


Figure 247: 24 month moving average of mean squared forecasting errors of 6-step-ahead F(2)VAR(p) forecast of IP



3.3.4 Forecast Horizon = 9

Figure 248: 24 month moving average of mean squared forecasting errors of 9-step-ahead Mean forecast of IP

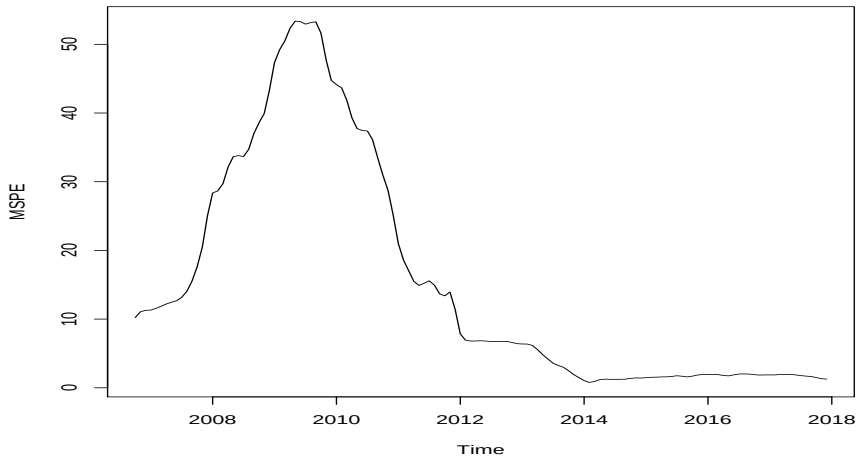


Figure 249: 24 month moving average of mean squared forecasting errors of 9-step-ahead Naive forecast of IP

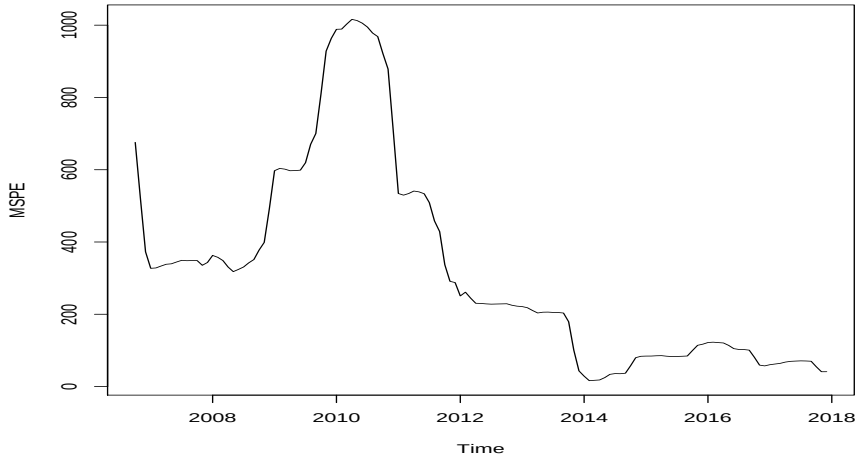


Figure 250: 24 month moving average of mean squared forecasting errors of 9-step-ahead MA forecast of IP

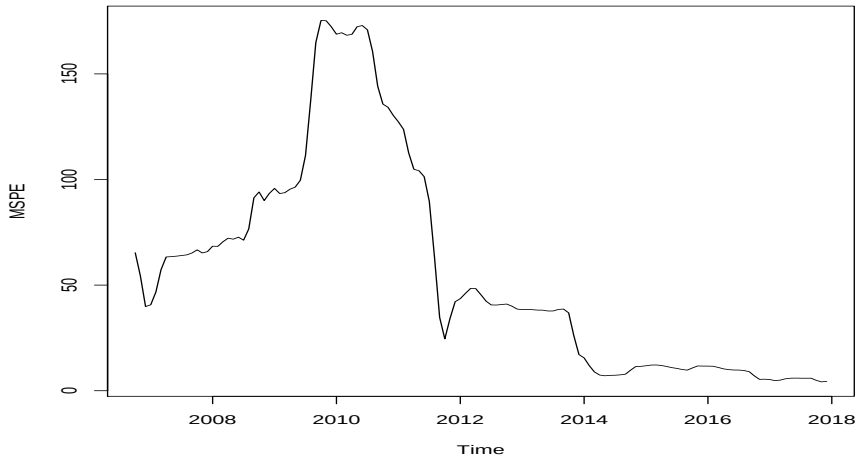


Figure 251: 24 month moving average of mean squared forecasting errors of 9-step-ahead MA-opt forecast of IP

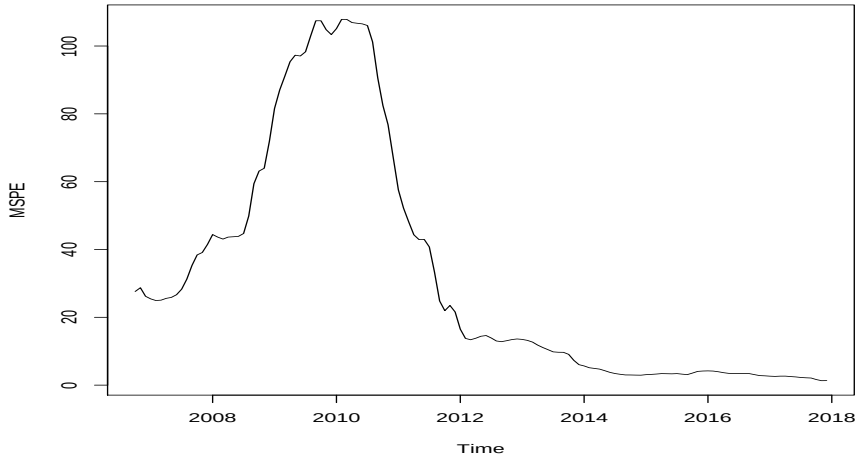


Figure 252: 24 month moving average of mean squared forecasting errors of 9-step-ahead SES forecast of IP

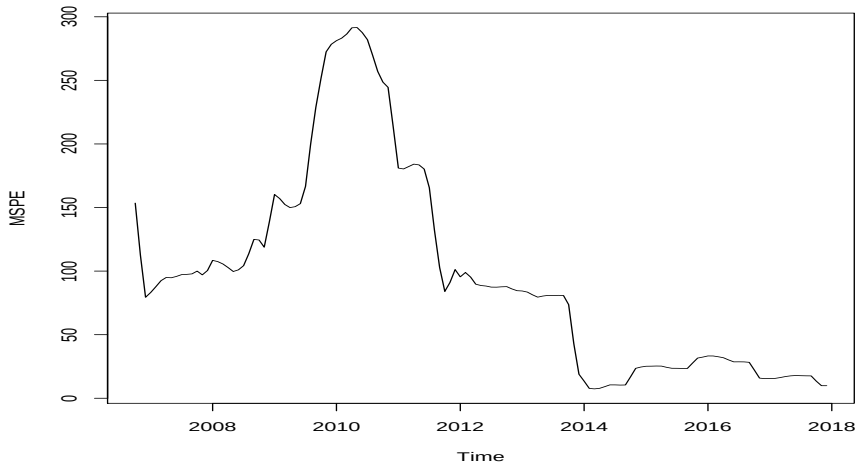


Figure 253: 24 month moving average of mean squared forecasting errors of 9-step-ahead SES-opt forecast of IP

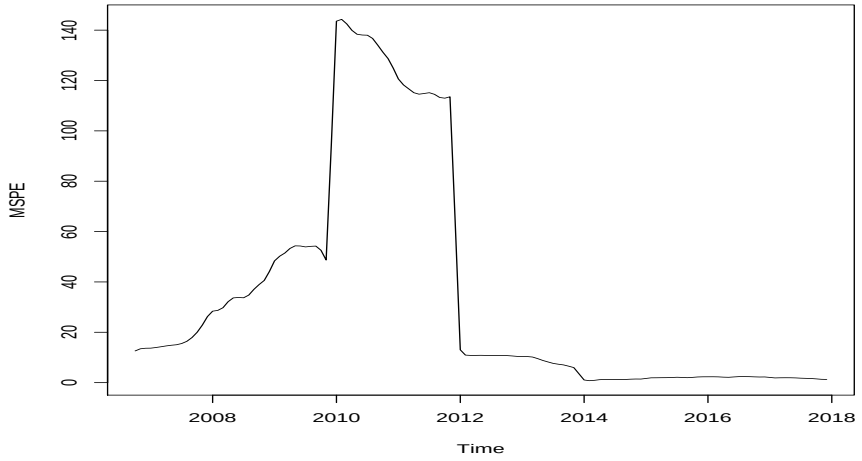


Figure 254: 24 month moving average of mean squared forecasting errors of 9-step-ahead AR(1) forecast of IP

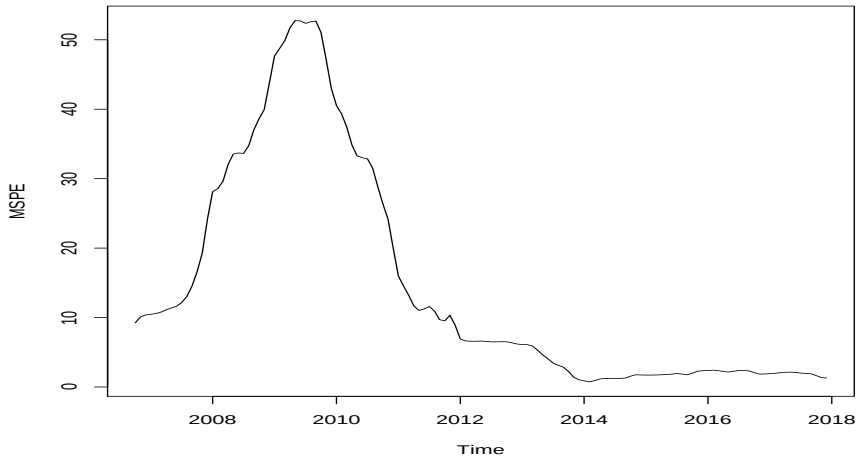


Figure 255: 24 month moving average of mean squared forecasting errors of 9-step-ahead AR(p) forecast of IP

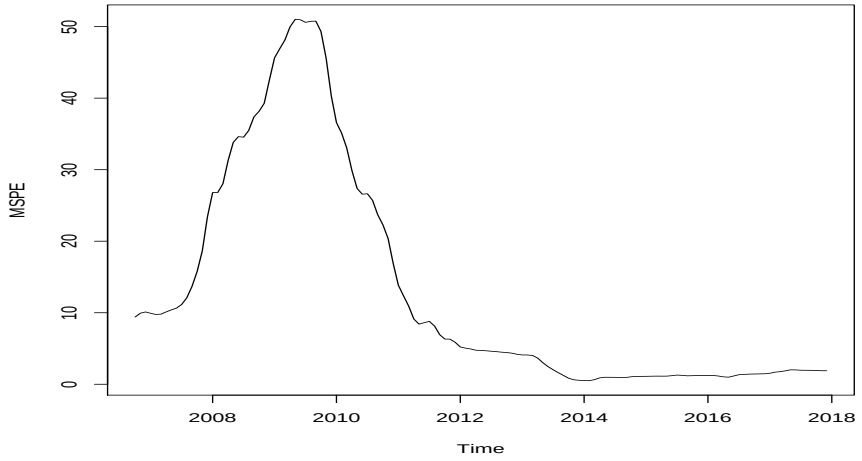


Figure 256: 24 month moving average of mean squared forecasting errors of 9-step-ahead ARd(1) forecast of IP

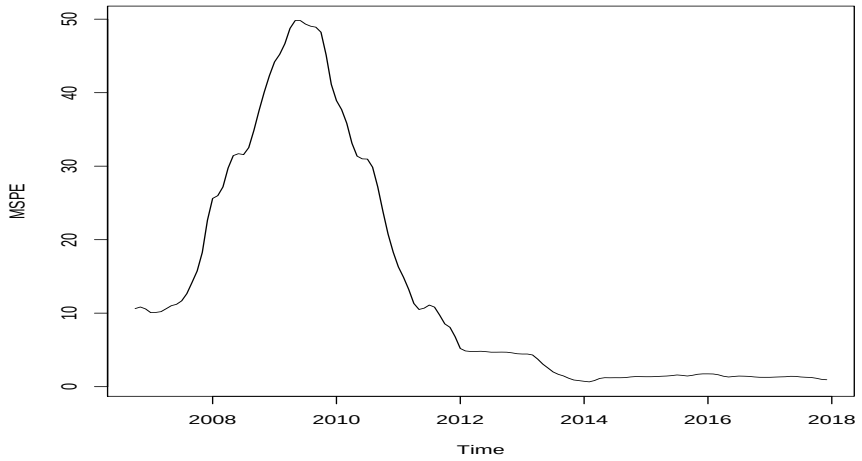


Figure 257: 24 month moving average of mean squared forecasting errors of 9-step-ahead ARd(p) forecast of IP

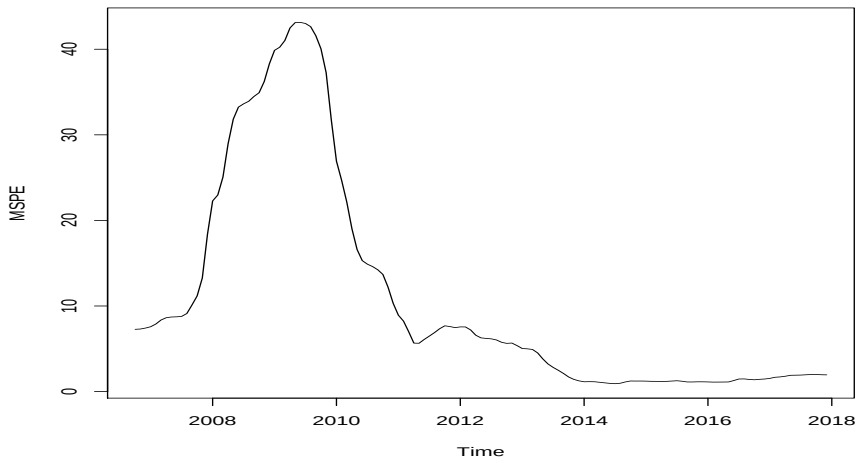


Figure 258: 24 month moving average of mean squared forecasting errors of 9-step-ahead ARMA(1,1) forecast of IP

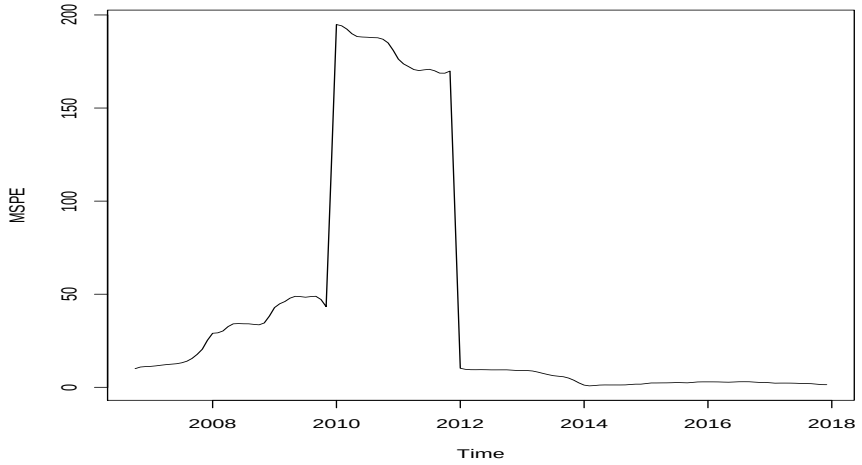


Figure 259: 24 month moving average of mean squared forecasting errors of 9-step-ahead ARMA(p,q) forecast of IP

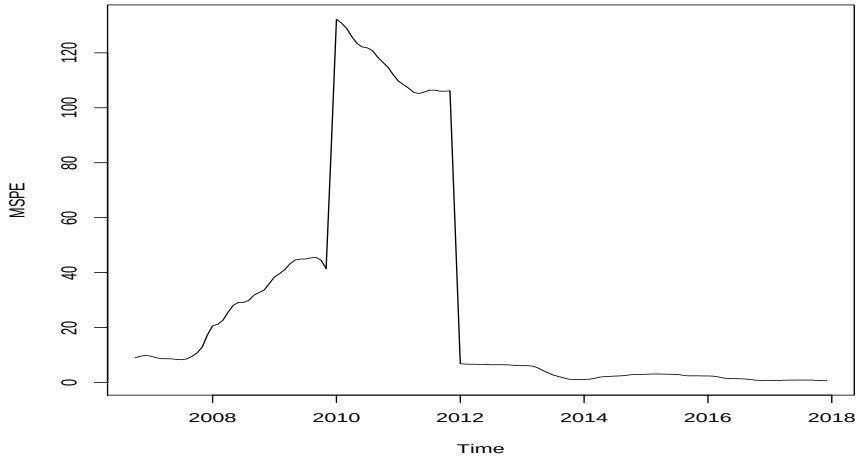


Figure 260: 24 month moving average of mean squared forecasting errors of 9-step-ahead VAR(1) forecast of IP

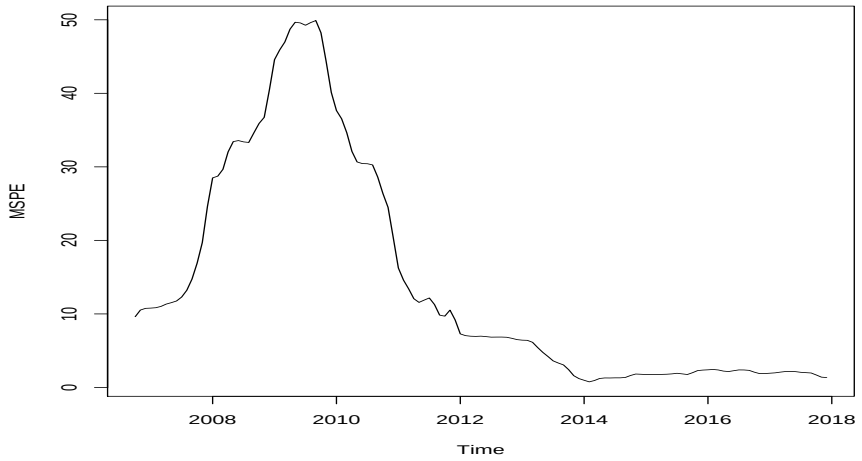


Figure 261: 24 month moving average of mean squared forecasting errors of 9-step-ahead VAR(p) forecast of IP

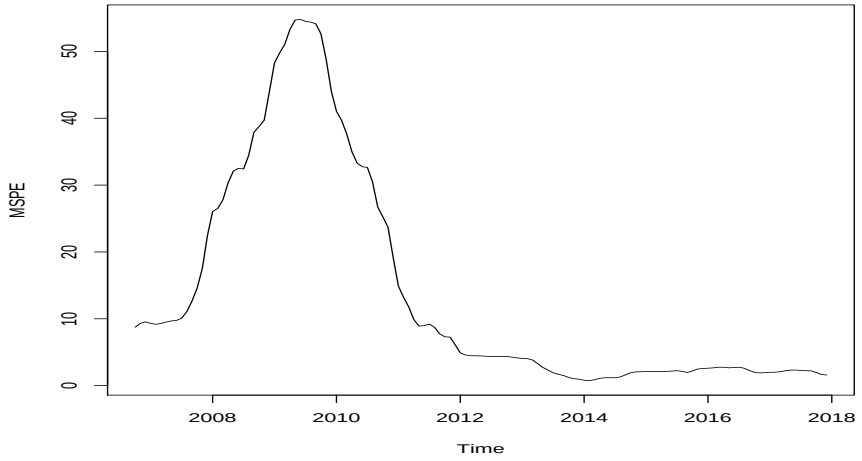


Figure 262: 24 month moving average of mean squared forecasting errors of 9-step-ahead BVAR forecast of IP

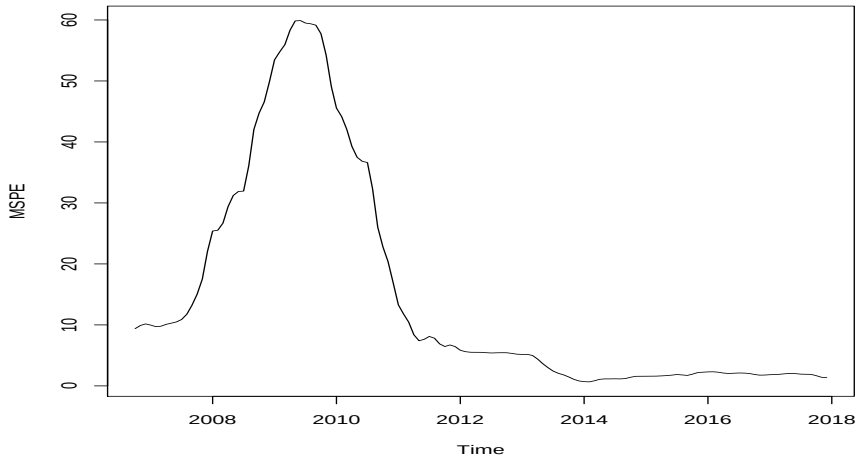


Figure 263: 24 month moving average of mean squared forecasting errors of 9-step-ahead Factor(2) forecast of IP

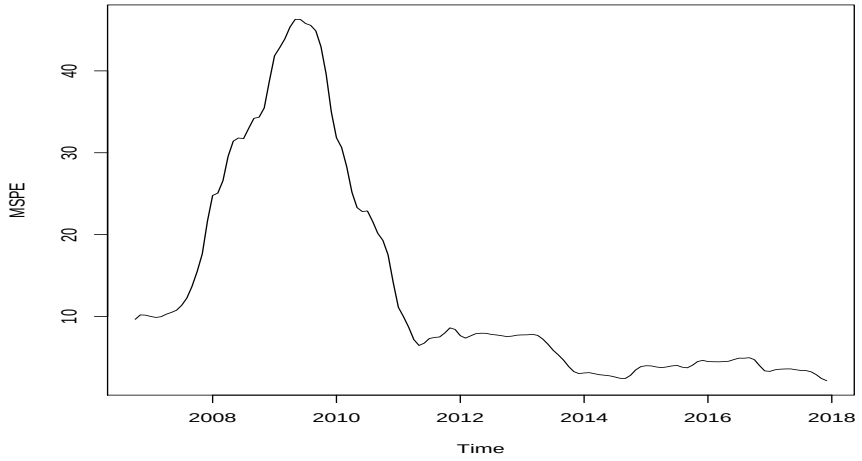


Figure 264: 24 month moving average of mean squared forecasting errors of 9-step-ahead Factor(k) forecast of IP

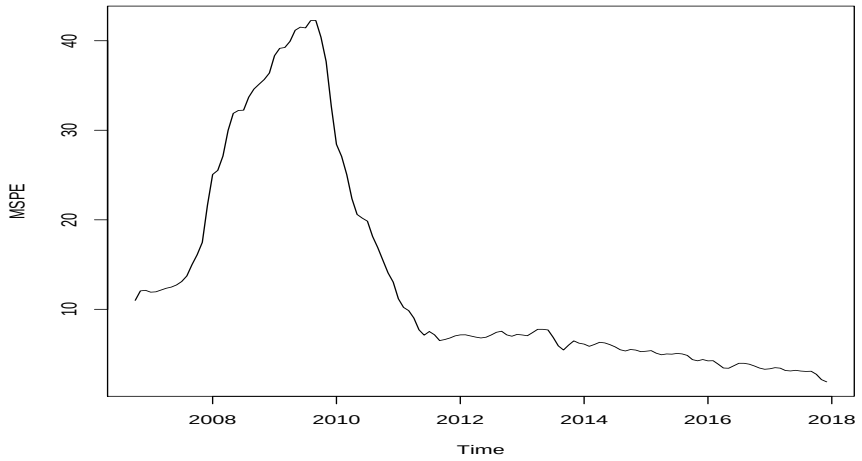


Figure 265: 24 month moving average of mean squared forecasting errors of 9-step-ahead F(2)VAR(1) forecast of IP

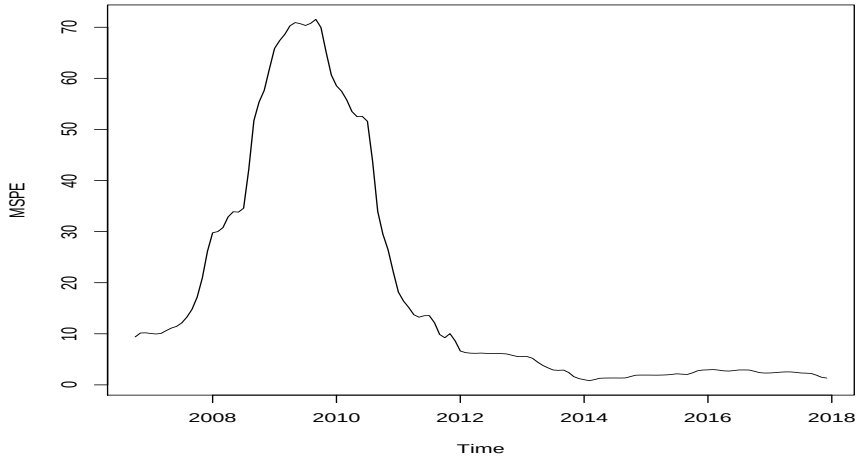
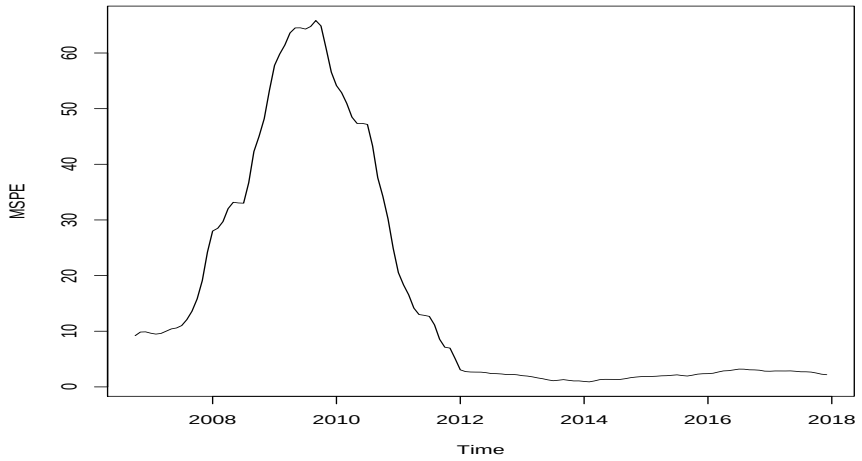


Figure 266: 24 month moving average of mean squared forecasting errors of 9-step-ahead F(2)VAR(p) forecast of IP



3.3.5 Forecast Horizon = 12

Figure 267: 24 month moving average of mean squared forecasting errors of 12-step-ahead Mean forecast of IP

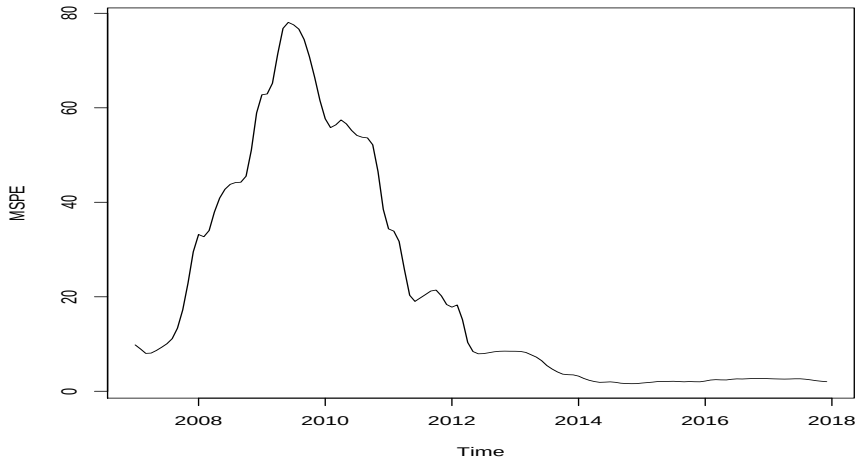


Figure 268: 24 month moving average of mean squared forecasting errors of 12-step-ahead Naive forecast of IP

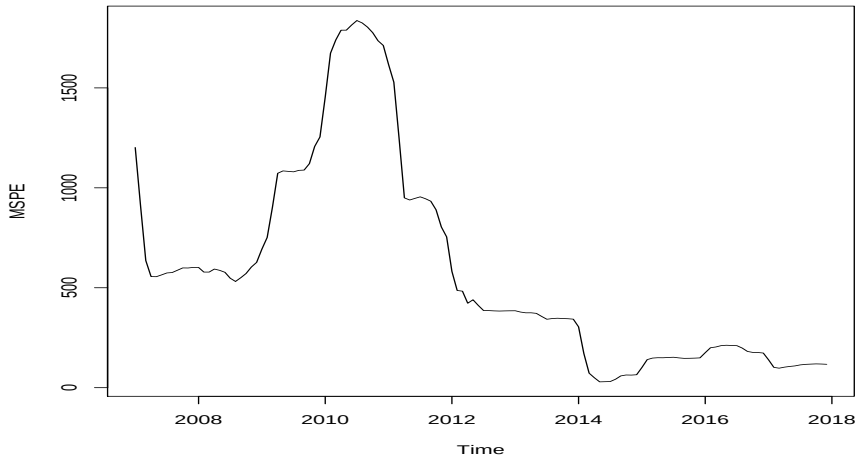


Figure 269: 24 month moving average of mean squared forecasting errors of 12-step-ahead MA forecast of IP

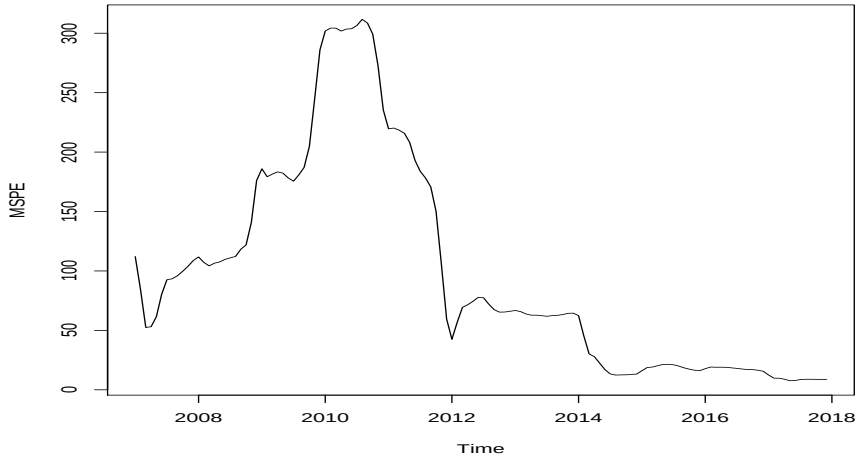


Figure 270: 24 month moving average of mean squared forecasting errors of 12-step-ahead MA-opt forecast of IP

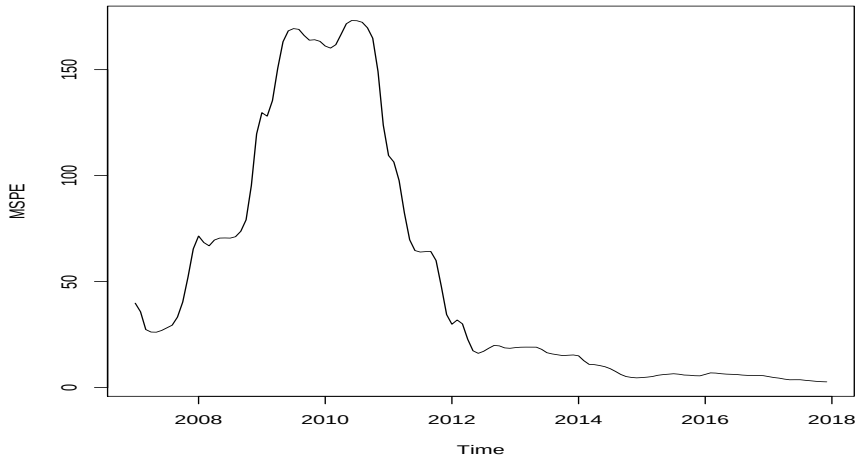


Figure 271: 24 month moving average of mean squared forecasting errors of 12-step-ahead SES forecast of IP

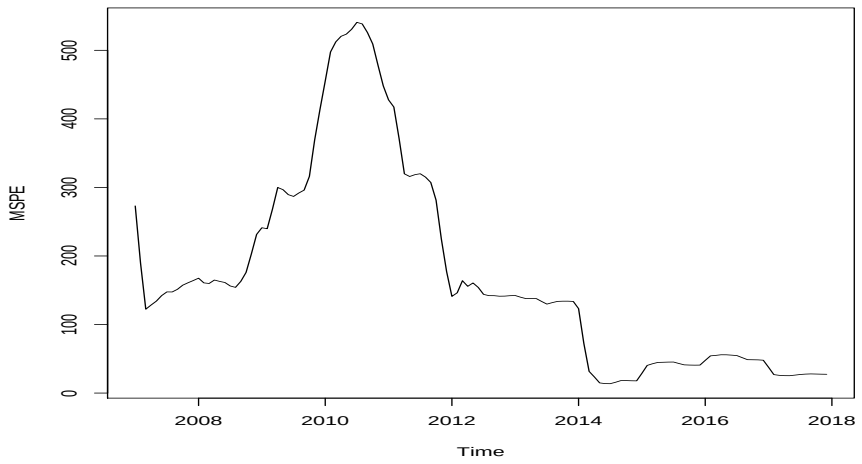


Figure 272: 24 month moving average of mean squared forecasting errors of 12-step-ahead SES-opt forecast of IP

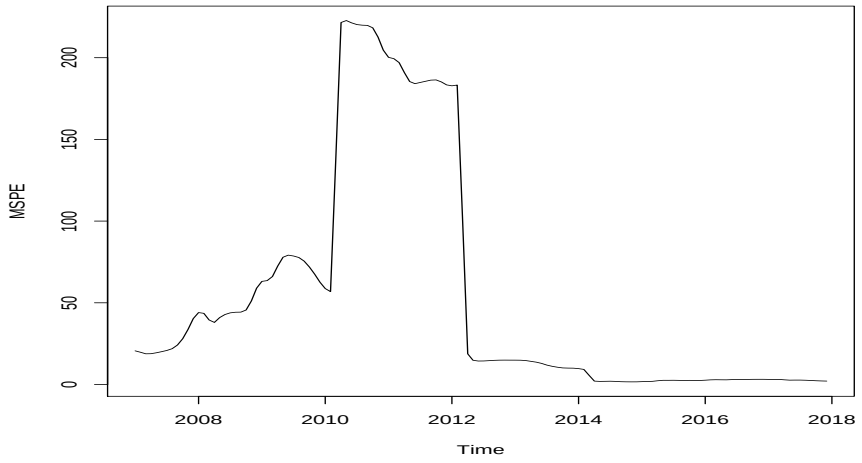


Figure 273: 24 month moving average of mean squared forecasting errors of 12-step-ahead AR(1) forecast of IP

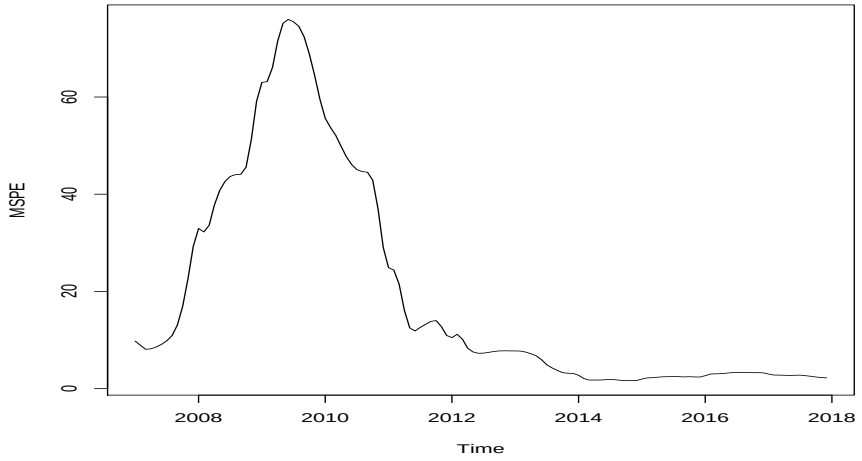


Figure 274: 24 month moving average of mean squared forecasting errors of 12-step-ahead AR(p) forecast of IP

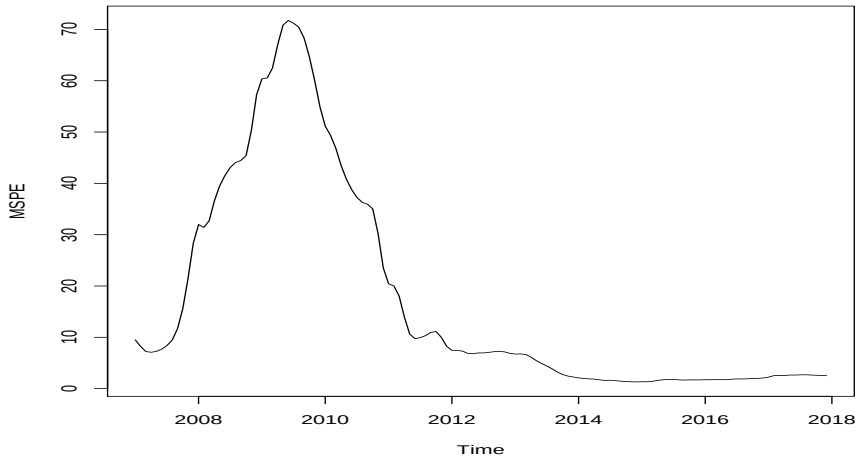


Figure 275: 24 month moving average of mean squared forecasting errors of 12-step-ahead ARd(1) forecast of IP

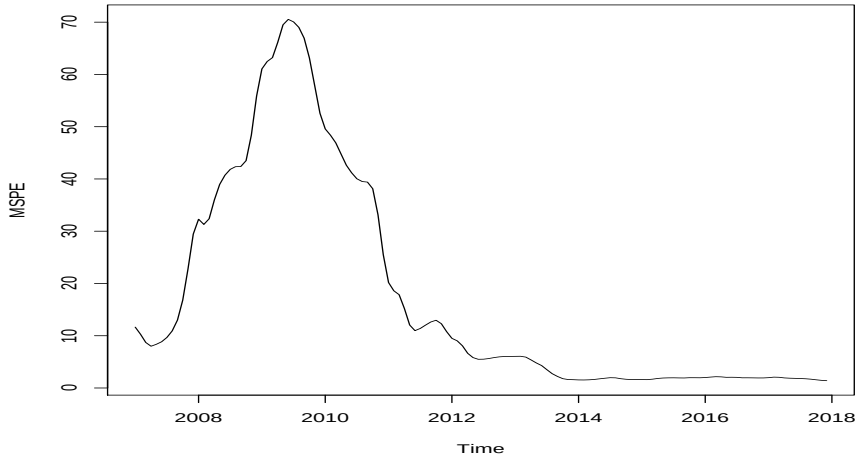


Figure 276: 24 month moving average of mean squared forecasting errors of 12-step-ahead ARd(p) forecast of IP

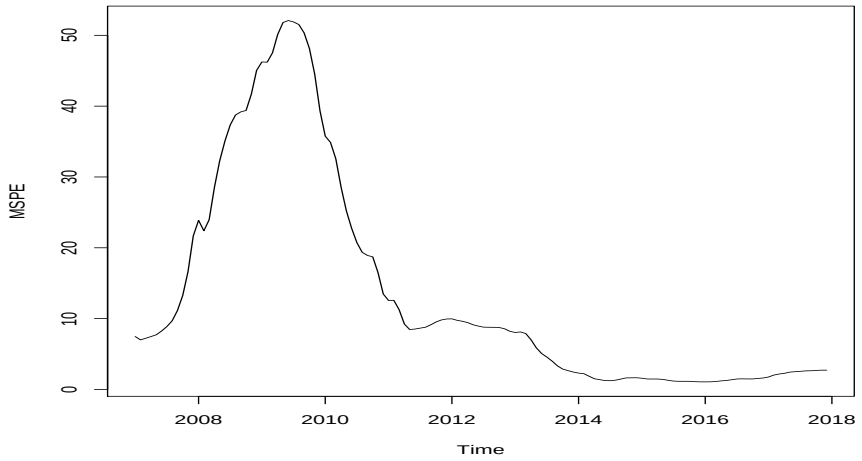


Figure 277: 24 month moving average of mean squared forecasting errors of 12-step-ahead ARMA(1,1) forecast of IP

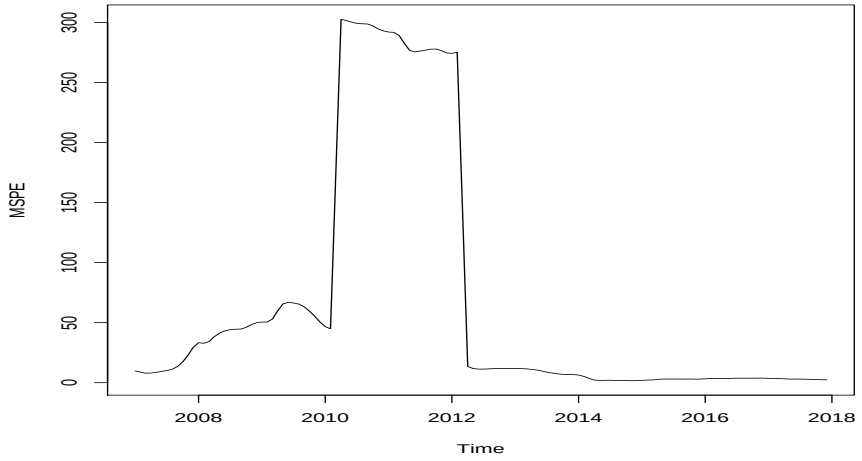


Figure 278: 24 month moving average of mean squared forecasting errors of 12-step-ahead ARMA(p,q) forecast of IP

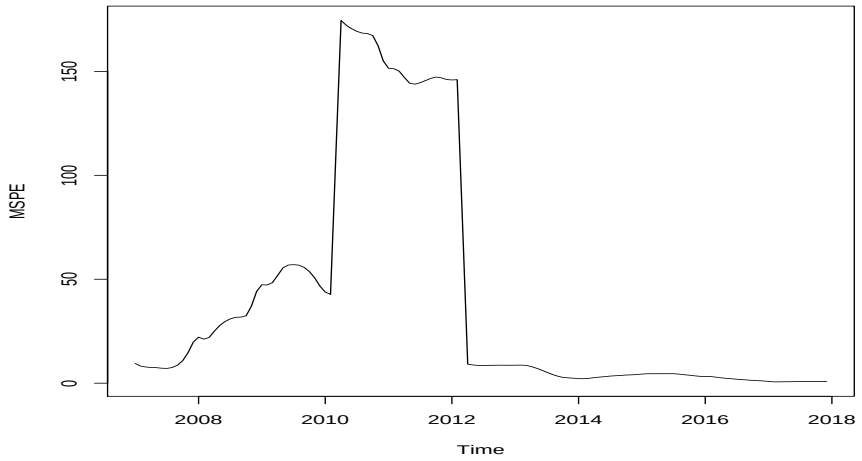


Figure 279: 24 month moving average of mean squared forecasting errors of 12-step-ahead VAR(1) forecast of IP

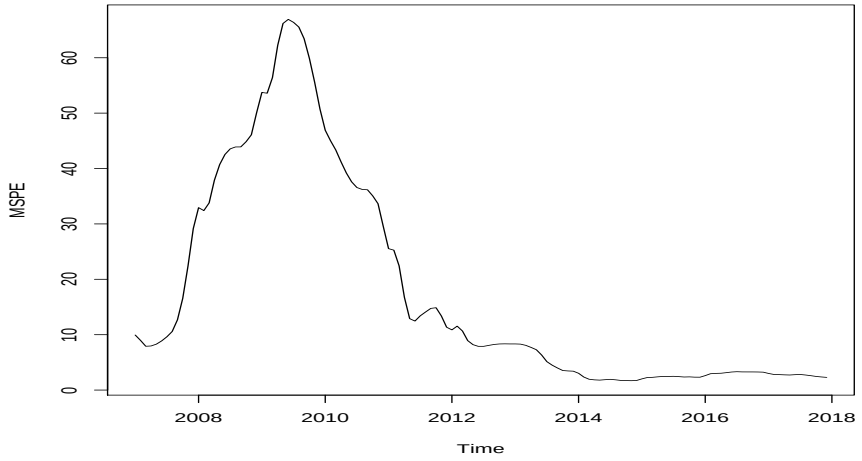


Figure 280: 24 month moving average of mean squared forecasting errors of 12-step-ahead VAR(p) forecast of IP

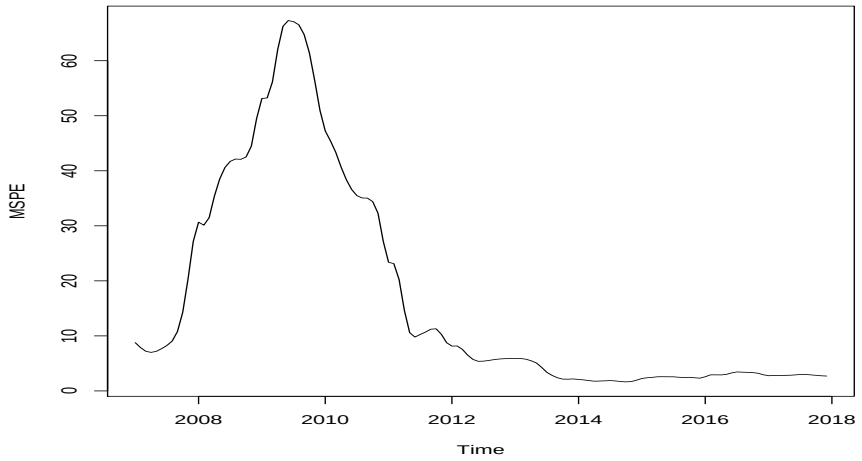


Figure 281: 24 month moving average of mean squared forecasting errors of 12-step-ahead BVAR forecast of IP

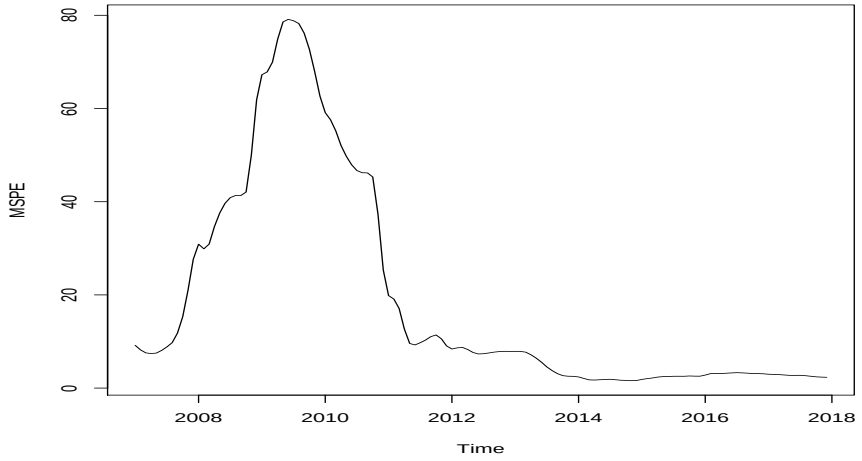


Figure 282: 24 month moving average of mean squared forecasting errors of 12-step-ahead Factor(2) forecast of IP

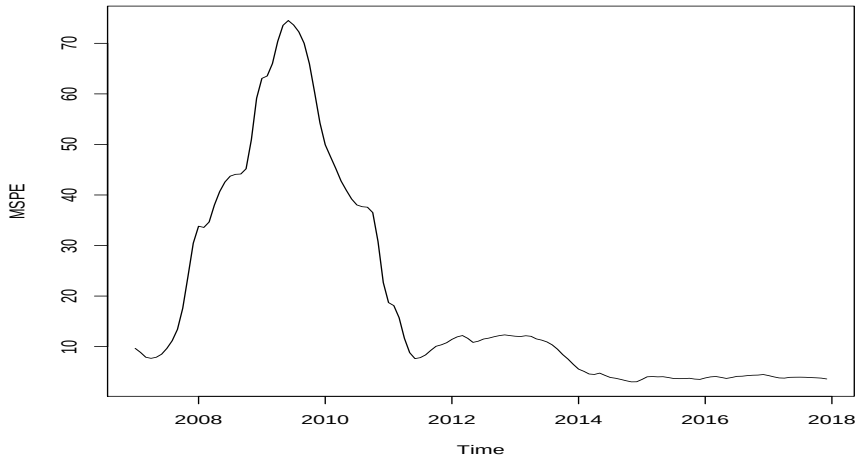


Figure 283: 24 month moving average of mean squared forecasting errors of 12-step-ahead Factor(k) forecast of IP

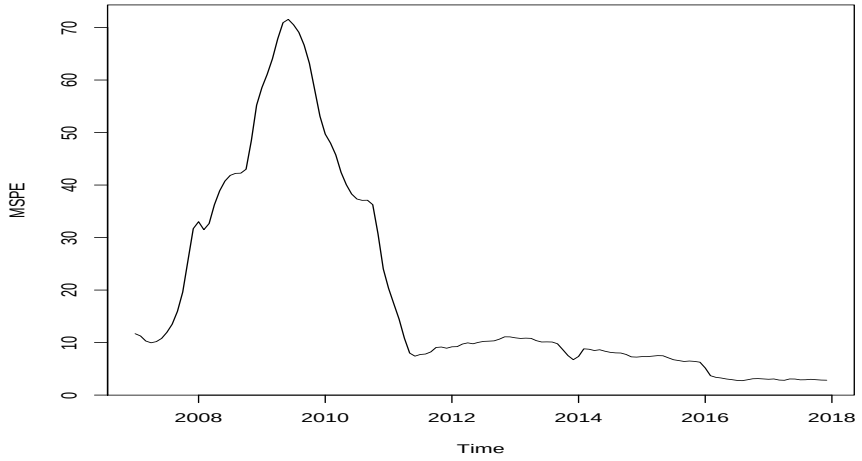


Figure 284: 24 month moving average of mean squared forecasting errors of 12-step-ahead F(2)VAR(1) forecast of IP

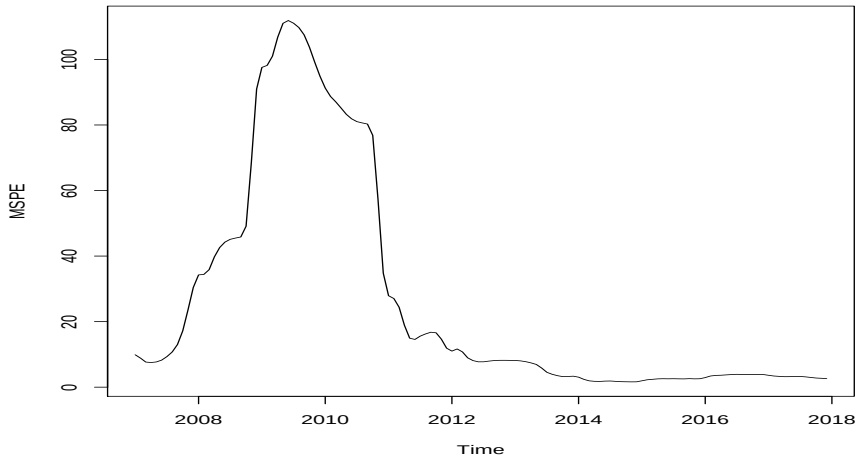
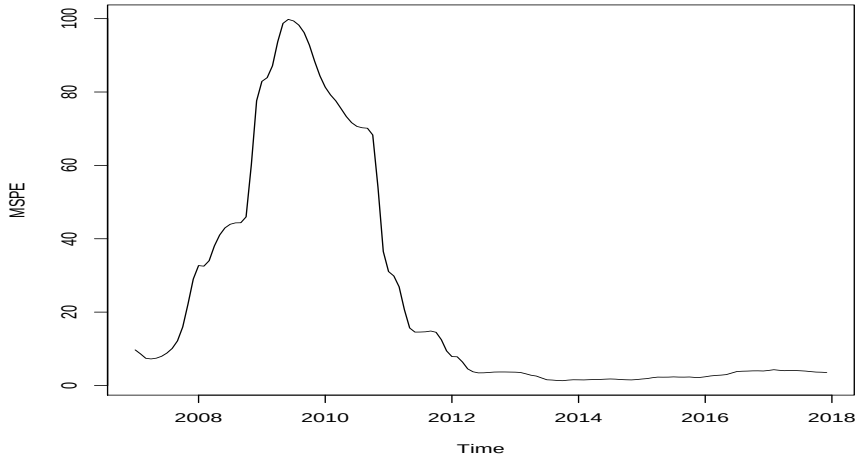


Figure 285: 24 month moving average of mean squared forecasting errors of 12-step-ahead F(2)VAR(p) forecast of IP



3.4 EP

3.4.1 Forecast Horizon = 1

Figure 286: 24 month moving average of mean squared forecasting errors of 1-step-ahead Mean forecast of EP

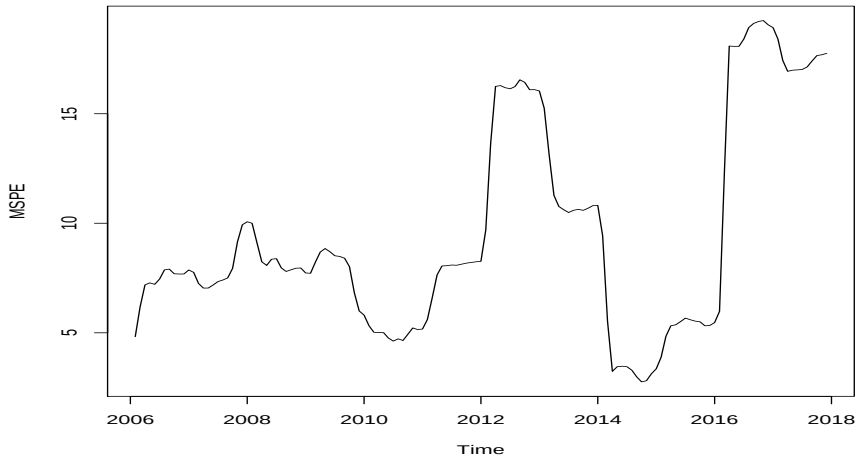


Figure 287: 24 month moving average of mean squared forecasting errors of 1-step-ahead Naive forecast of EP

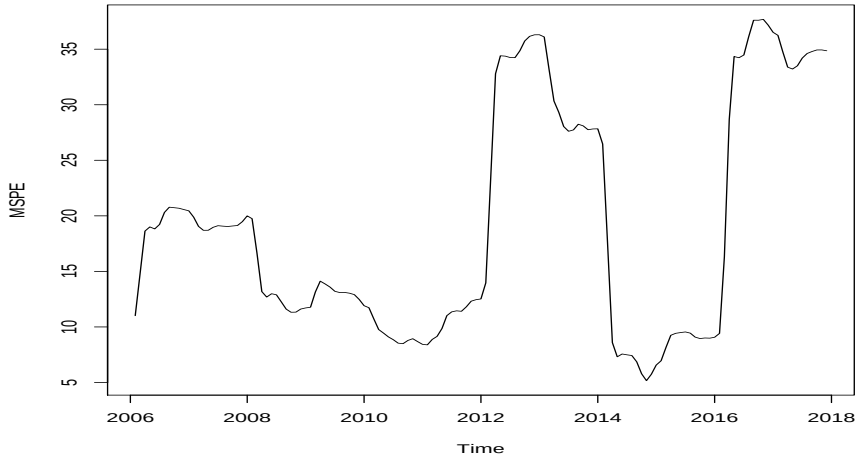


Figure 288: 24 month moving average of mean squared forecasting errors of 1-step-ahead MA forecast of EP

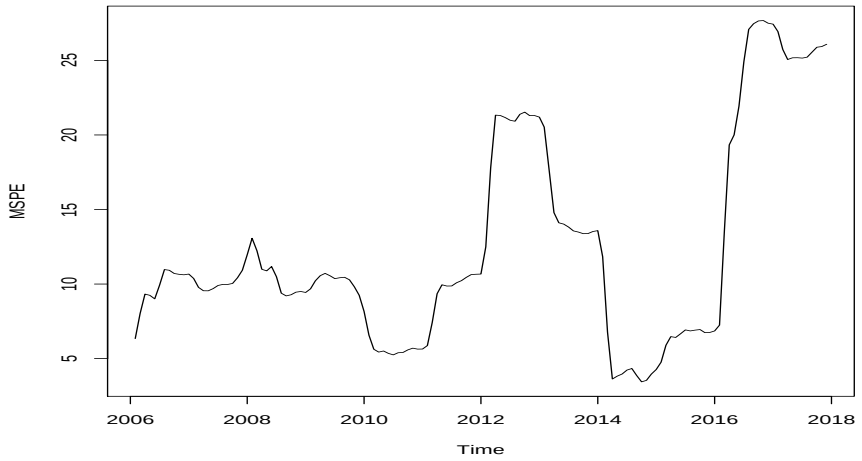


Figure 289: 24 month moving average of mean squared forecasting errors of 1-step-ahead MA-opt forecast of EP

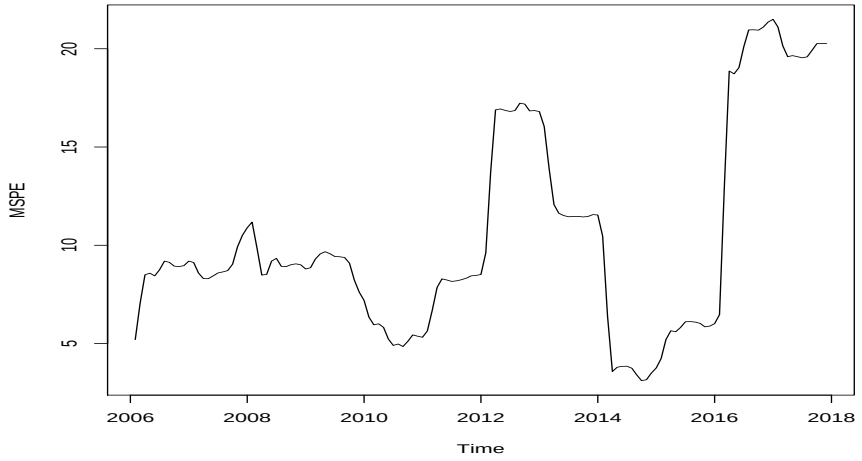


Figure 290: 24 month moving average of mean squared forecasting errors of 1-step-ahead SES forecast of EP

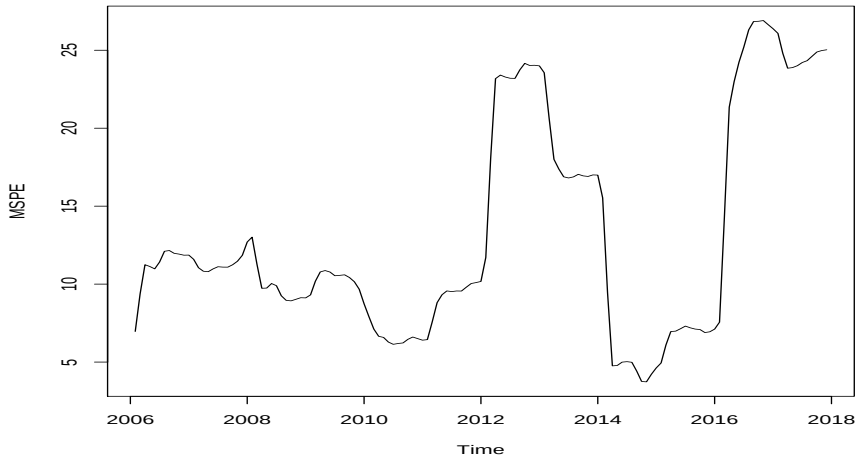


Figure 291: 24 month moving average of mean squared forecasting errors of 1-step-ahead SES-opt forecast of EP

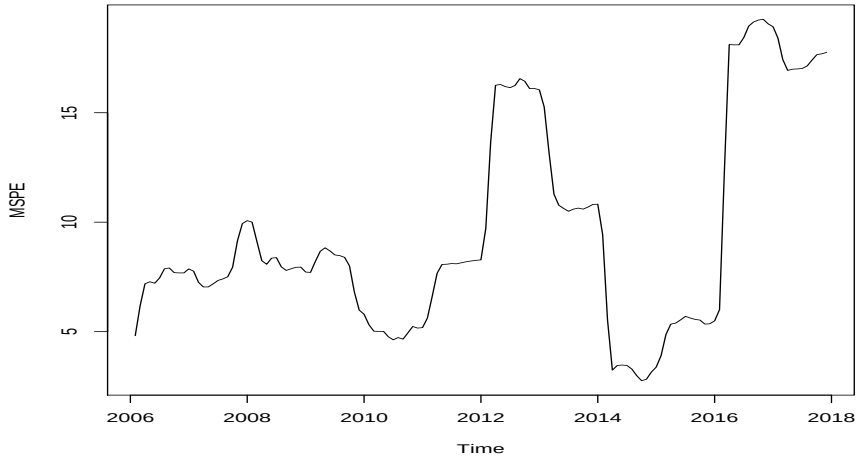


Figure 292: 24 month moving average of mean squared forecasting errors of 1-step-ahead AR(1) forecast of EP

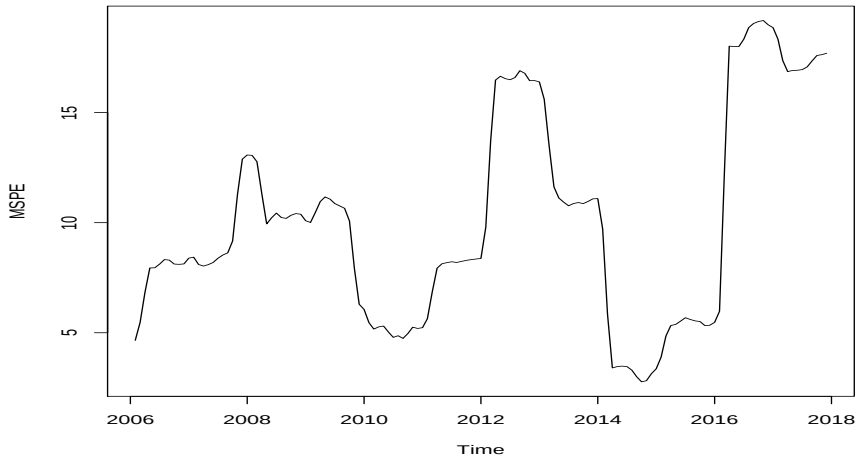


Figure 293: 24 month moving average of mean squared forecasting errors of 1-step-ahead AR(p) forecast of EP

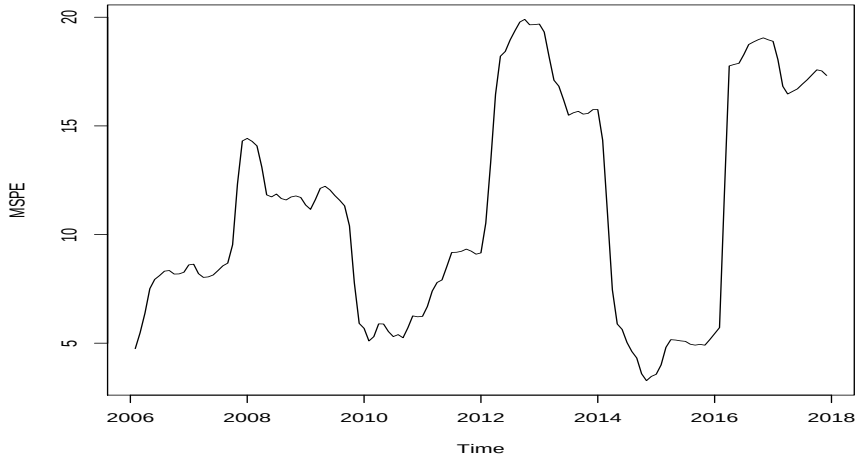


Figure 294: 24 month moving average of mean squared forecasting errors of 1-step-ahead ARd(1) forecast of EP

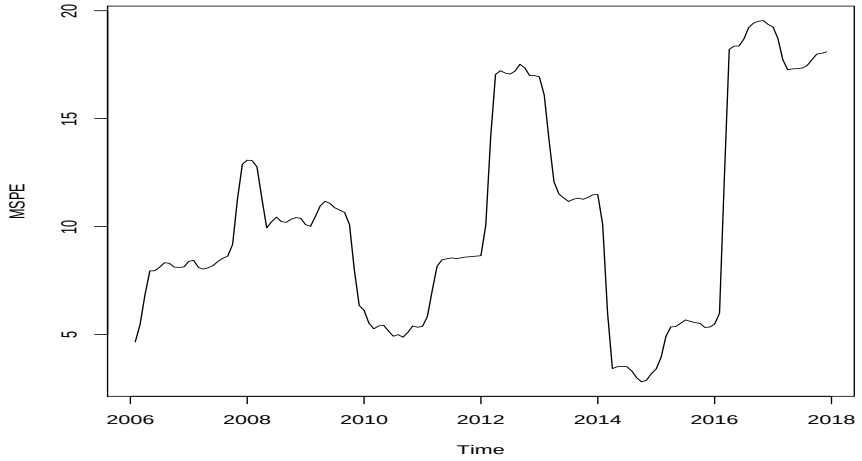


Figure 295: 24 month moving average of mean squared forecasting errors of 1-step-ahead ARd(p) forecast of EP

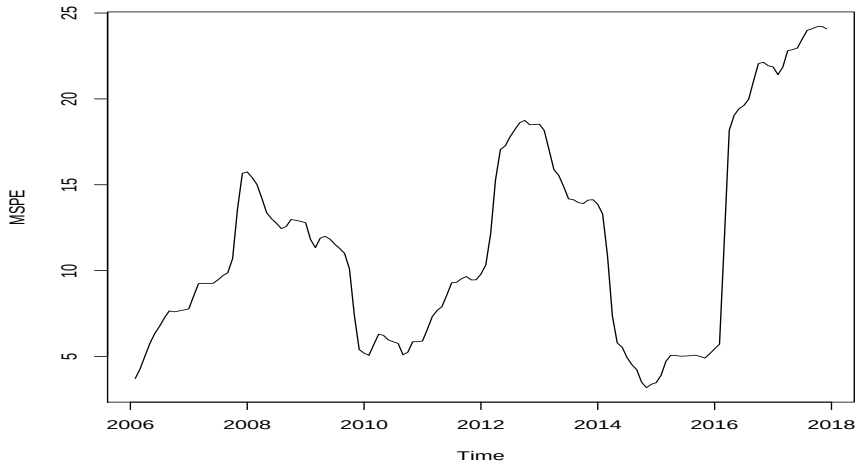


Figure 296: 24 month moving average of mean squared forecasting errors of 1-step-ahead ARMA(1,1) forecast of EP

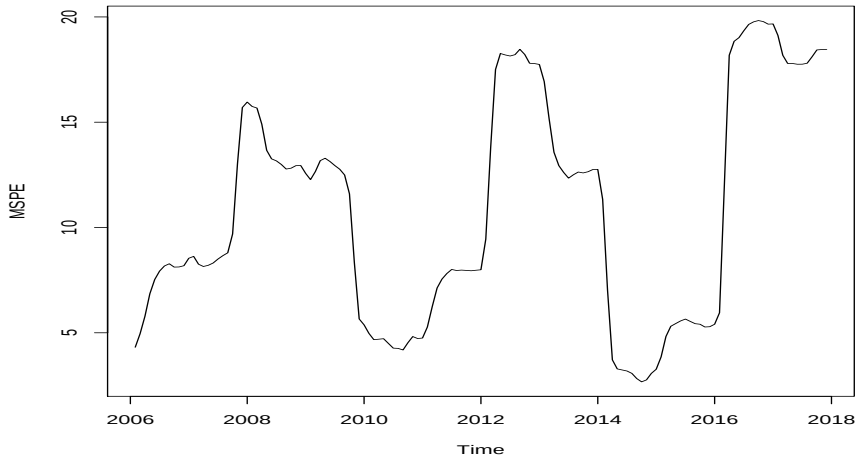


Figure 297: 24 month moving average of mean squared forecasting errors of 1-step-ahead ARMA(p,q) forecast of EP

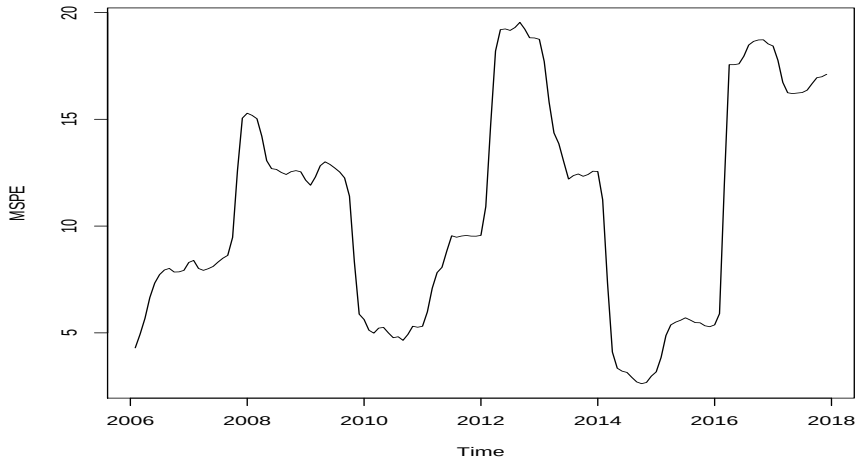


Figure 298: 24 month moving average of mean squared forecasting errors of 1-step-ahead VAR(1) forecast of EP

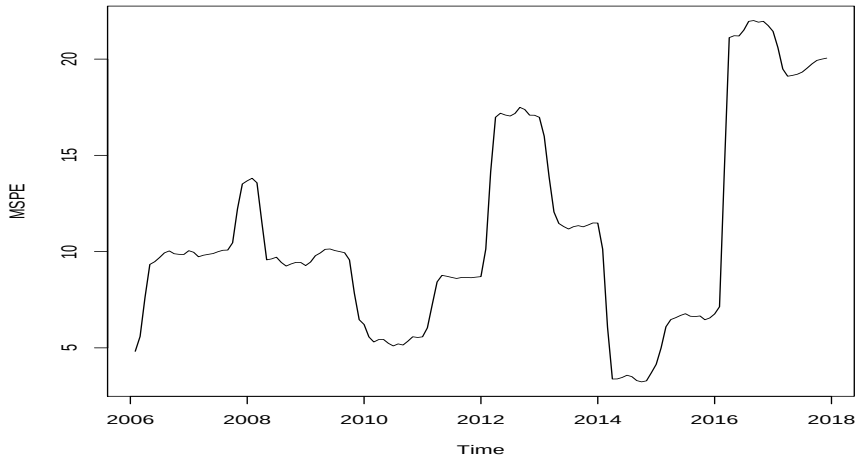


Figure 299: 24 month moving average of mean squared forecasting errors of 1-step-ahead VAR(p) forecast of EP

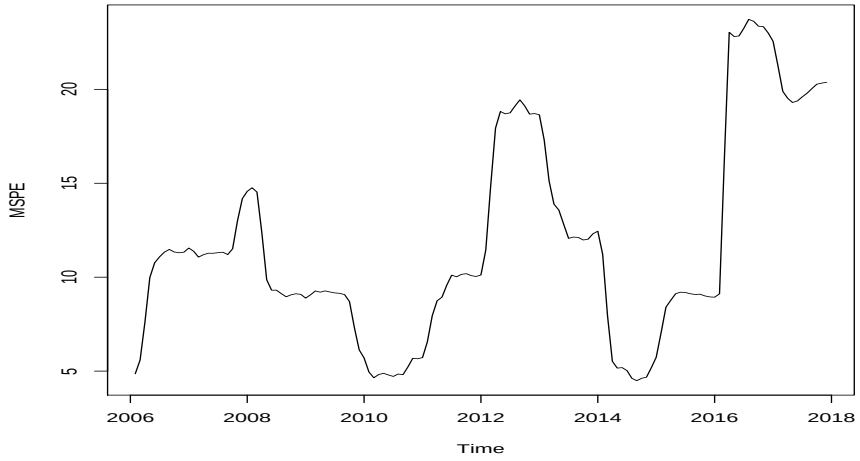


Figure 300: 24 month moving average of mean squared forecasting errors of 1-step-ahead BVAR forecast of EP

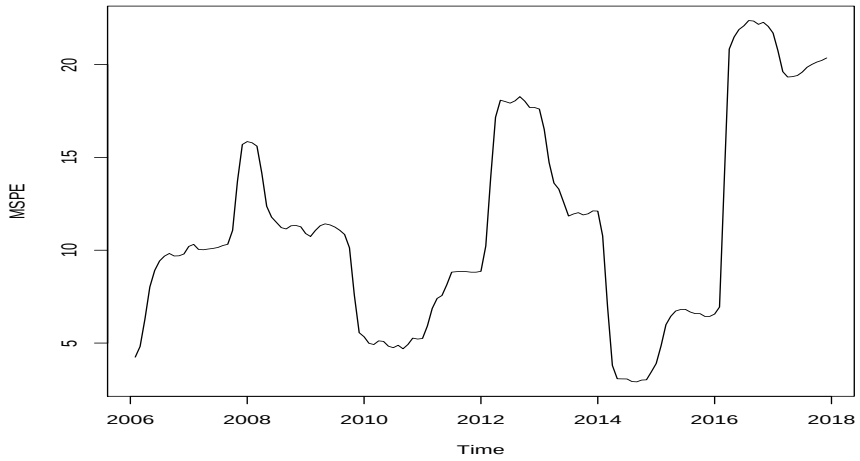


Figure 301: 24 month moving average of mean squared forecasting errors of 1-step-ahead Factor(2) forecast of EP

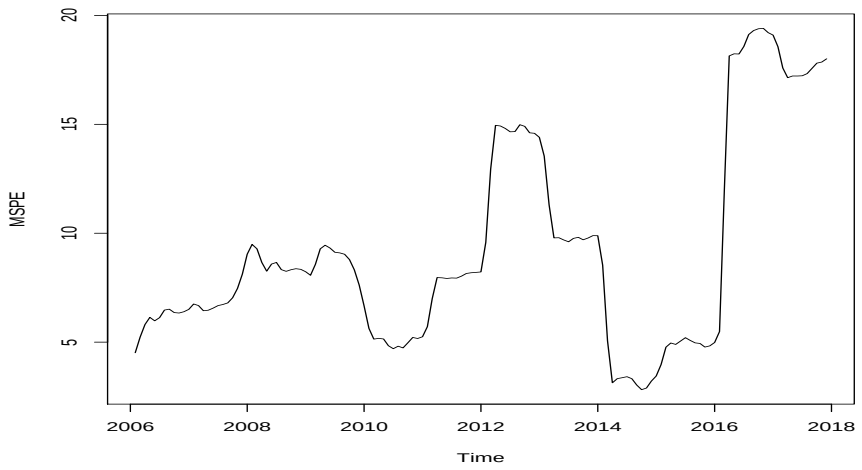


Figure 302: 24 month moving average of mean squared forecasting errors of 1-step-ahead Factor(k) forecast of EP

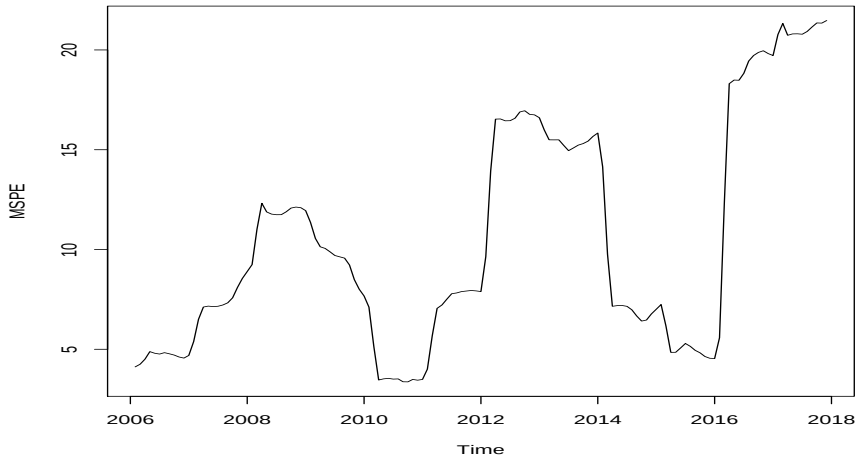


Figure 303: 24 month moving average of mean squared forecasting errors of 1-step-ahead F(2)VAR(1) forecast of EP

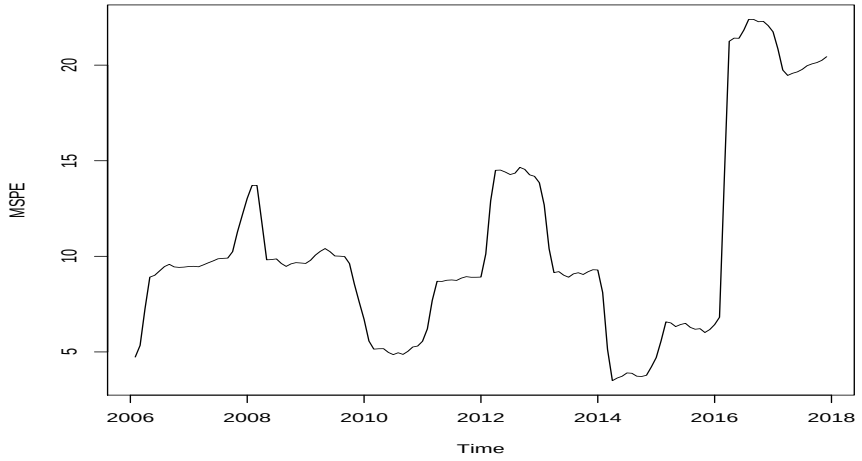
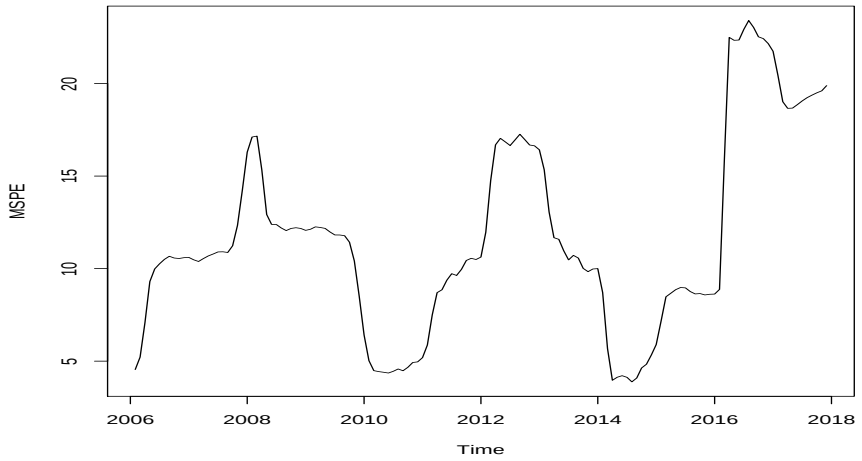


Figure 304: 24 month moving average of mean squared forecasting errors of 1-step-ahead F(2)VAR(p) forecast of EP



3.4.2 Forecast Horizon = 3

Figure 305: 24 month moving average of mean squared forecasting errors of 3-step-ahead Mean forecast of EP

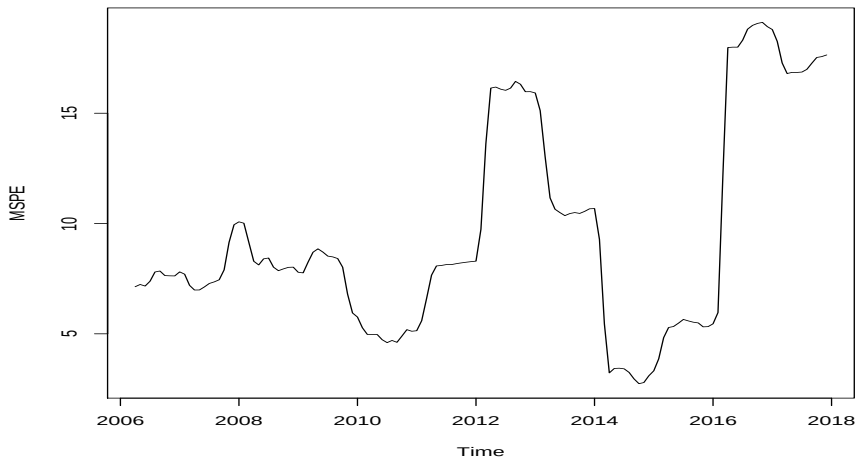


Figure 306: 24 month moving average of mean squared forecasting errors of 3-step-ahead Naive forecast of EP

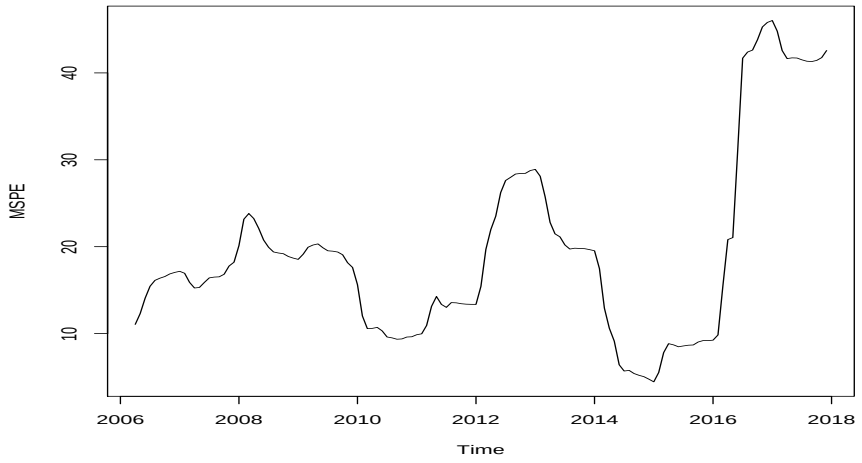


Figure 307: 24 month moving average of mean squared forecasting errors of 3-step-ahead MA forecast of EP

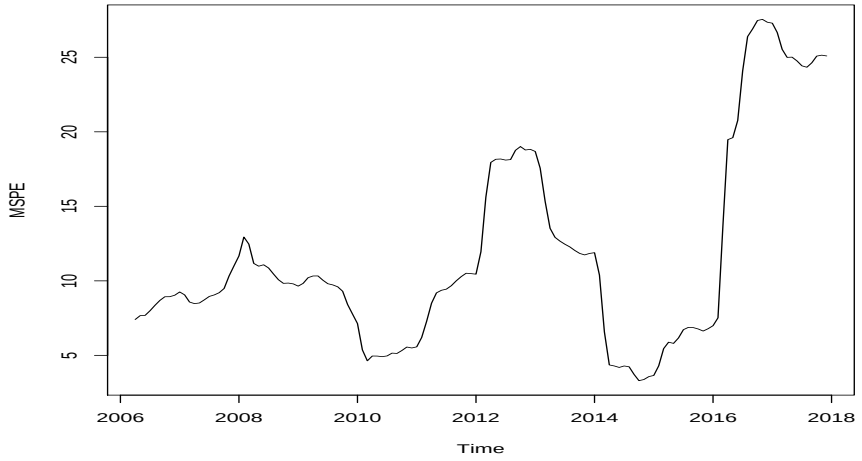


Figure 308: 24 month moving average of mean squared forecasting errors of 3-step-ahead MA-opt forecast of EP

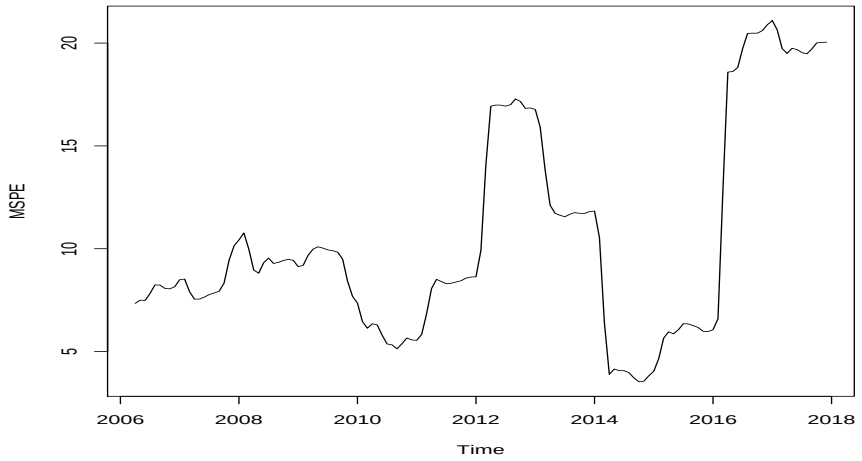


Figure 309: 24 month moving average of mean squared forecasting errors of 3-step-ahead SES forecast of EP

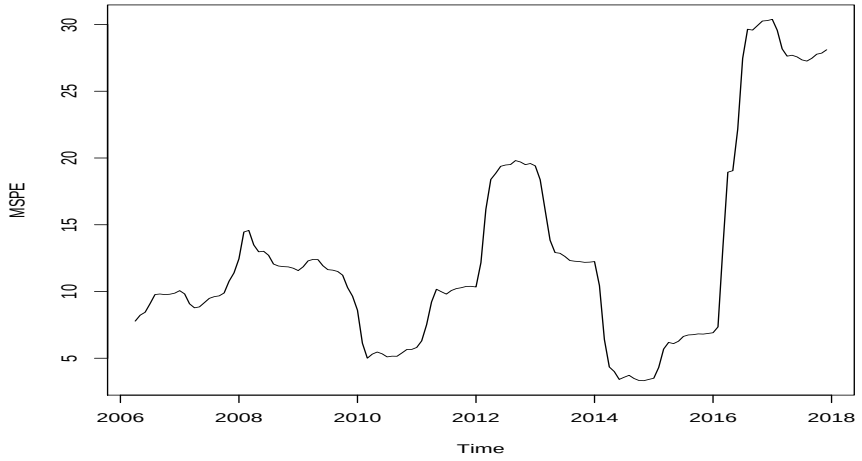


Figure 310: 24 month moving average of mean squared forecasting errors of 3-step-ahead SES-opt forecast of EP

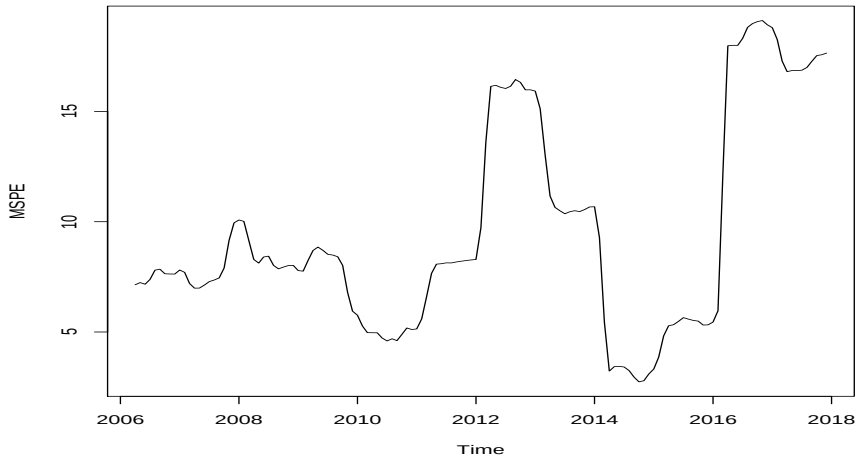


Figure 311: 24 month moving average of mean squared forecasting errors of 3-step-ahead AR(1) forecast of EP

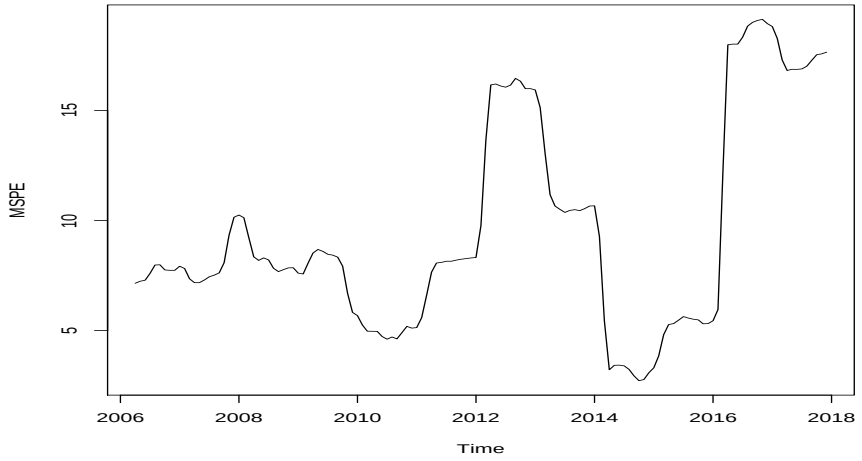


Figure 312: 24 month moving average of mean squared forecasting errors of 3-step-ahead AR(p) forecast of EP

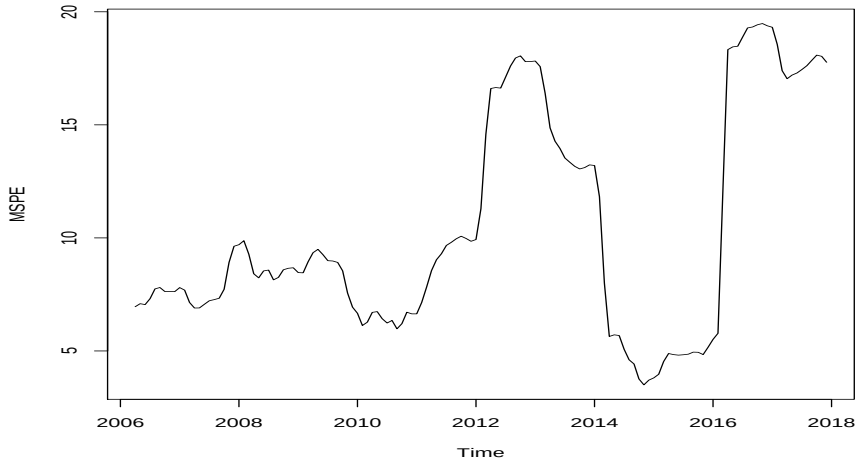


Figure 313: 24 month moving average of mean squared forecasting errors of 3-step-ahead ARd(1) forecast of EP

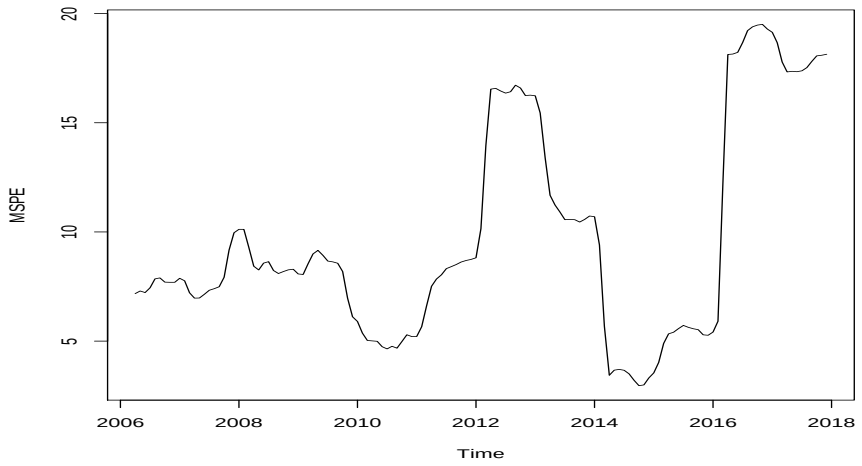


Figure 314: 24 month moving average of mean squared forecasting errors of 3-step-ahead ARd(p) forecast of EP

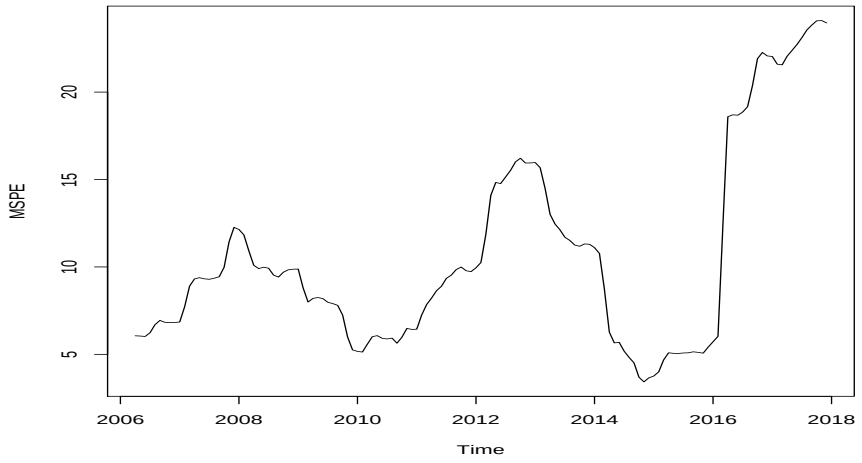


Figure 315: 24 month moving average of mean squared forecasting errors of 3-step-ahead ARMA(1,1) forecast of EP

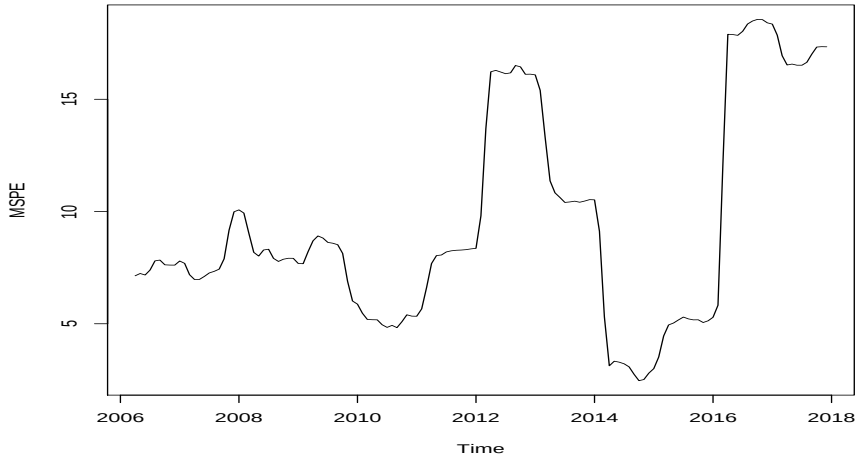


Figure 316: 24 month moving average of mean squared forecasting errors of 3-step-ahead ARMA(p,q) forecast of EP

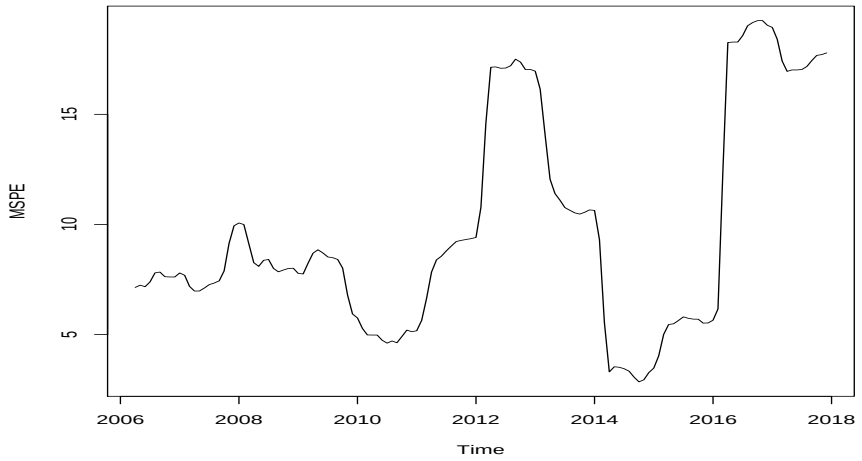


Figure 317: 24 month moving average of mean squared forecasting errors of 3-step-ahead VAR(1) forecast of EP

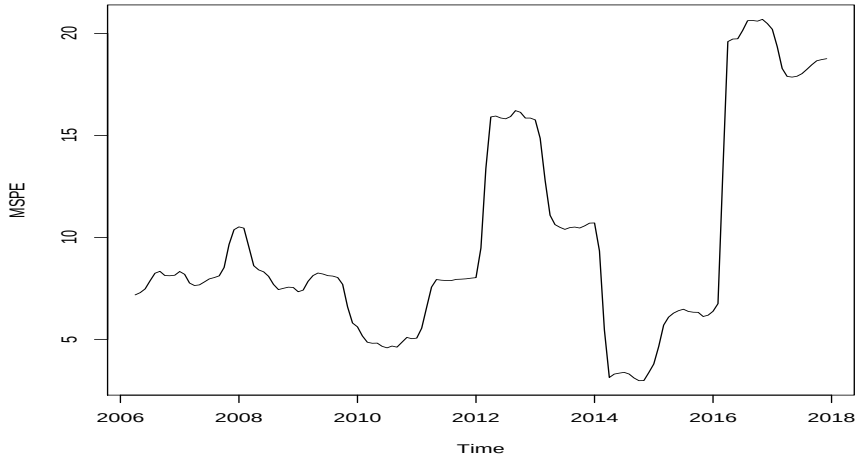


Figure 318: 24 month moving average of mean squared forecasting errors of 3-step-ahead VAR(p) forecast of EP

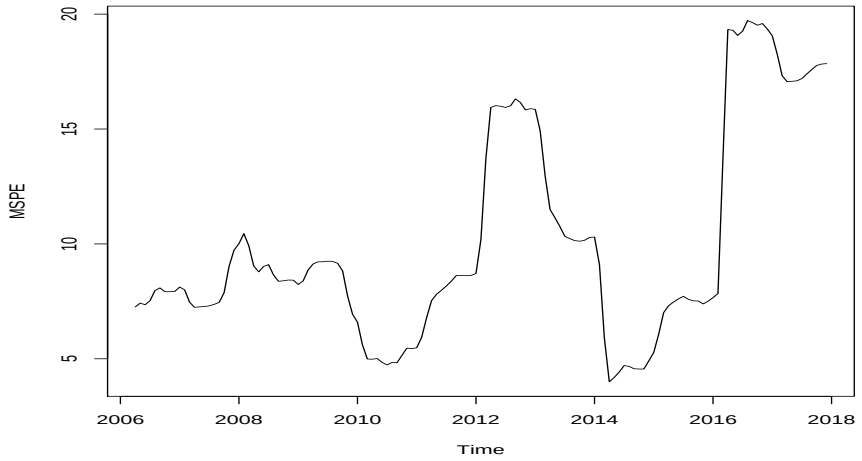


Figure 319: 24 month moving average of mean squared forecasting errors of 3-step-ahead BVAR forecast of EP

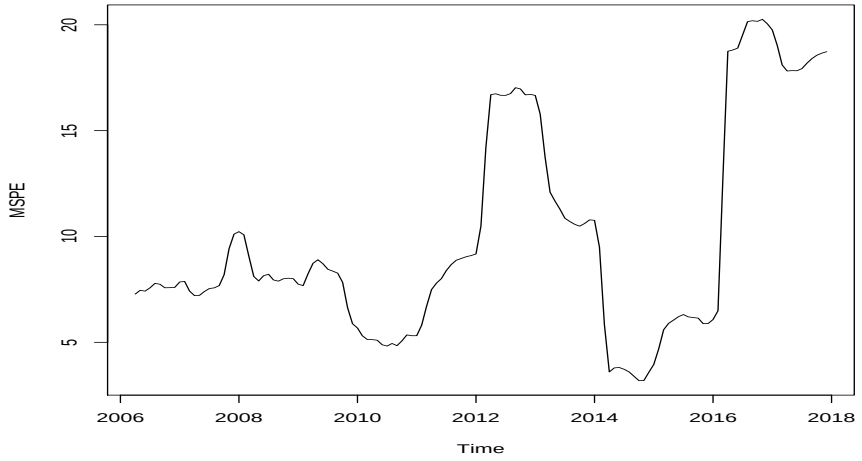


Figure 320: 24 month moving average of mean squared forecasting errors of 3-step-ahead Factor(2) forecast of EP

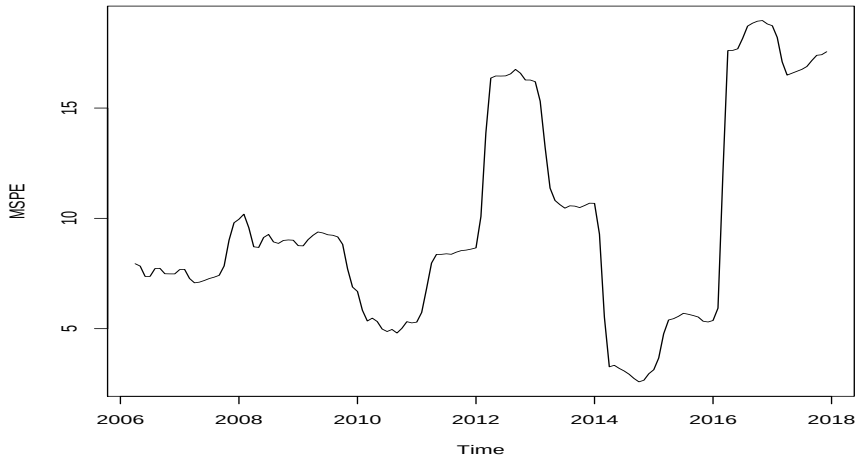


Figure 321: 24 month moving average of mean squared forecasting errors of 3-step-ahead Factor(k) forecast of EP

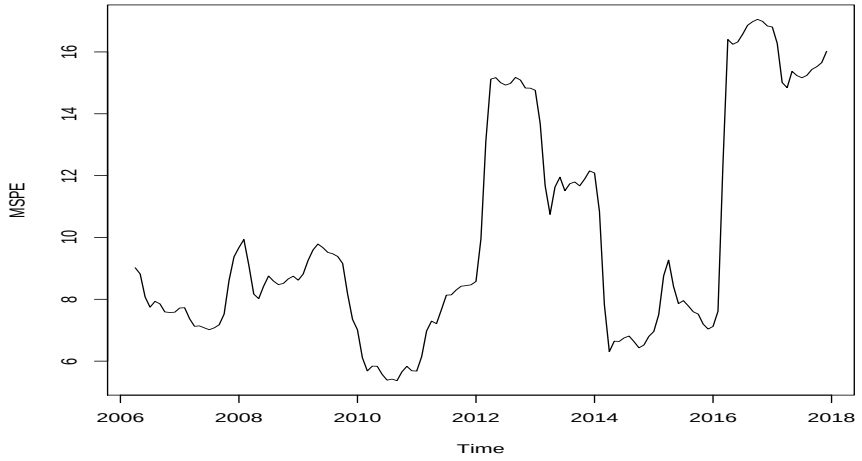


Figure 322: 24 month moving average of mean squared forecasting errors of 3-step-ahead F(2)VAR(1) forecast of EP

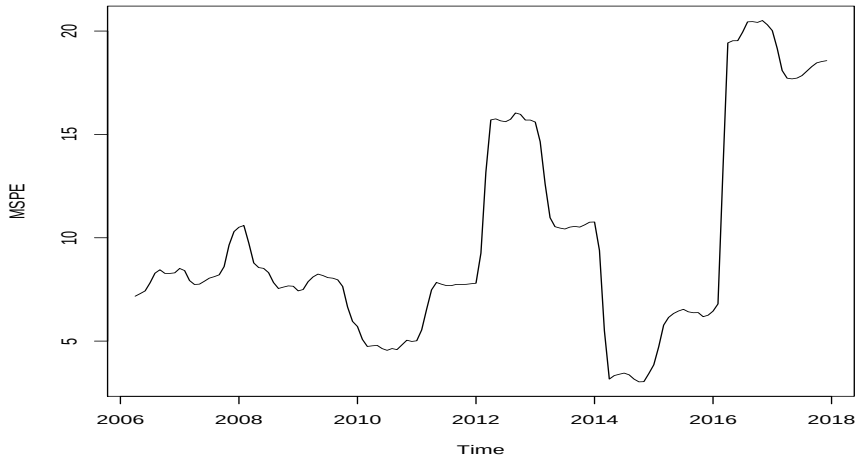
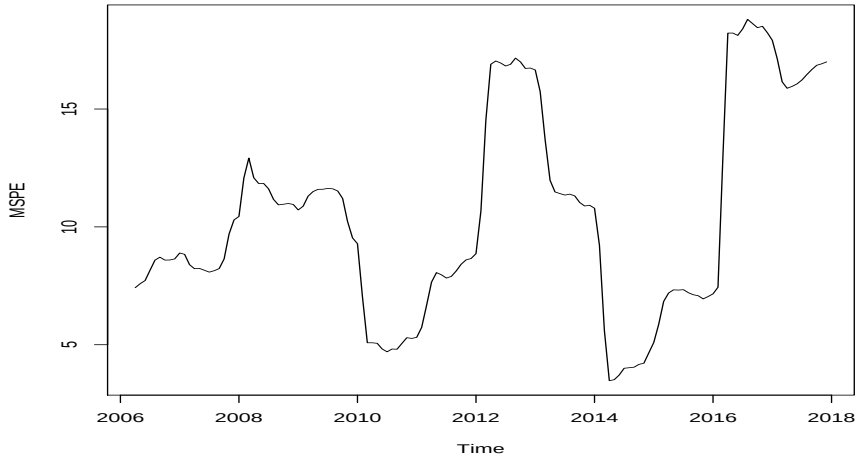


Figure 323: 24 month moving average of mean squared forecasting errors of 3-step-ahead F(2)VAR(p) forecast of EP



3.4.3 Forecast Horizon = 6

Figure 324: 24 month moving average of mean squared forecasting errors of 6-step-ahead Mean forecast of EP

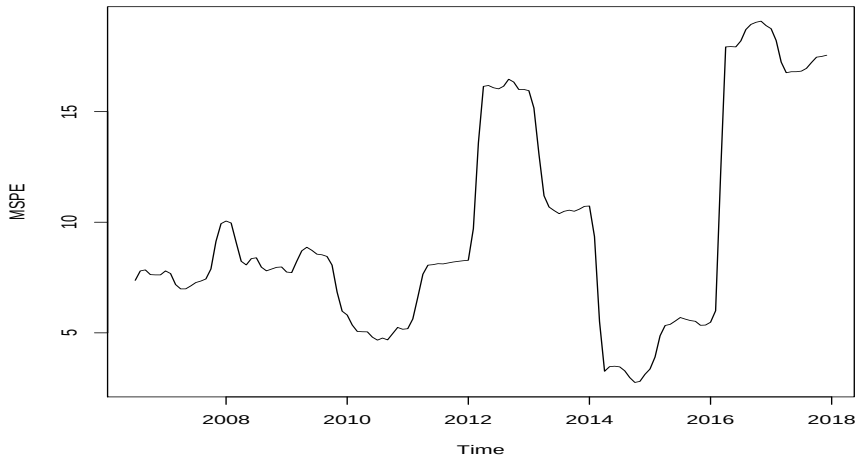


Figure 325: 24 month moving average of mean squared forecasting errors of 6-step-ahead Naive forecast of EP

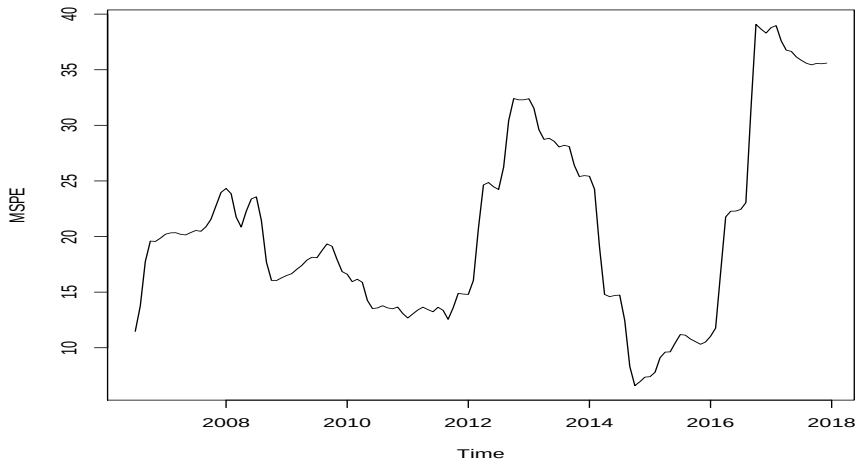


Figure 326: 24 month moving average of mean squared forecasting errors of 6-step-ahead MA forecast of EP

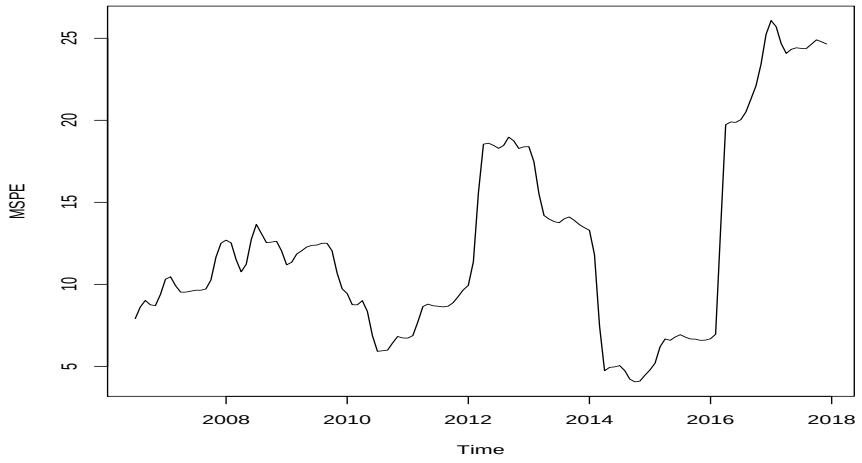


Figure 327: 24 month moving average of mean squared forecasting errors of 6-step-ahead MA-opt forecast of EP

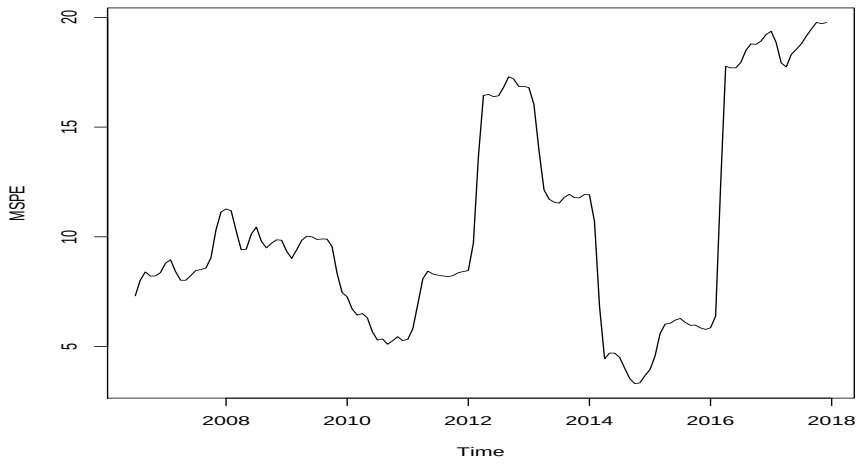


Figure 328: 24 month moving average of mean squared forecasting errors of 6-step-ahead SES forecast of EP

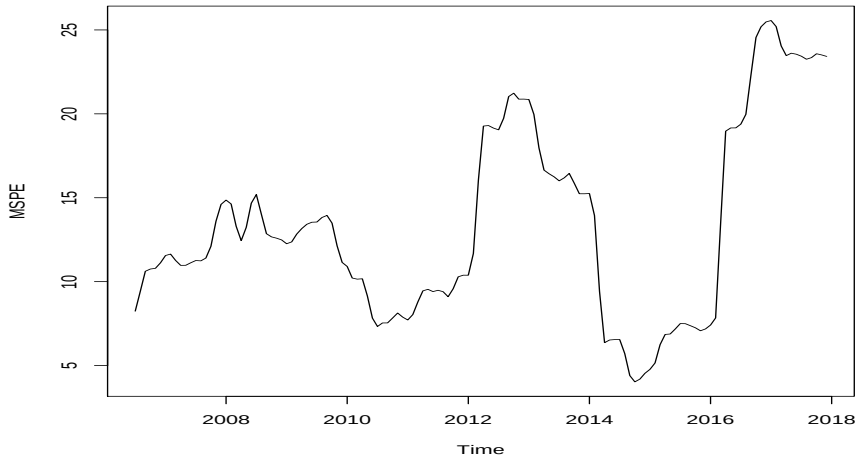


Figure 329: 24 month moving average of mean squared forecasting errors of 6-step-ahead SES-opt forecast of EP

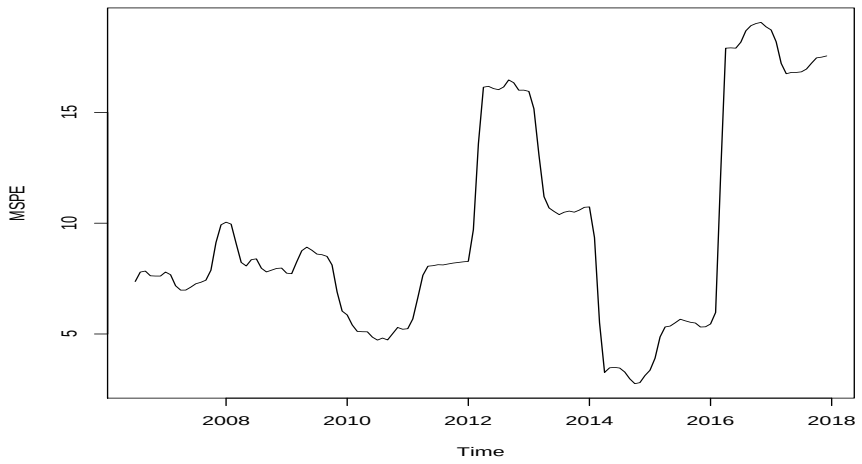


Figure 330: 24 month moving average of mean squared forecasting errors of 6-step-ahead AR(1) forecast of EP

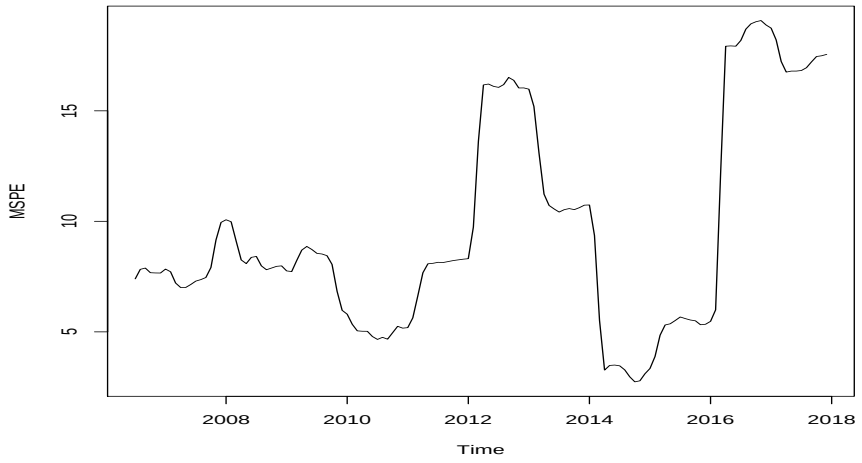


Figure 331: 24 month moving average of mean squared forecasting errors of 6-step-ahead AR(p) forecast of EP

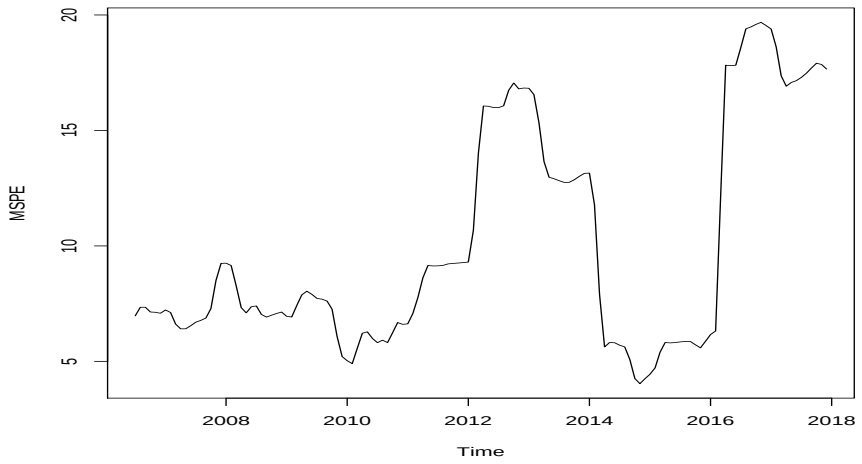


Figure 332: 24 month moving average of mean squared forecasting errors of 6-step-ahead ARd(1) forecast of EP

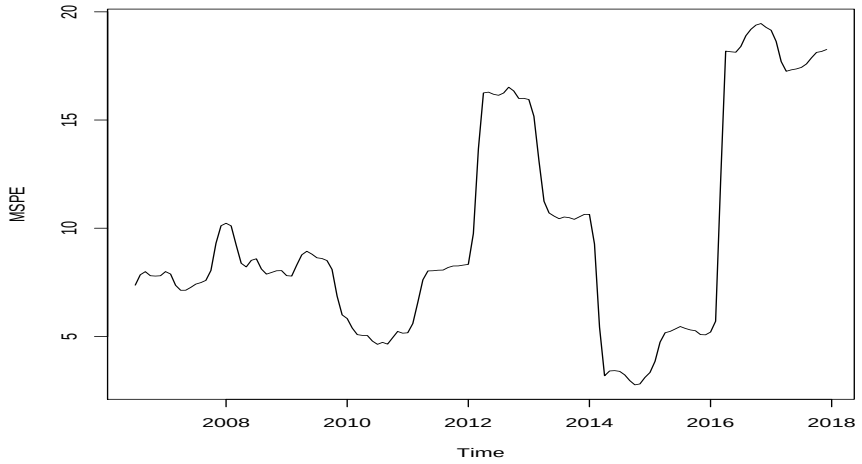


Figure 333: 24 month moving average of mean squared forecasting errors of 6-step-ahead ARd(p) forecast of EP

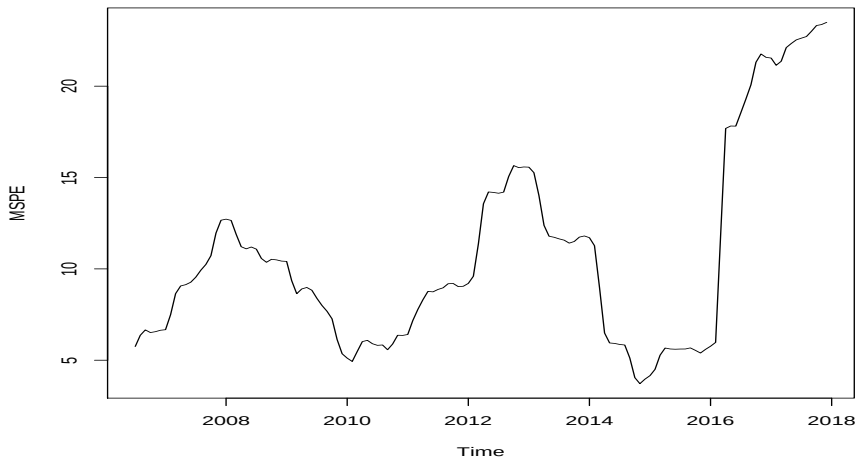


Figure 334: 24 month moving average of mean squared forecasting errors of 6-step-ahead ARMA(1,1) forecast of EP

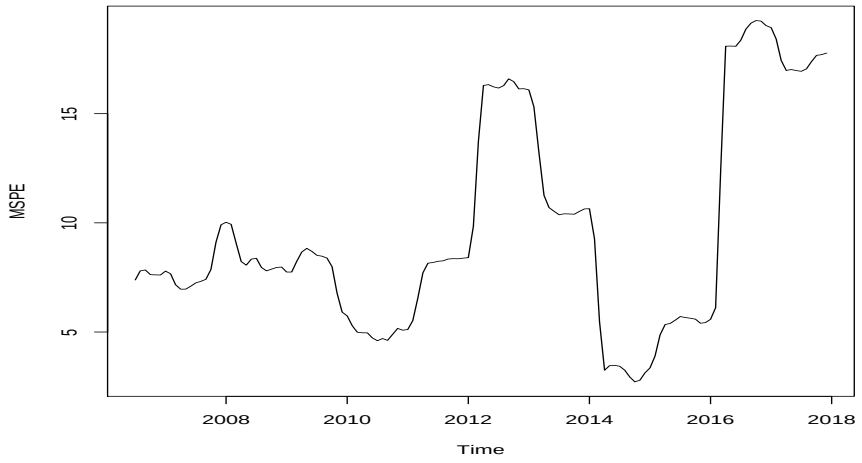


Figure 335: 24 month moving average of mean squared forecasting errors of 6-step-ahead ARMA(p,q) forecast of EP

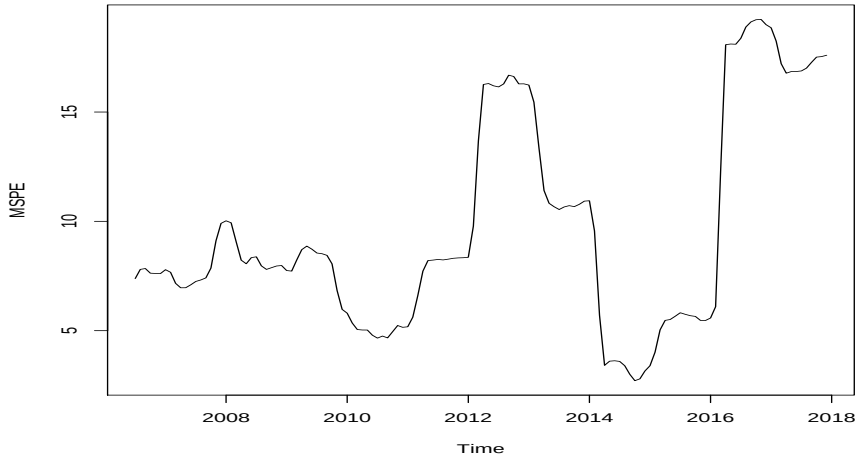


Figure 336: 24 month moving average of mean squared forecasting errors of 6-step-ahead VAR(1) forecast of EP

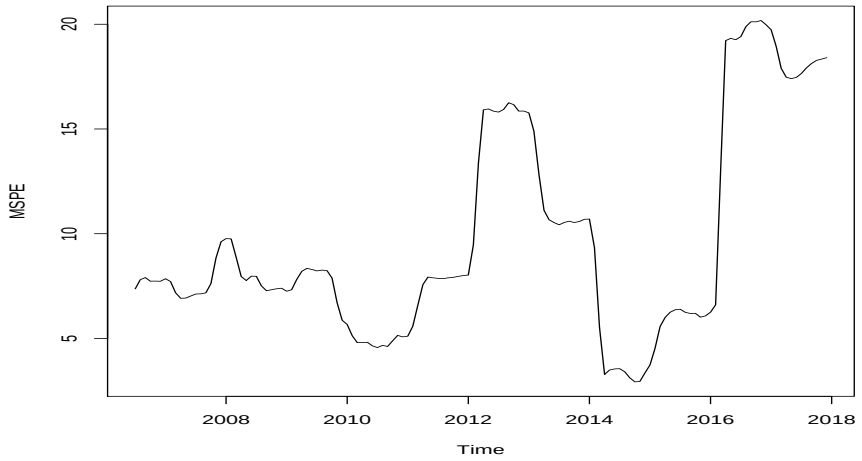


Figure 337: 24 month moving average of mean squared forecasting errors of 6-step-ahead VAR(p) forecast of EP

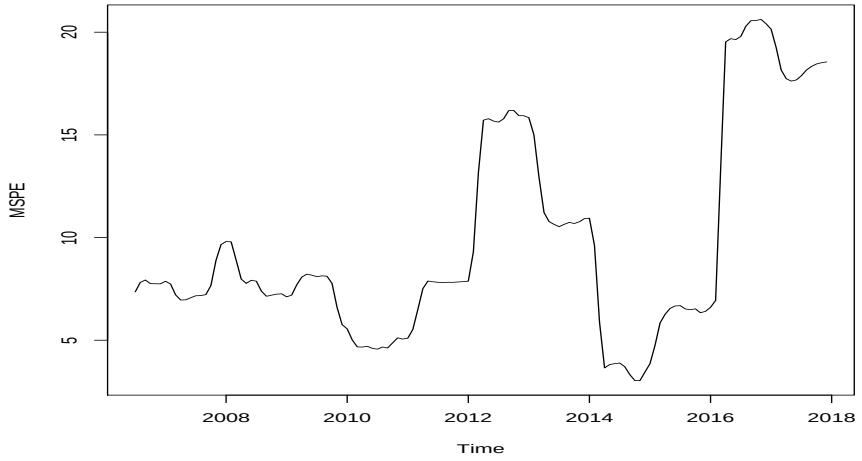


Figure 338: 24 month moving average of mean squared forecasting errors of 6-step-ahead BVAR forecast of EP

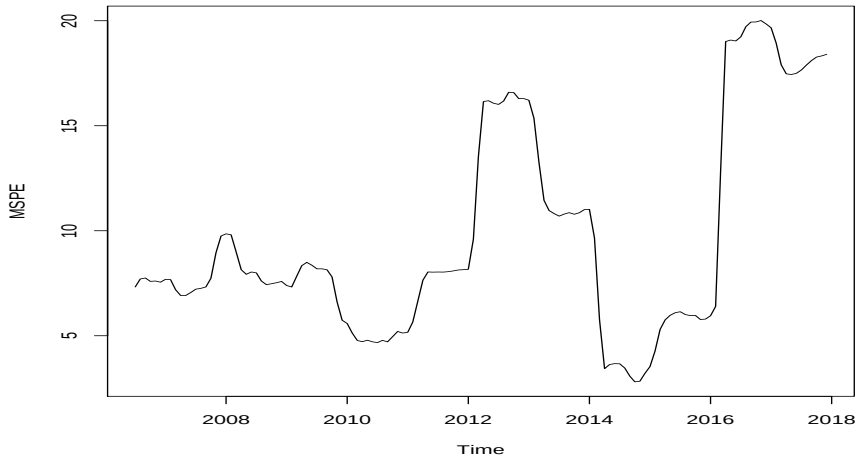


Figure 339: 24 month moving average of mean squared forecasting errors of 6-step-ahead Factor(2) forecast of EP

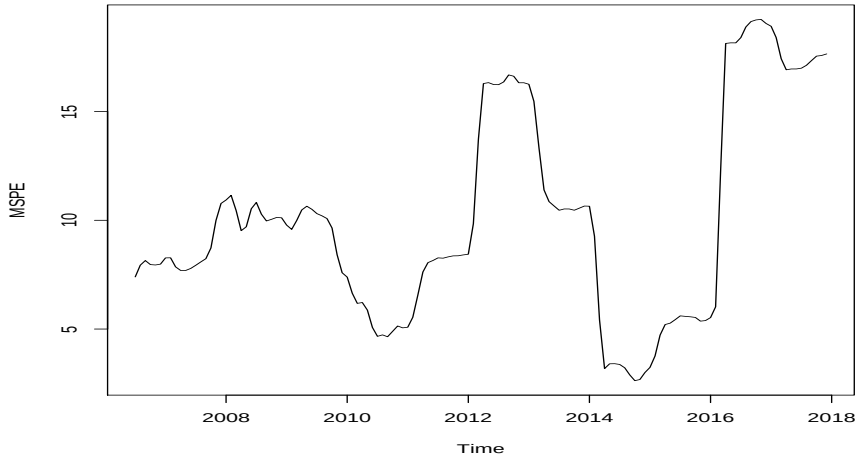


Figure 340: 24 month moving average of mean squared forecasting errors of 6-step-ahead Factor(k) forecast of EP

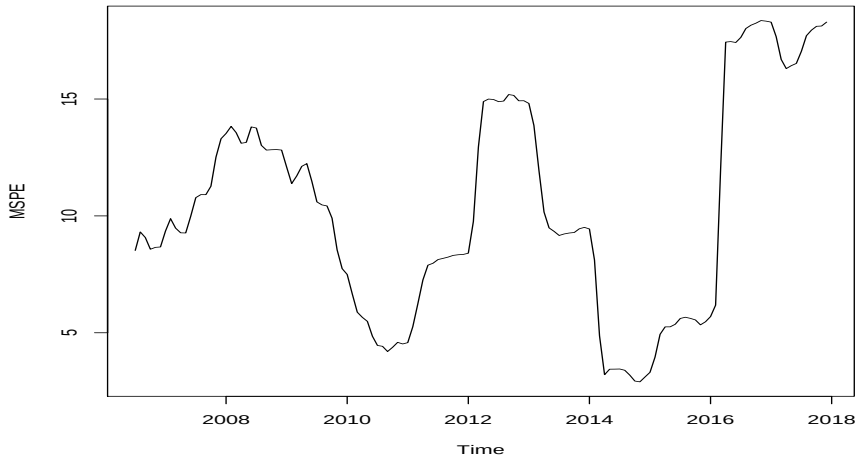


Figure 341: 24 month moving average of mean squared forecasting errors of 6-step-ahead F(2)VAR(1) forecast of EP

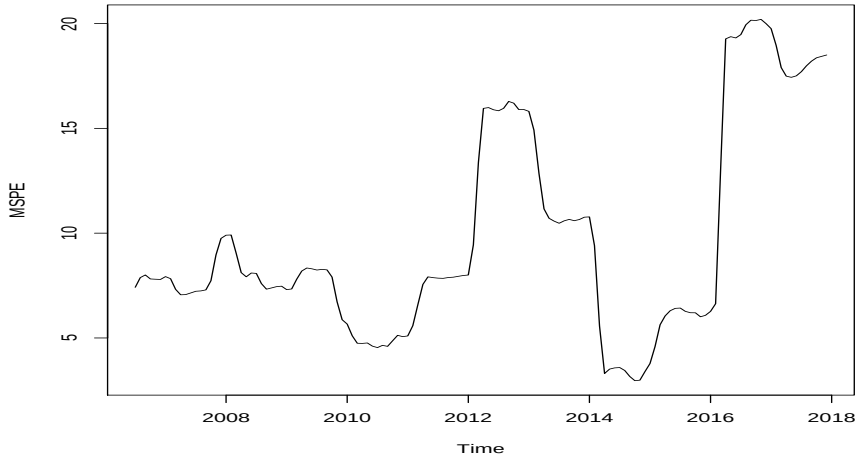
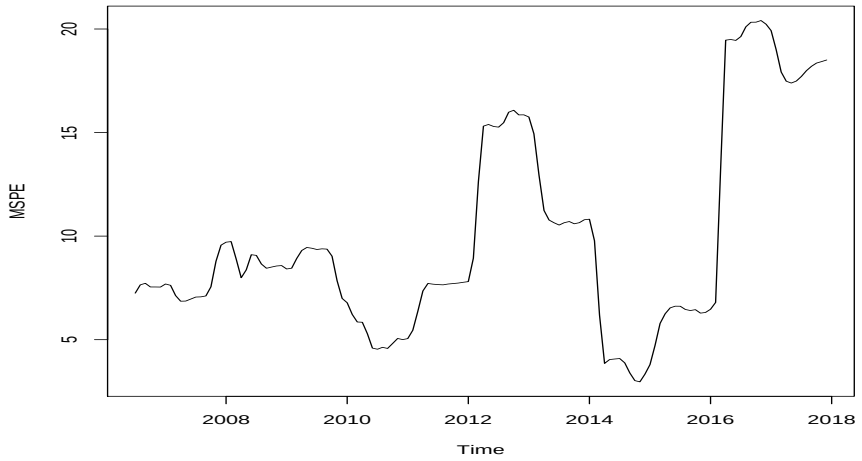


Figure 342: 24 month moving average of mean squared forecasting errors of 6-step-ahead F(2)VAR(p) forecast of EP



3.4.4 Forecast Horizon = 9

Figure 343: 24 month moving average of mean squared forecasting errors of 9-step-ahead Mean forecast of EP

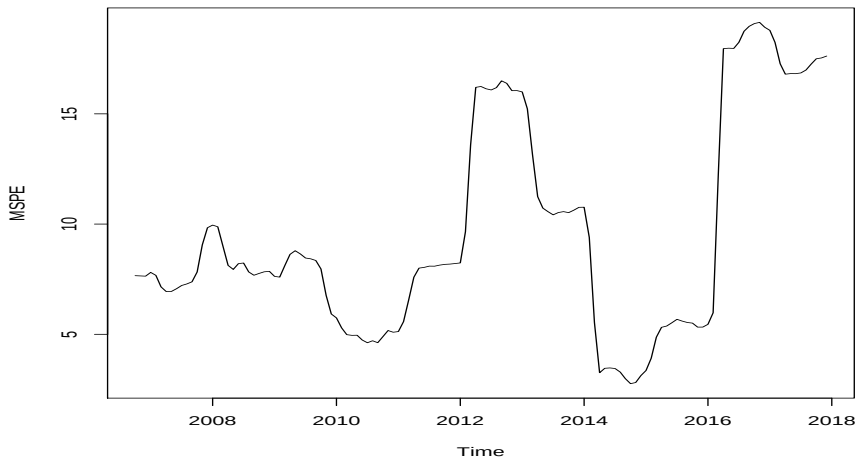


Figure 344: 24 month moving average of mean squared forecasting errors of 9-step-ahead Naive forecast of EP

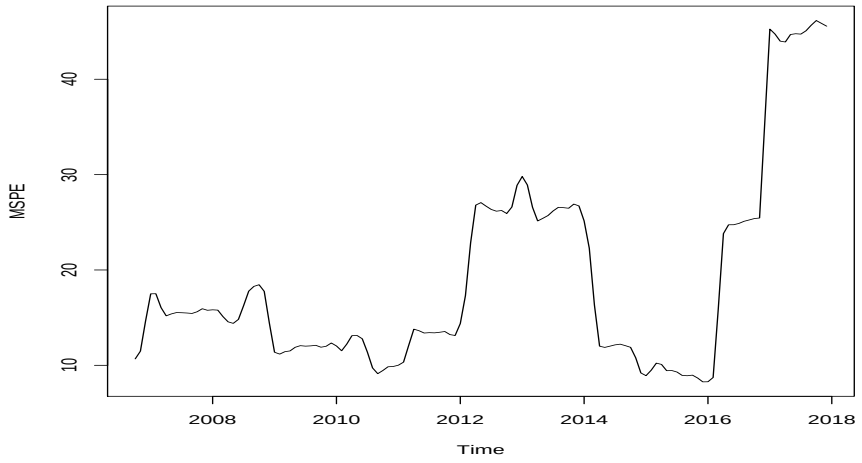


Figure 345: 24 month moving average of mean squared forecasting errors of 9-step-ahead MA forecast of EP

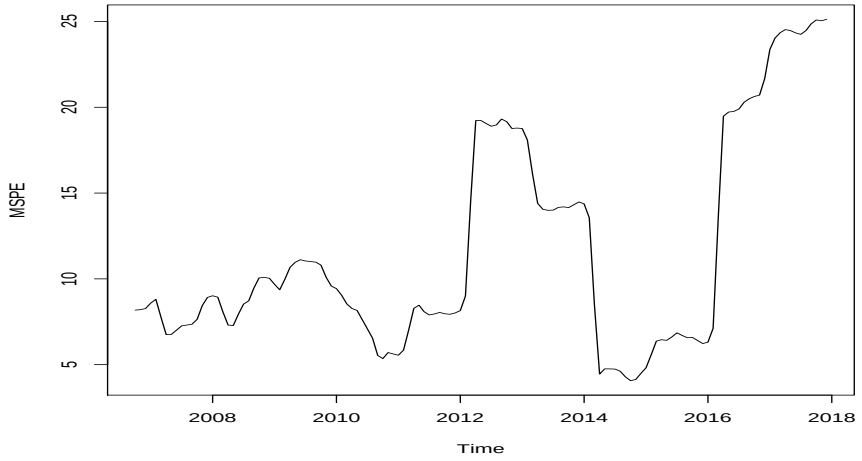


Figure 346: 24 month moving average of mean squared forecasting errors of 9-step-ahead MA-opt forecast of EP

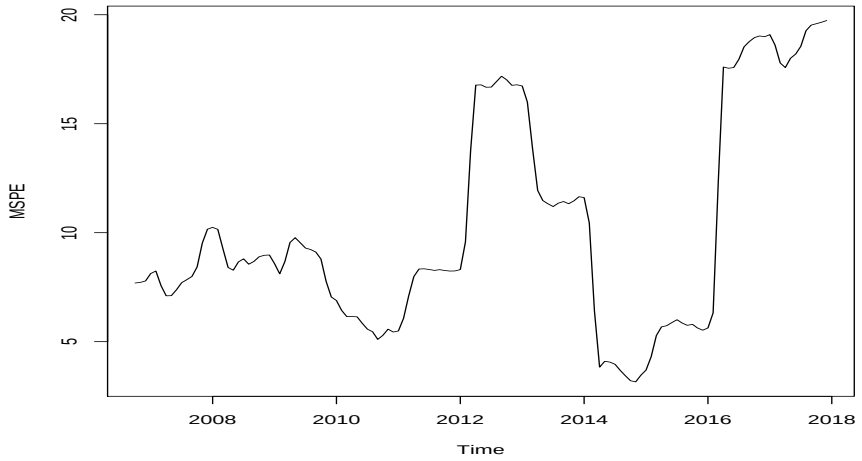


Figure 347: 24 month moving average of mean squared forecasting errors of 9-step-ahead SES forecast of EP

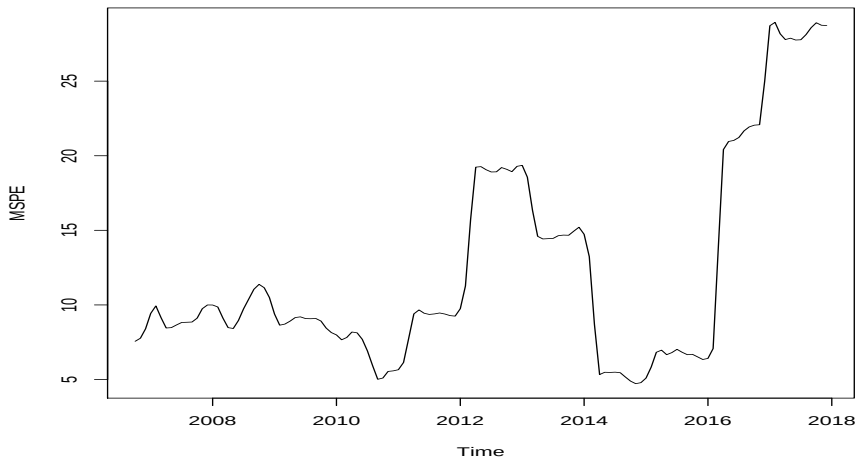


Figure 348: 24 month moving average of mean squared forecasting errors of 9-step-ahead SES-opt forecast of EP

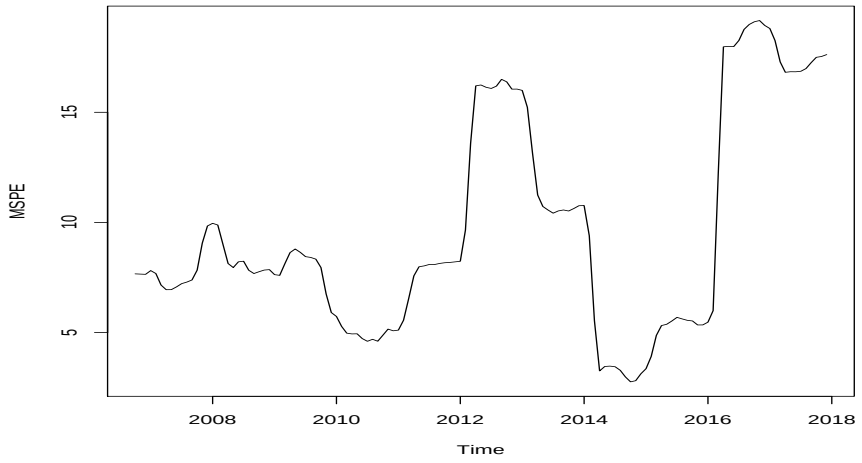


Figure 349: 24 month moving average of mean squared forecasting errors of 9-step-ahead AR(1) forecast of EP

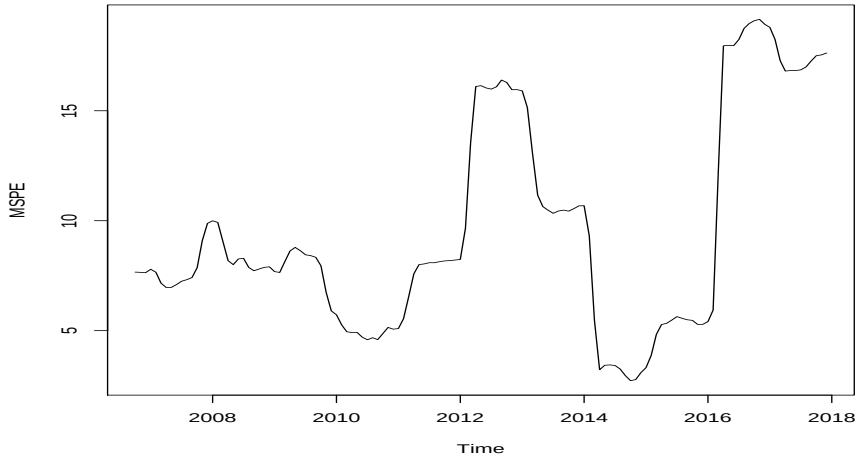


Figure 350: 24 month moving average of mean squared forecasting errors of 9-step-ahead AR(p) forecast of EP

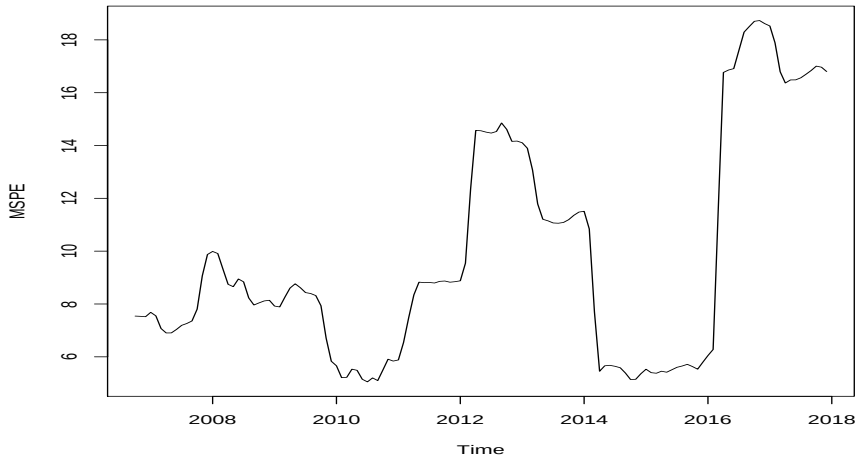


Figure 351: 24 month moving average of mean squared forecasting errors of 9-step-ahead ARd(1) forecast of EP

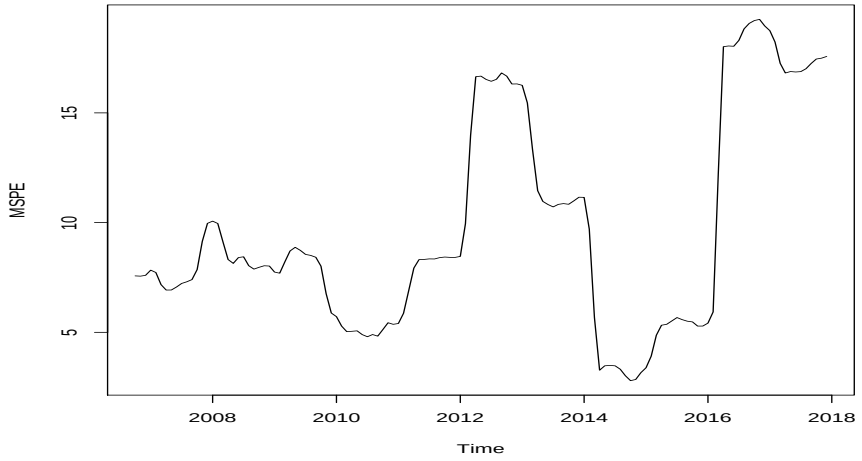


Figure 352: 24 month moving average of mean squared forecasting errors of 9-step-ahead ARd(p) forecast of EP

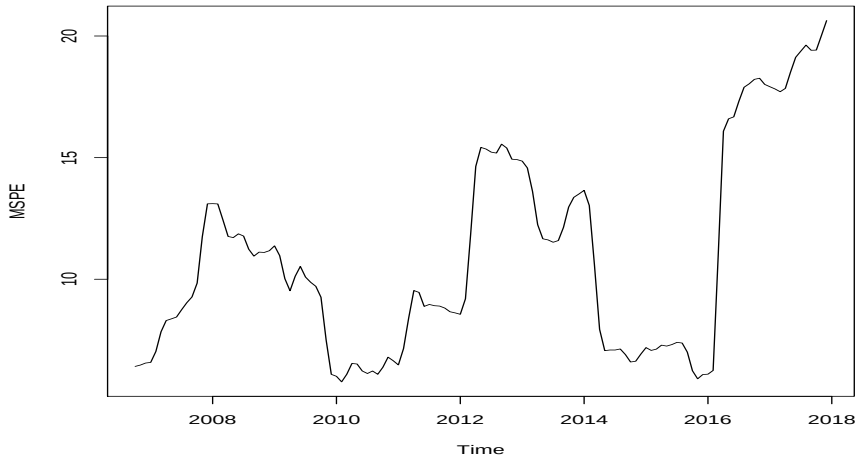


Figure 353: 24 month moving average of mean squared forecasting errors of 9-step-ahead ARMA(1,1) forecast of EP

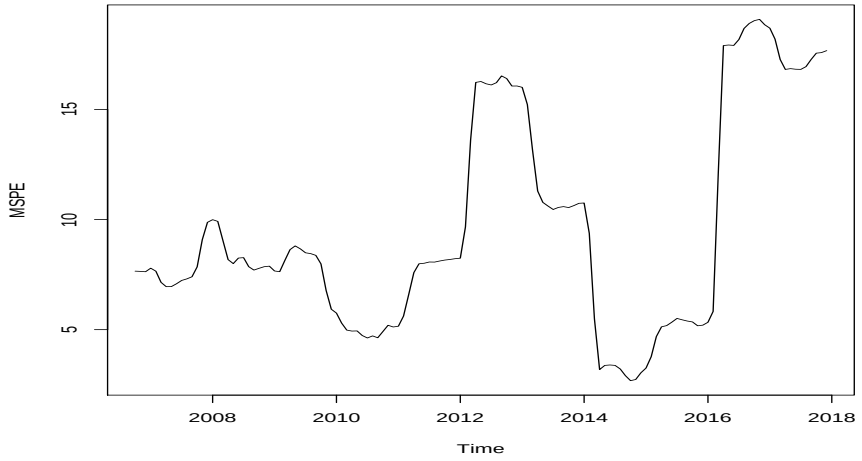


Figure 354: 24 month moving average of mean squared forecasting errors of 9-step-ahead ARMA(p,q) forecast of EP

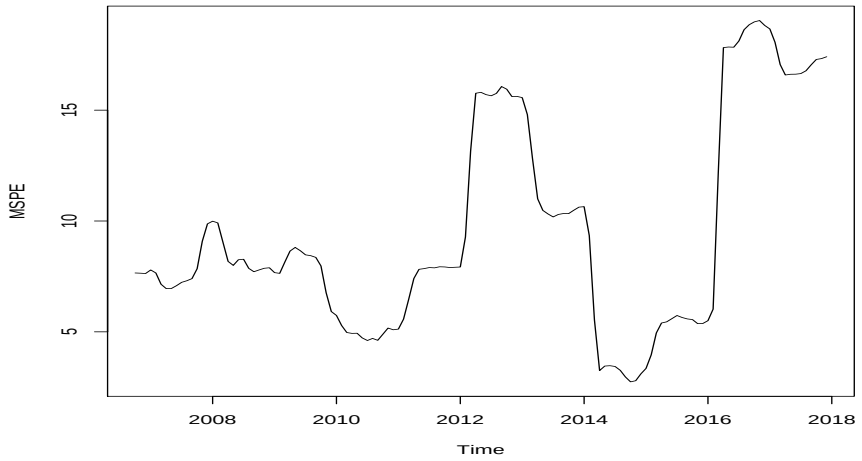


Figure 355: 24 month moving average of mean squared forecasting errors of 9-step-ahead VAR(1) forecast of EP

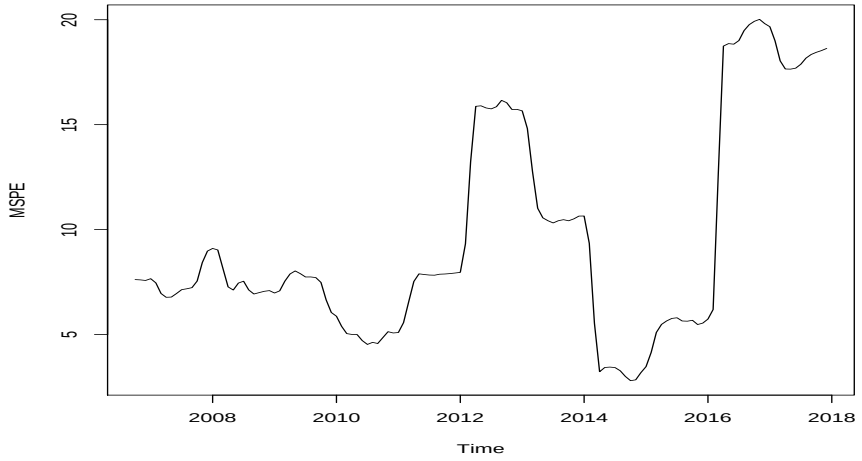


Figure 356: 24 month moving average of mean squared forecasting errors of 9-step-ahead VAR(p) forecast of EP

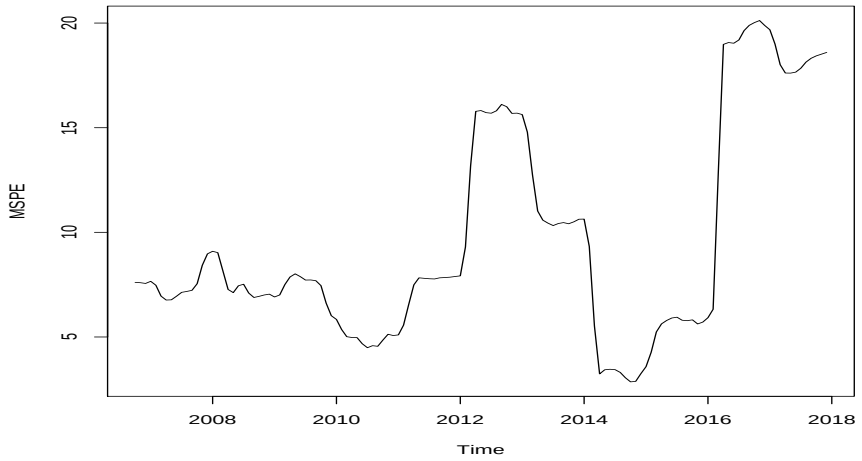


Figure 357: 24 month moving average of mean squared forecasting errors of 9-step-ahead BVAR forecast of EP

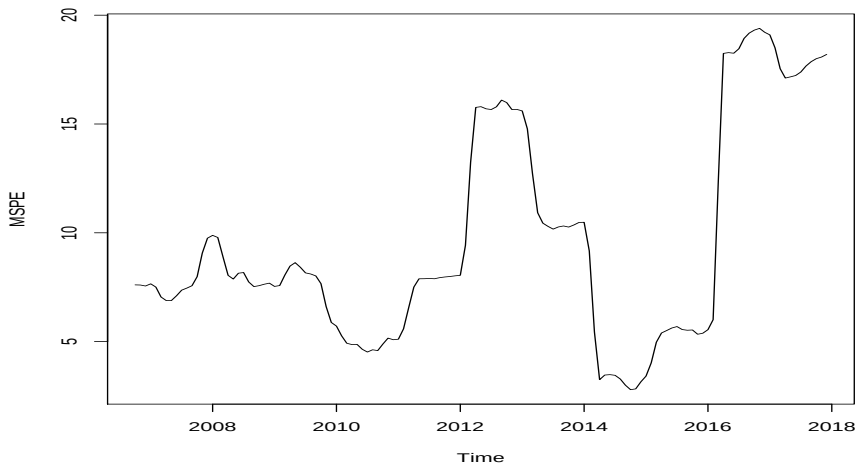


Figure 358: 24 month moving average of mean squared forecasting errors of 9-step-ahead Factor(2) forecast of EP

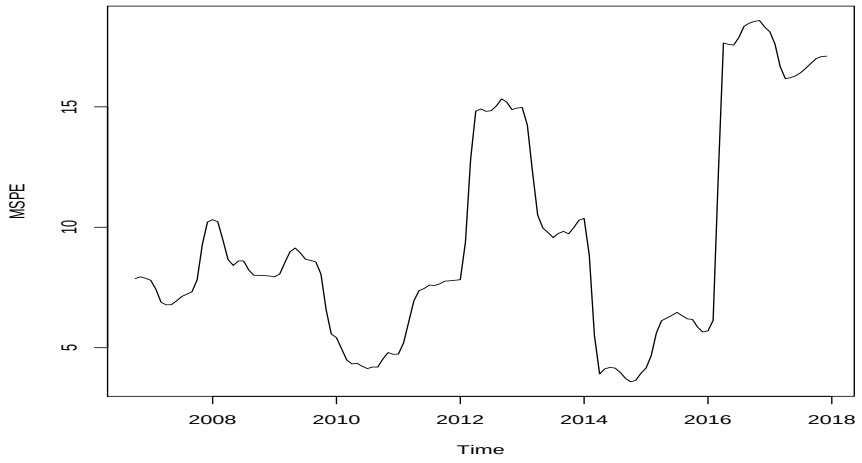


Figure 359: 24 month moving average of mean squared forecasting errors of 9-step-ahead Factor(k) forecast of EP

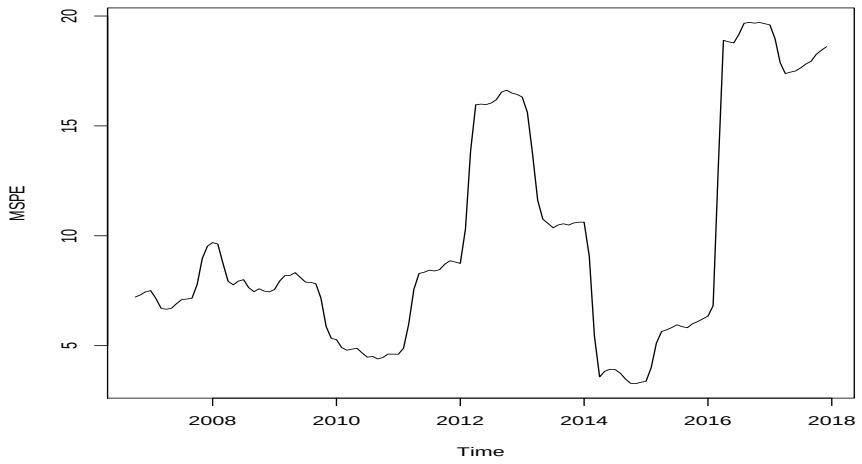


Figure 360: 24 month moving average of mean squared forecasting errors of 9-step-ahead F(2)VAR(1) forecast of EP

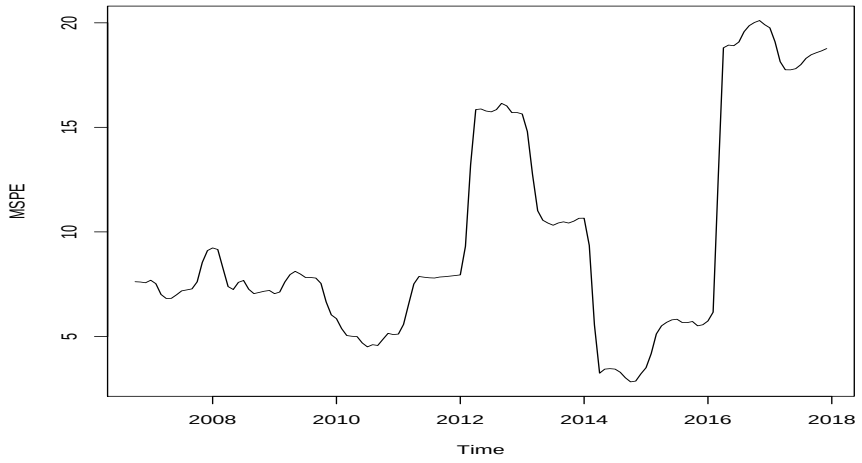
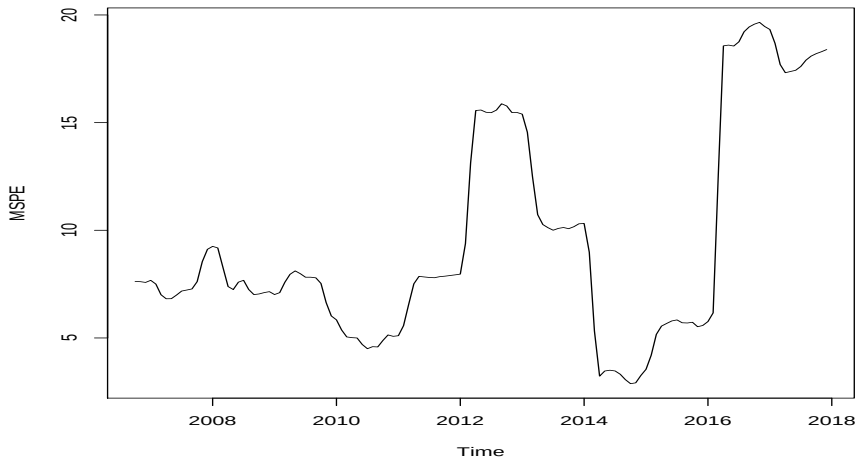


Figure 361: 24 month moving average of mean squared forecasting errors of 9-step-ahead F(2)VAR(p) forecast of EP



3.4.5 Forecast Horizon = 12

Figure 362: 24 month moving average of mean squared forecasting errors of 12-step-ahead Mean forecast of EP

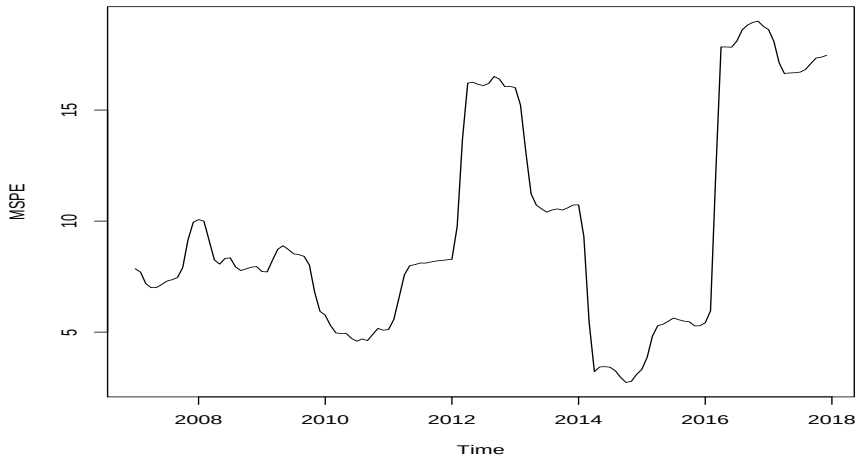


Figure 363: 24 month moving average of mean squared forecasting errors of 12-step-ahead Naive forecast of EP

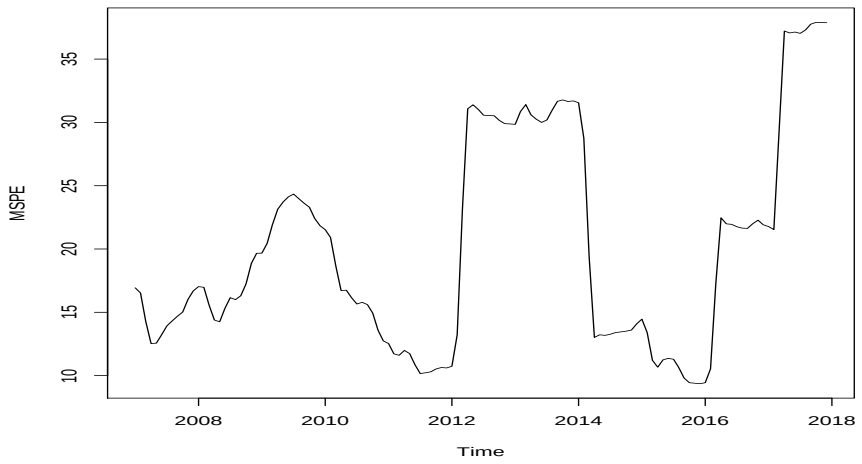


Figure 364: 24 month moving average of mean squared forecasting errors of 12-step-ahead MA forecast of EP

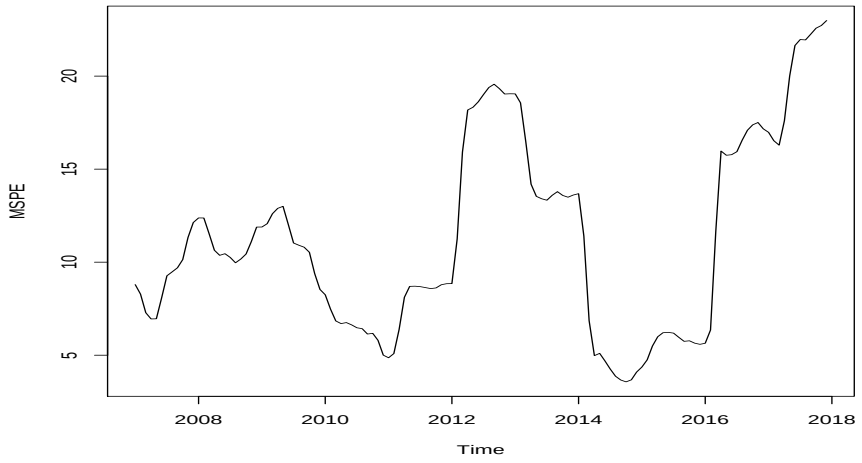


Figure 365: 24 month moving average of mean squared forecasting errors of 12-step-ahead MA-opt forecast of EP

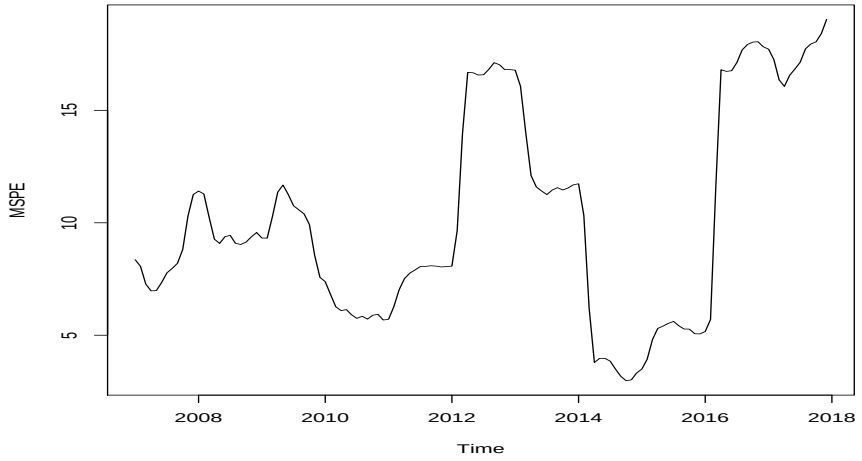


Figure 366: 24 month moving average of mean squared forecasting errors of 12-step-ahead SES forecast of EP

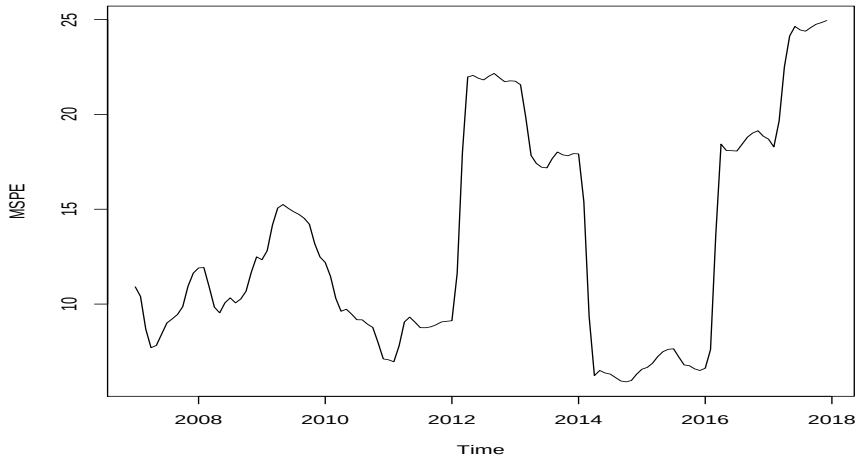


Figure 367: 24 month moving average of mean squared forecasting errors of 12-step-ahead SES-opt forecast of EP

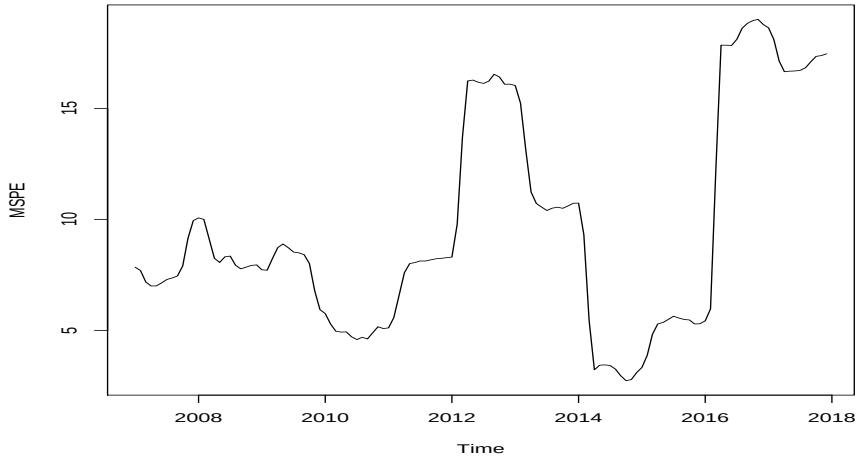


Figure 368: 24 month moving average of mean squared forecasting errors of 12-step-ahead AR(1) forecast of EP

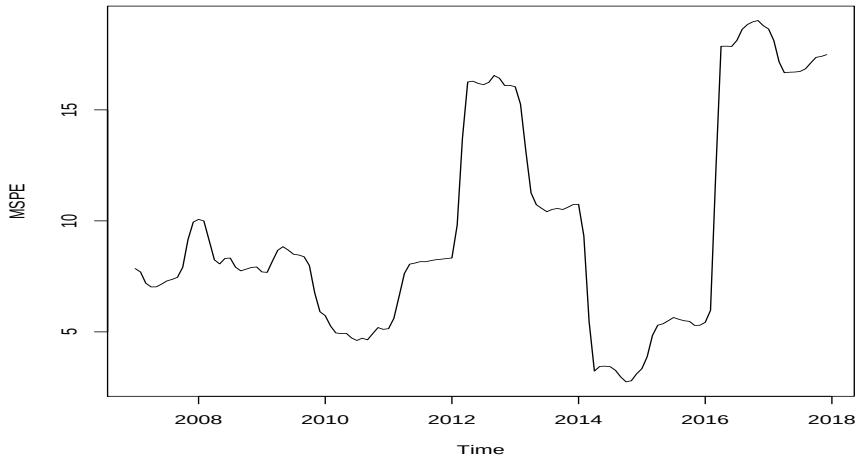


Figure 369: 24 month moving average of mean squared forecasting errors of 12-step-ahead AR(p) forecast of EP

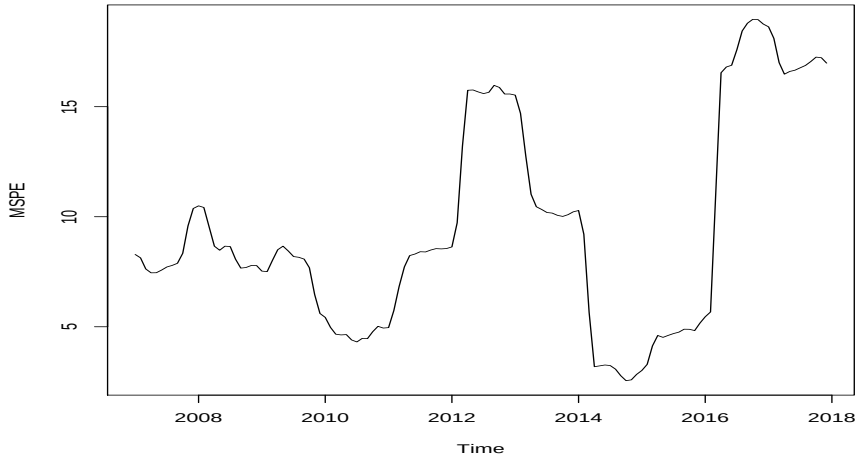


Figure 370: 24 month moving average of mean squared forecasting errors of 12-step-ahead ARd(1) forecast of EP

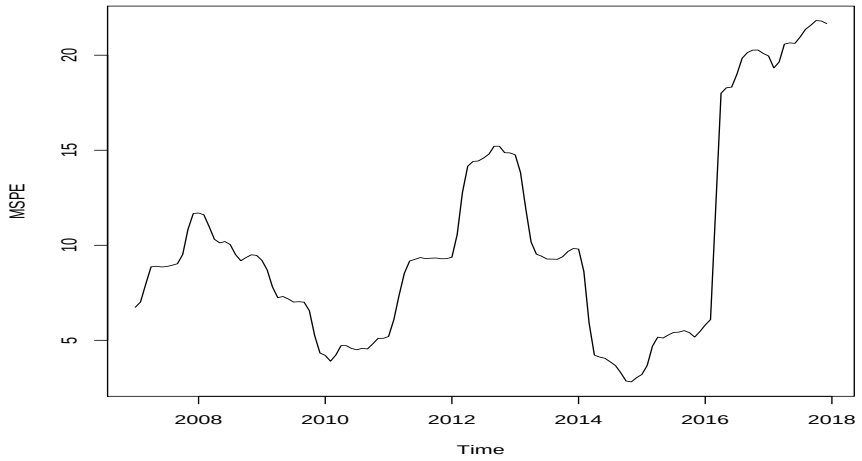


Figure 371: 24 month moving average of mean squared forecasting errors of 12-step-ahead ARd(p) forecast of EP

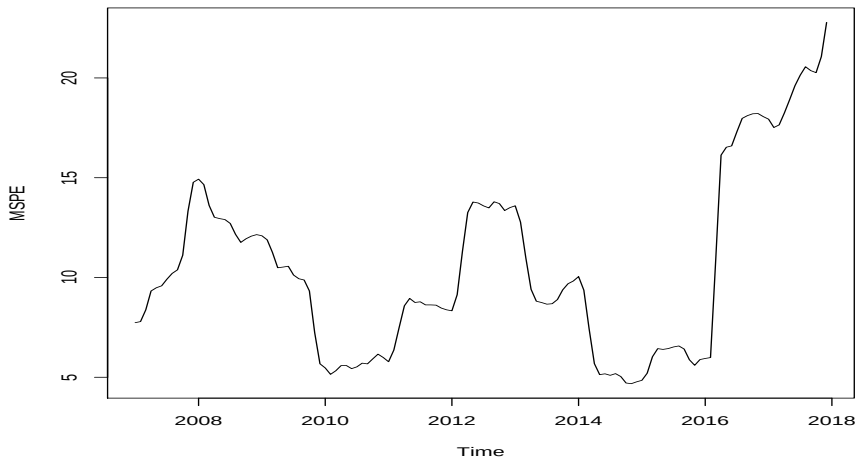


Figure 372: 24 month moving average of mean squared forecasting errors of 12-step-ahead ARMA(1,1) forecast of EP

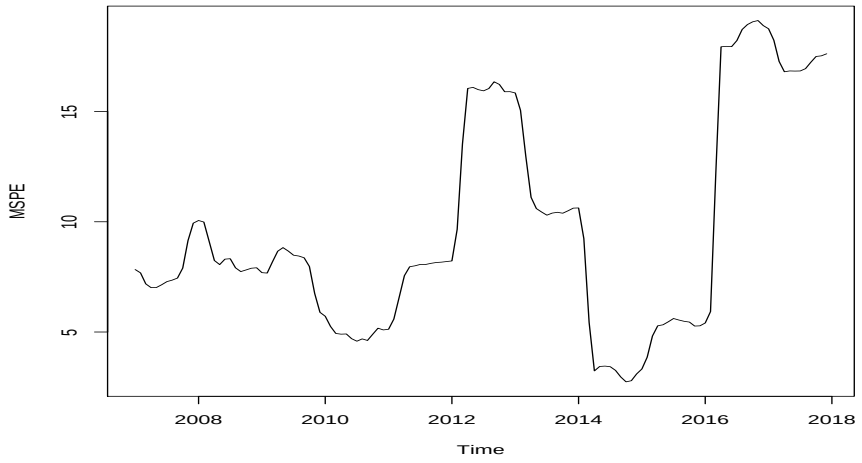


Figure 373: 24 month moving average of mean squared forecasting errors of 12-step-ahead ARMA(p,q) forecast of EP

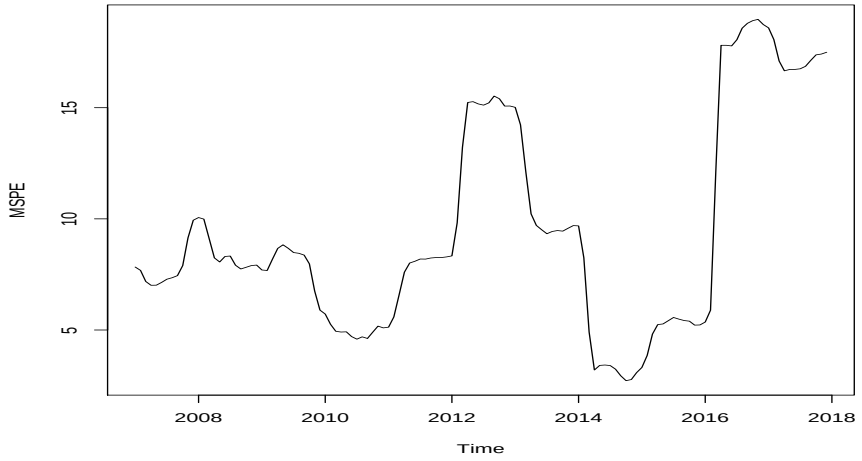


Figure 374: 24 month moving average of mean squared forecasting errors of 12-step-ahead VAR(1) forecast of EP

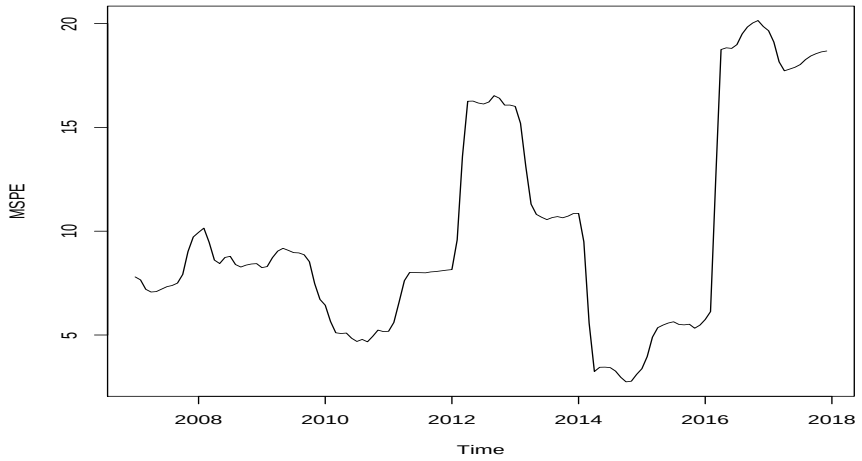


Figure 375: 24 month moving average of mean squared forecasting errors of 12-step-ahead VAR(p) forecast of EP

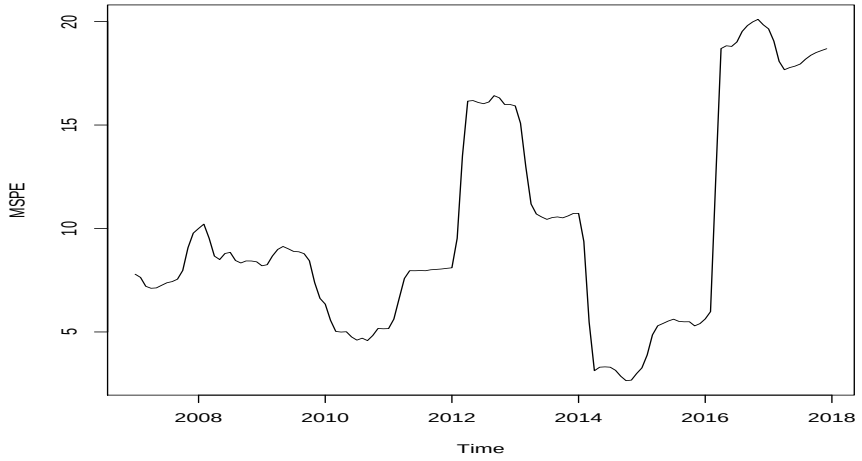


Figure 376: 24 month moving average of mean squared forecasting errors of 12-step-ahead BVAR forecast of EP

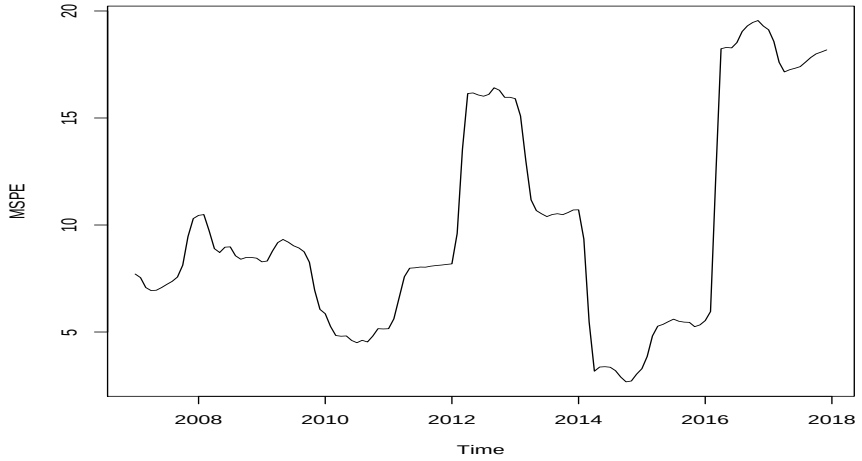


Figure 377: 24 month moving average of mean squared forecasting errors of 12-step-ahead Factor(2) forecast of EP

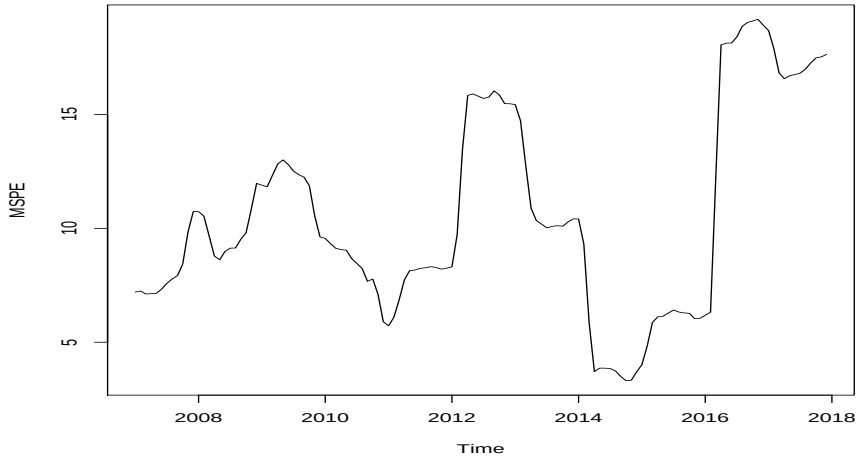


Figure 378: 24 month moving average of mean squared forecasting errors of 12-step-ahead Factor(k) forecast of EP

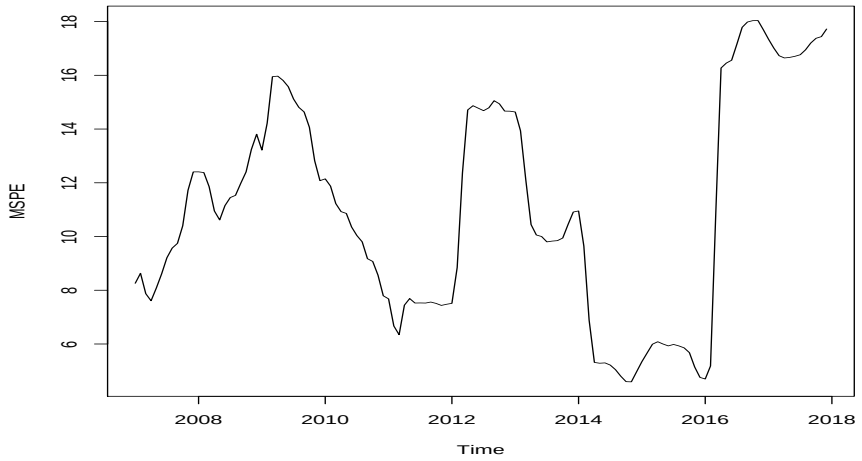


Figure 379: 24 month moving average of mean squared forecasting errors of 12-step-ahead F(2)VAR(1) forecast of EP

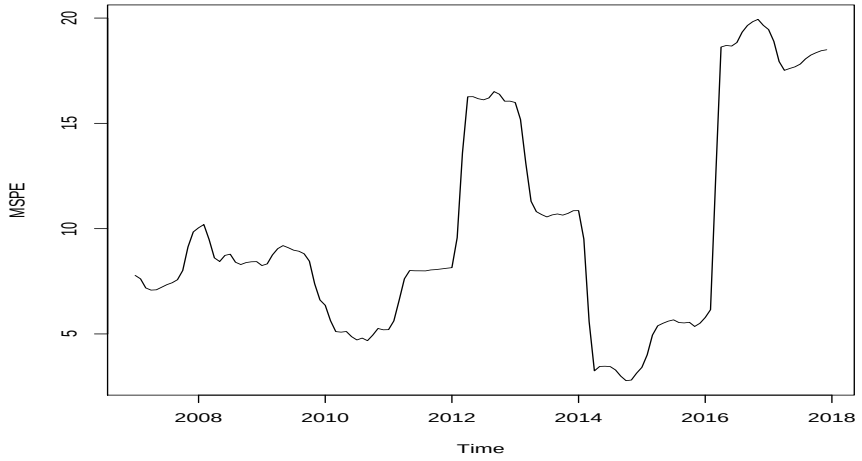
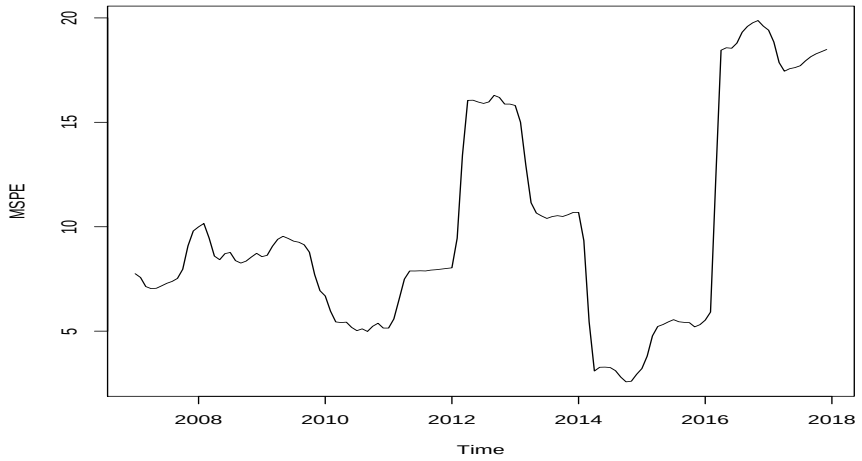


Figure 380: 24 month moving average of mean squared forecasting errors of 12-step-ahead F(2)VAR(p) forecast of EP



4 Difference of MSPE from benchmark MSPE

4.1 CPI

4.1.1 Forecast Horizon = 1

Figure 381: Mean squared forecasting errors of 1-step-ahead Naive forecast of CPI: Difference from benchmark

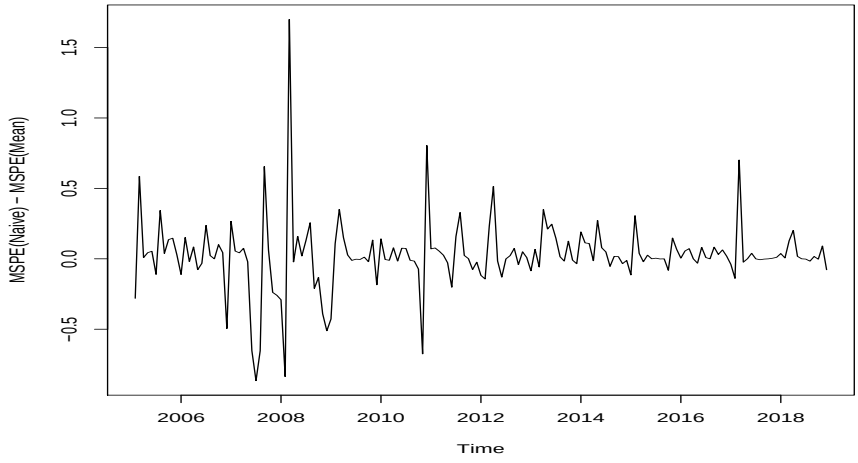


Figure 382: Mean squared forecasting errors of 1-step-ahead MA forecast of CPI: Difference from benchmark

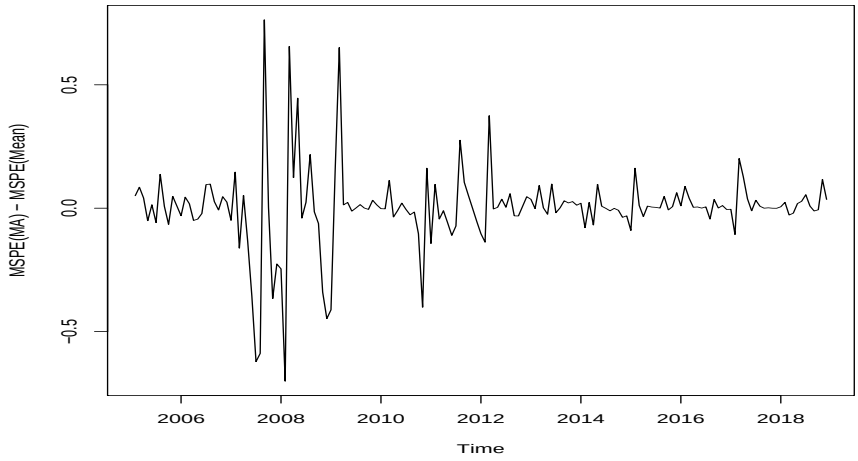


Figure 383: Mean squared forecasting errors of 1-step-ahead MA-opt forecast of CPI: Difference from benchmark

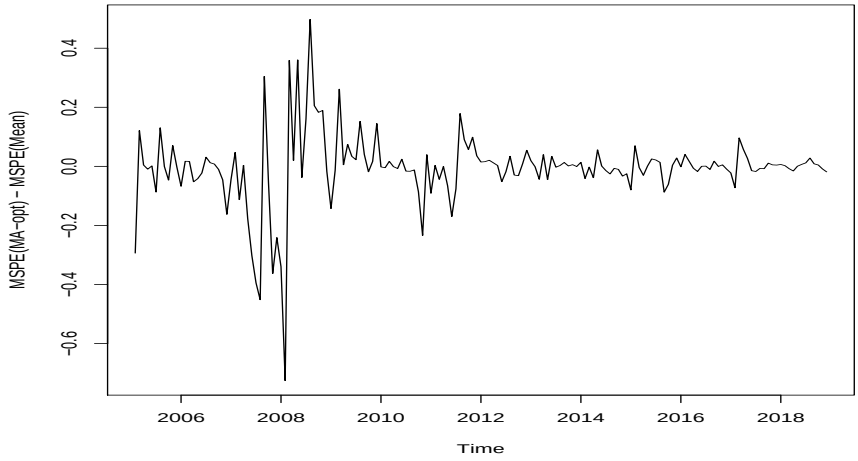


Figure 384: Mean squared forecasting errors of 1-step-ahead SES forecast of CPI: Difference from benchmark

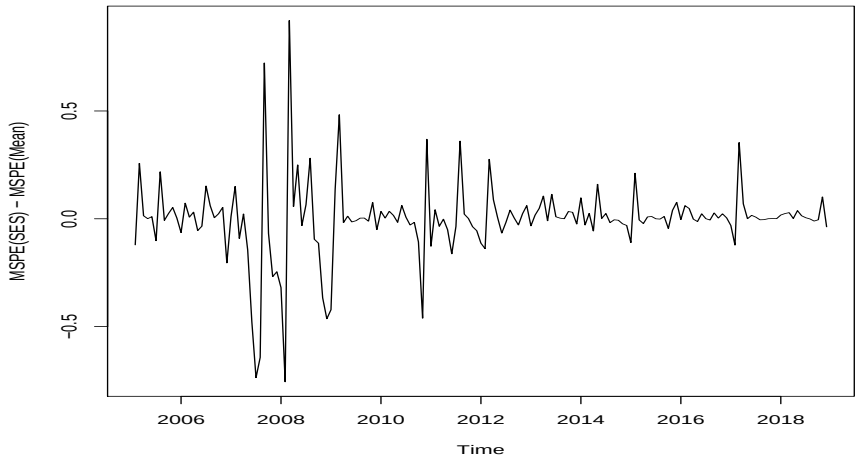


Figure 385: Mean squared forecasting errors of 1-step-ahead SES-opt forecast of CPI: Difference from benchmark

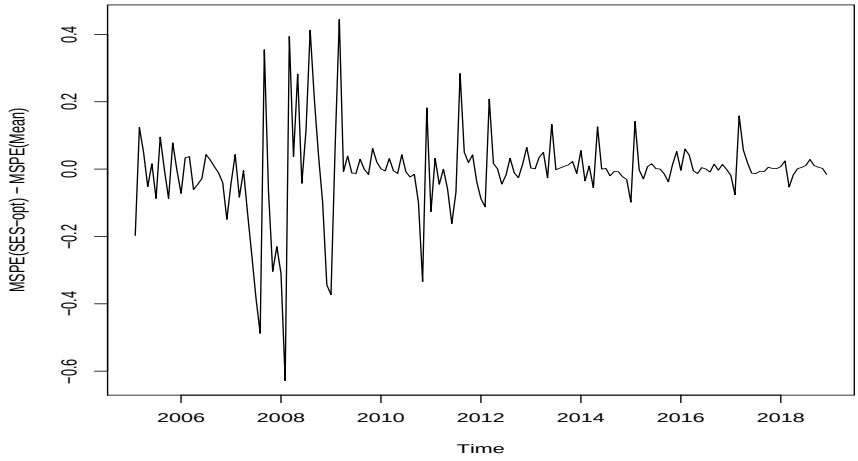


Figure 386: Mean squared forecasting errors of 1-step-ahead AR(1) forecast of CPI: Difference from benchmark

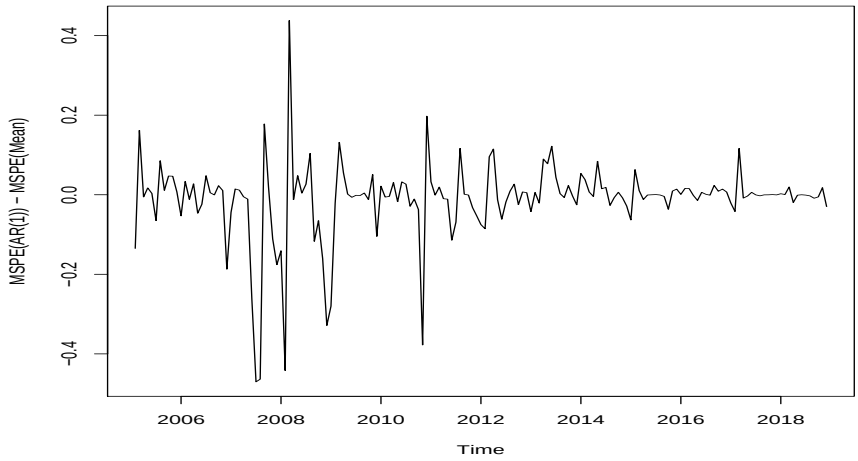


Figure 387: Mean squared forecasting errors of 1-step-ahead AR(p) forecast of CPI: Difference from benchmark

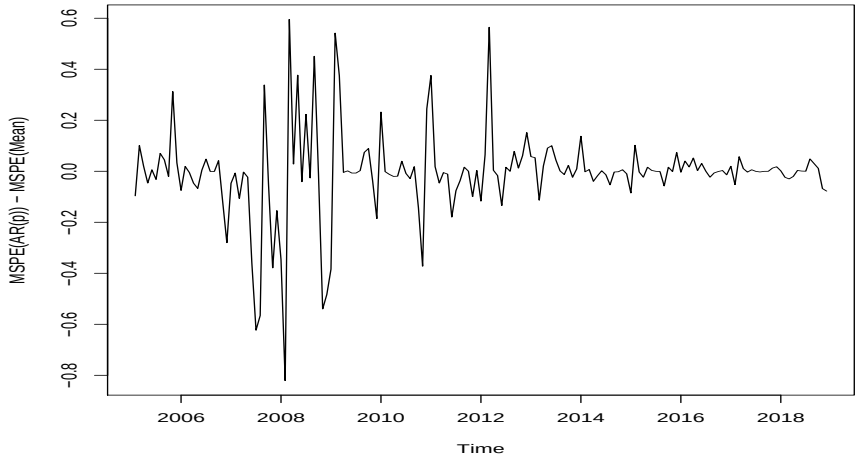


Figure 388: Mean squared forecasting errors of 1-step-ahead ARd(1) forecast of CPI: Difference from benchmark

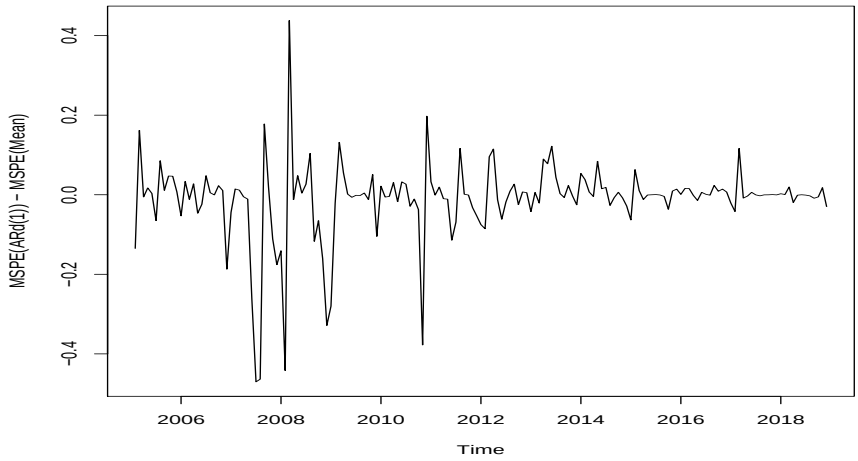


Figure 389: Mean squared forecasting errors of 1-step-ahead ARd(p) forecast of CPI: Difference from benchmark

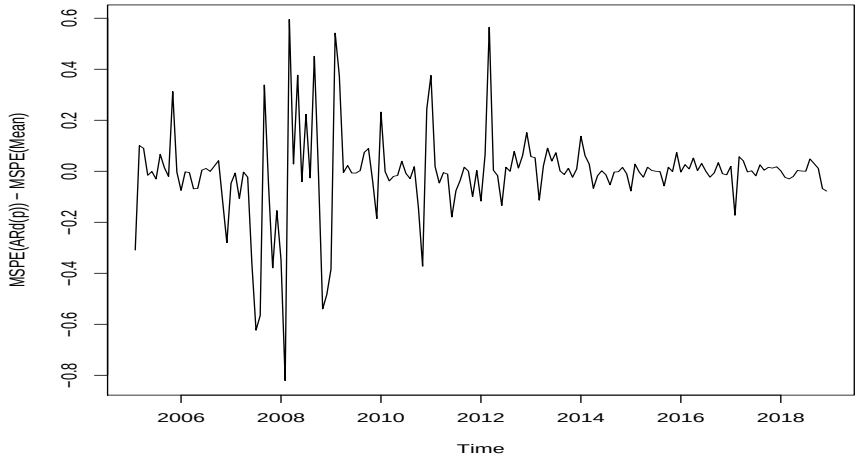


Figure 390: Mean squared forecasting errors of 1-step-ahead ARMA(1,1) forecast of CPI: Difference from benchmark

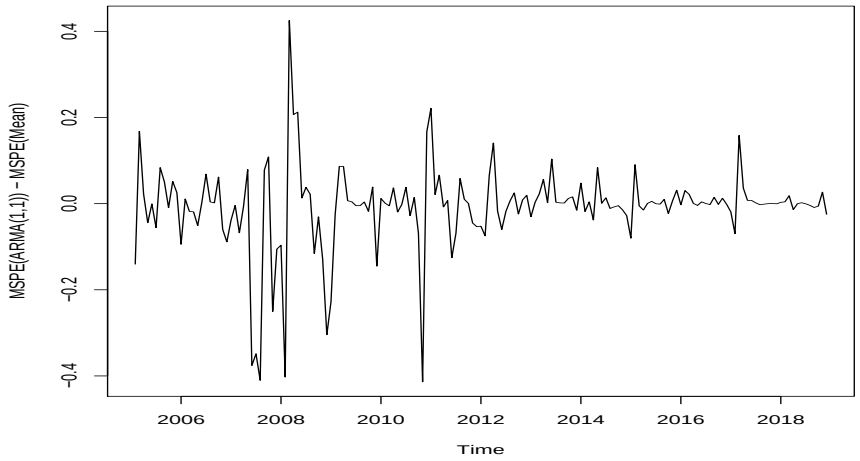


Figure 391: Mean squared forecasting errors of 1-step-ahead ARMA(p,q) forecast of CPI: Difference from benchmark

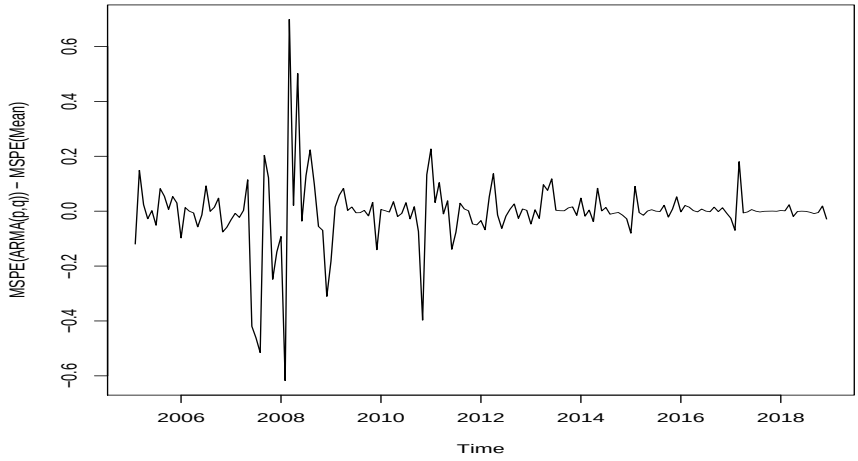


Figure 392: Mean squared forecasting errors of 1-step-ahead VAR(1) forecast of CPI: Difference from benchmark

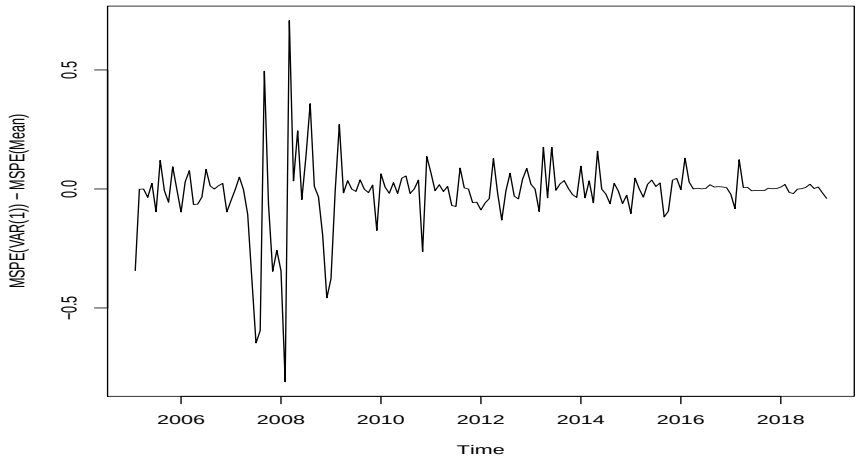


Figure 393: Mean squared forecasting errors of 1-step-ahead VAR(p) forecast of CPI: Difference from benchmark

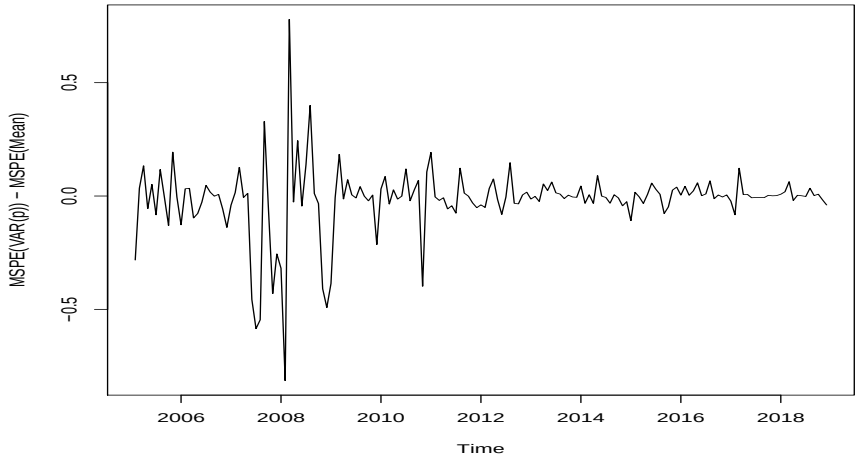


Figure 394: Mean squared forecasting errors of 1-step-ahead BVAR forecast of CPI: Difference from benchmark

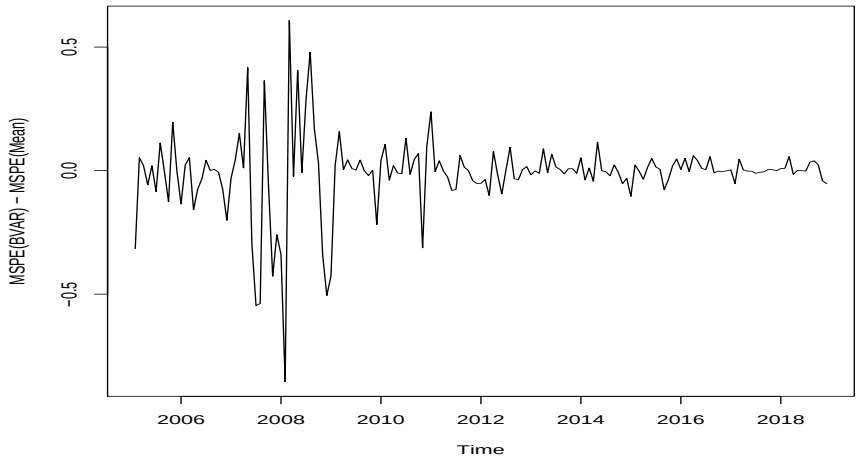


Figure 395: Mean squared forecasting errors of 1-step-ahead Factor(2) forecast of CPI: Difference from benchmark

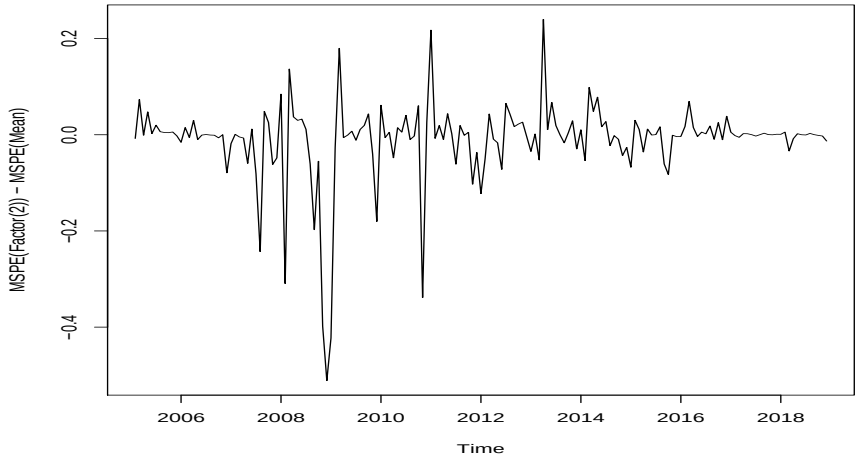


Figure 396: Mean squared forecasting errors of 1-step-ahead Factor(k) forecast of CPI: Difference from benchmark

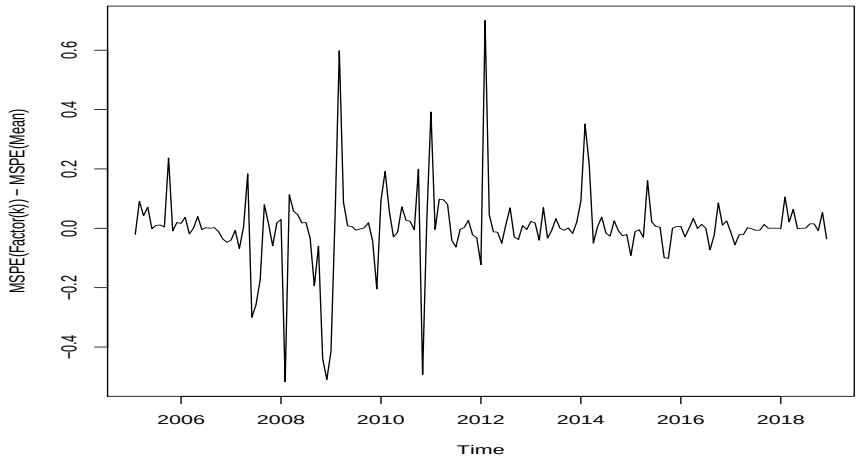


Figure 397: Mean squared forecasting errors of 1-step-ahead F(2)VAR(1) forecast of CPI: Difference from benchmark

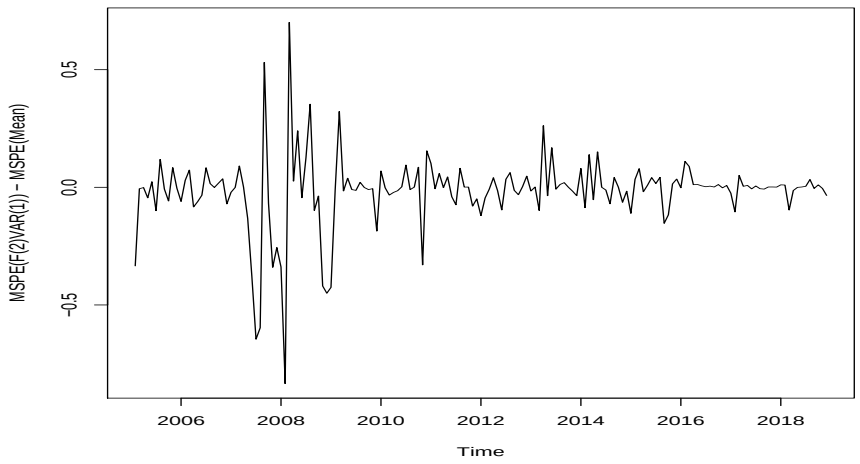
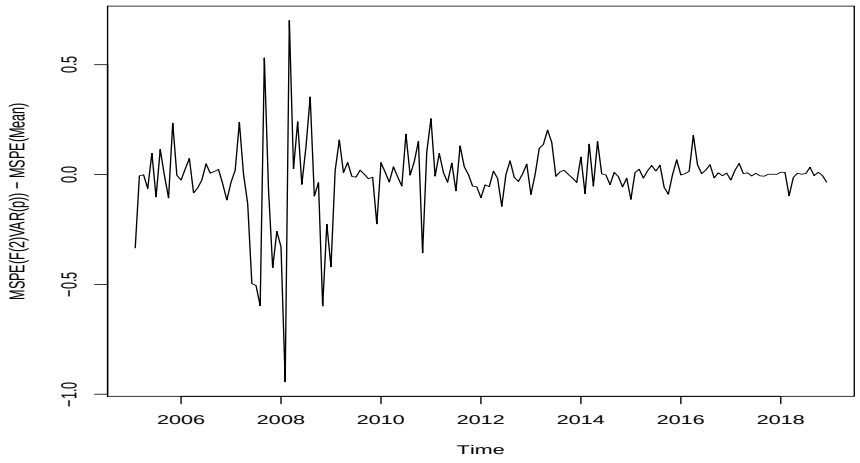


Figure 398: Mean squared forecasting errors of 1-step-ahead F(2)VAR(p) forecast of CPI: Difference from benchmark



4.1.2 Forecast Horizon = 3

Figure 399: Mean squared forecasting errors of 3-step-ahead Naive forecast of CPI: Difference from benchmark

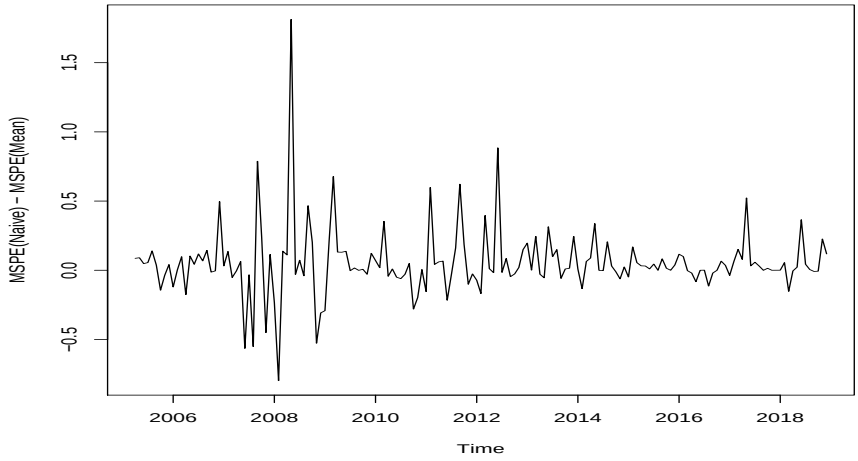


Figure 400: Mean squared forecasting errors of 3-step-ahead MA forecast of CPI: Difference from benchmark

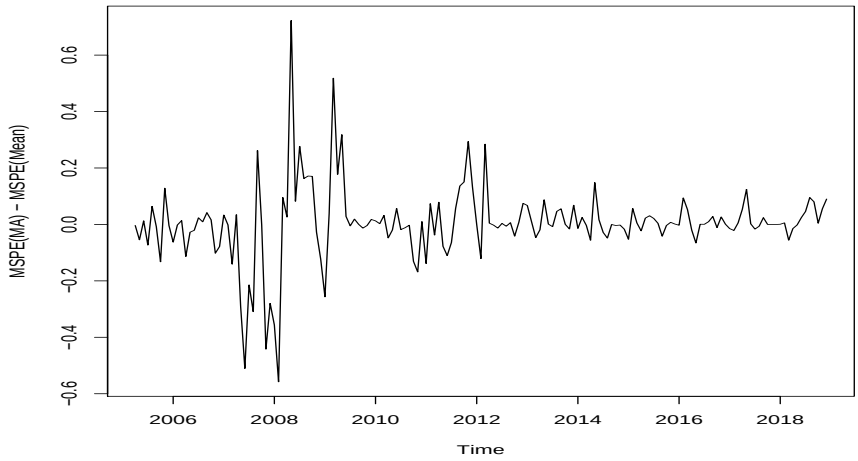


Figure 401: Mean squared forecasting errors of 3-step-ahead MA-opt forecast of CPI: Difference from benchmark

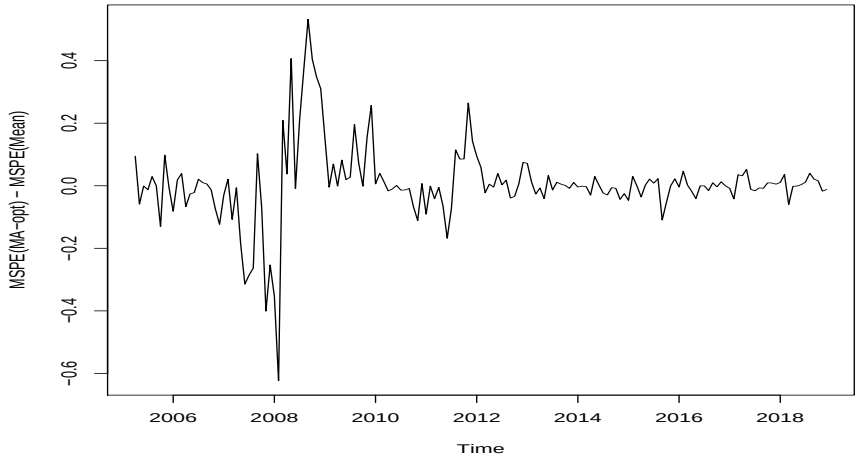


Figure 402: Mean squared forecasting errors of 3-step-ahead SES forecast of CPI: Difference from benchmark

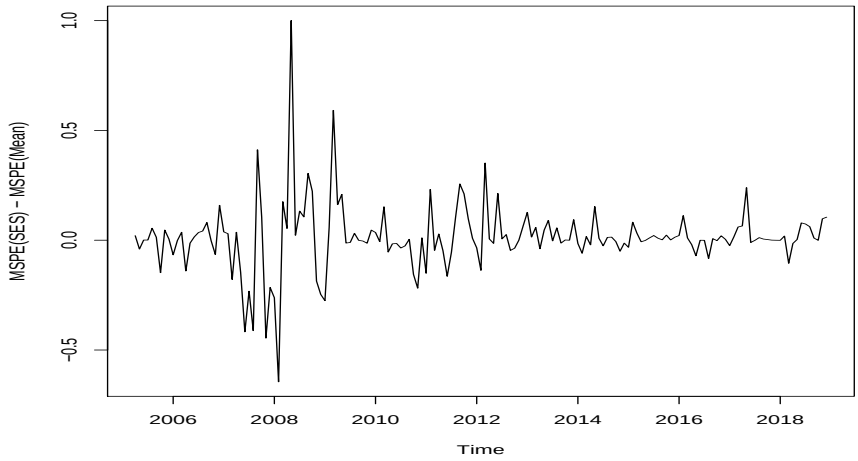


Figure 403: Mean squared forecasting errors of 3-step-ahead SES-opt forecast of CPI: Difference from benchmark

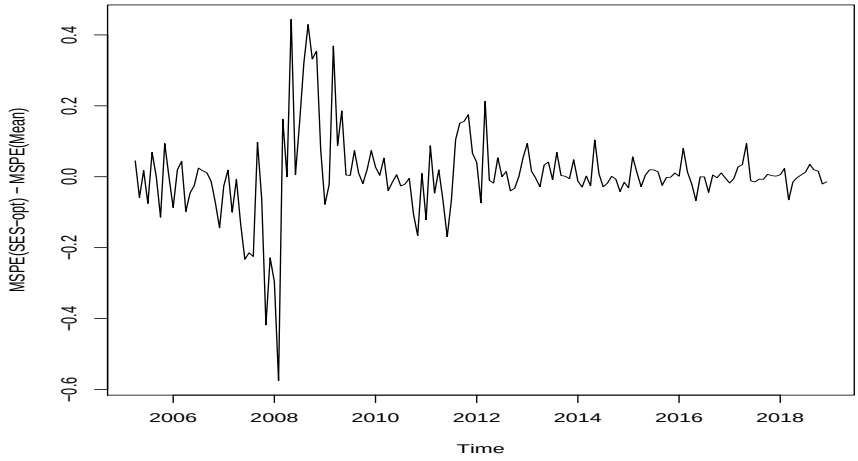


Figure 404: Mean squared forecasting errors of 3-step-ahead AR(1) forecast of CPI: Difference from benchmark

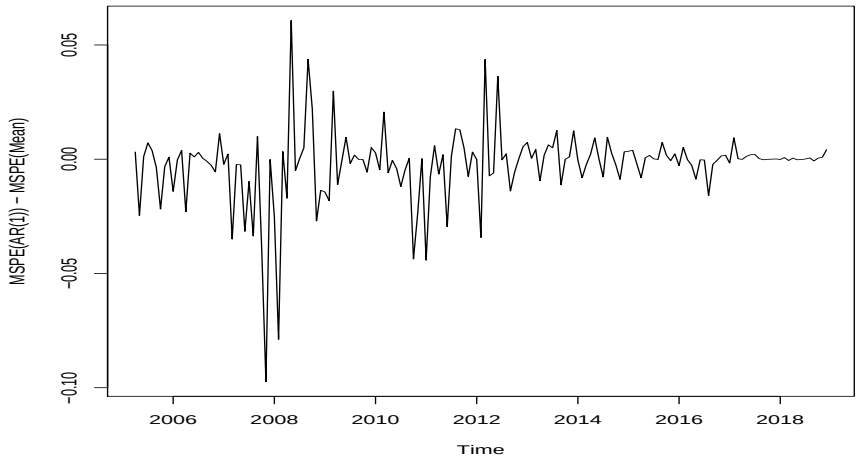


Figure 405: Mean squared forecasting errors of 3-step-ahead AR(p) forecast of CPI: Difference from benchmark

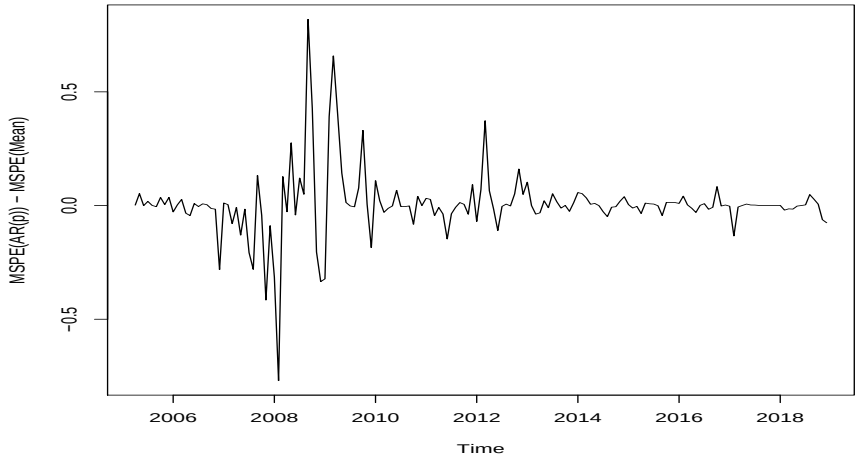


Figure 406: Mean squared forecasting errors of 3-step-ahead ARd(1) forecast of CPI: Difference from benchmark

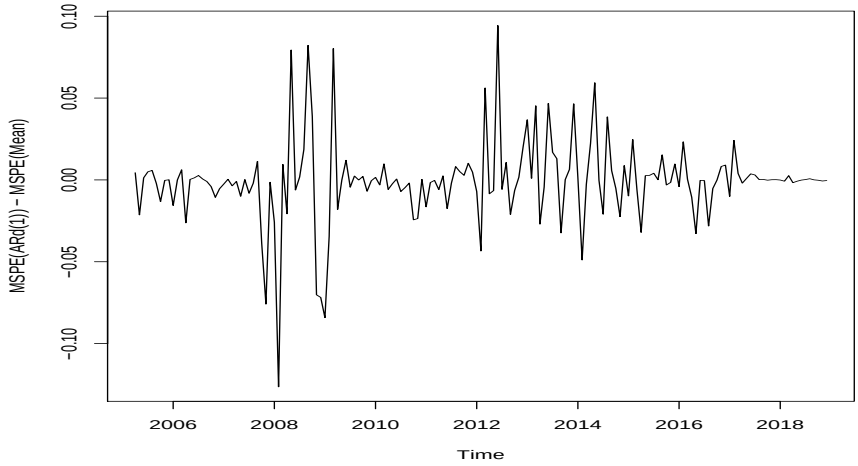


Figure 407: Mean squared forecasting errors of 3-step-ahead ARd(p) forecast of CPI: Difference from benchmark

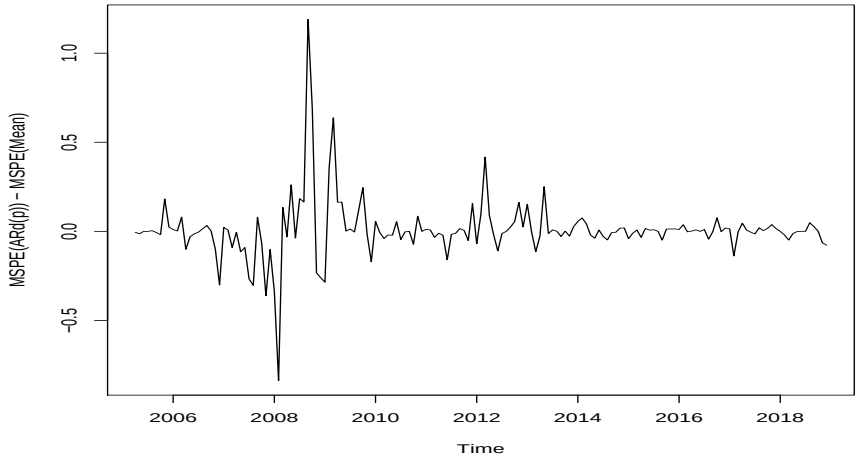


Figure 408: Mean squared forecasting errors of 3-step-ahead ARMA(1,1) forecast of CPI: Difference from benchmark

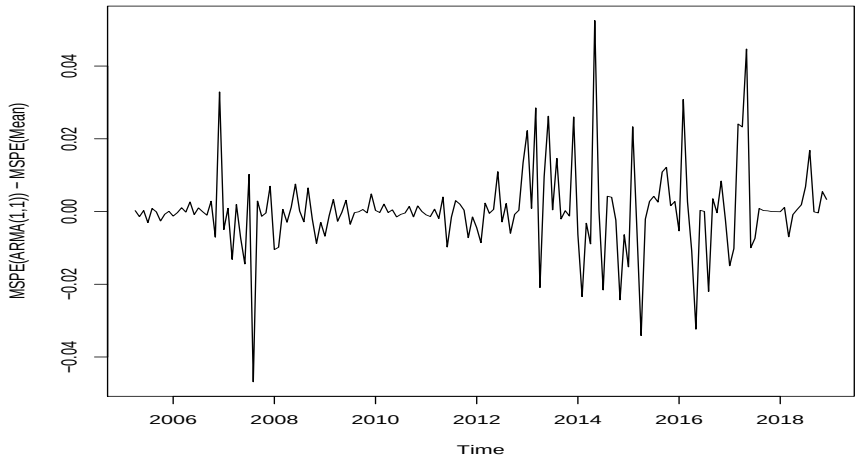


Figure 409: Mean squared forecasting errors of 3-step-ahead ARMA(p,q) forecast of CPI: Difference from benchmark

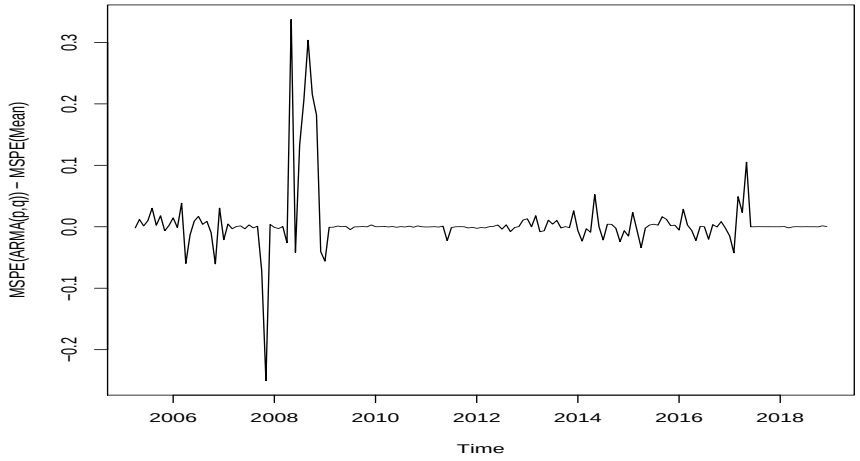


Figure 410: Mean squared forecasting errors of 3-step-ahead VAR(1) forecast of CPI: Difference from benchmark

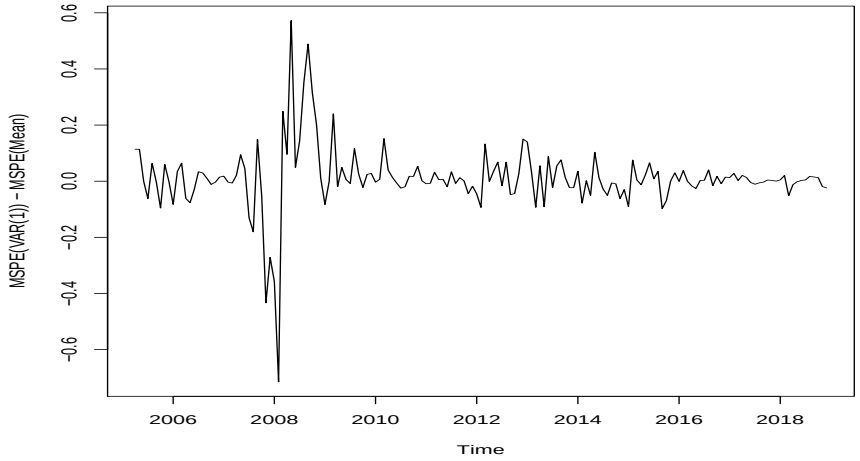


Figure 411: Mean squared forecasting errors of 3-step-ahead VAR(p) forecast of CPI: Difference from benchmark

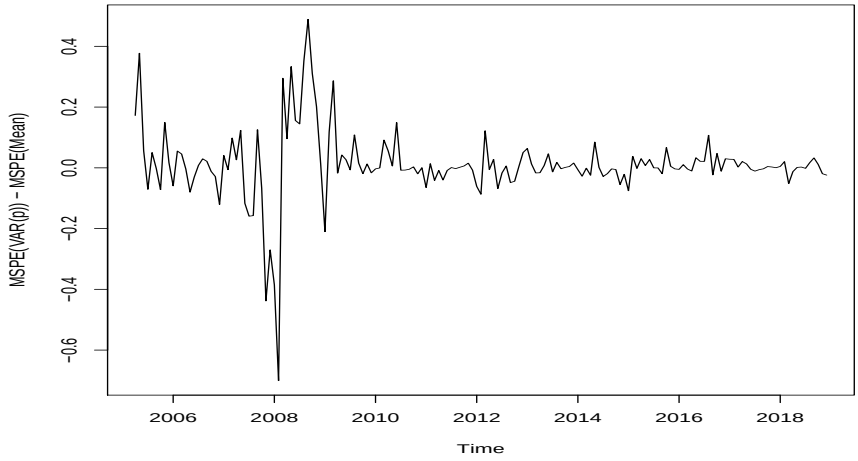


Figure 412: Mean squared forecasting errors of 3-step-ahead BVAR forecast of CPI: Difference from benchmark

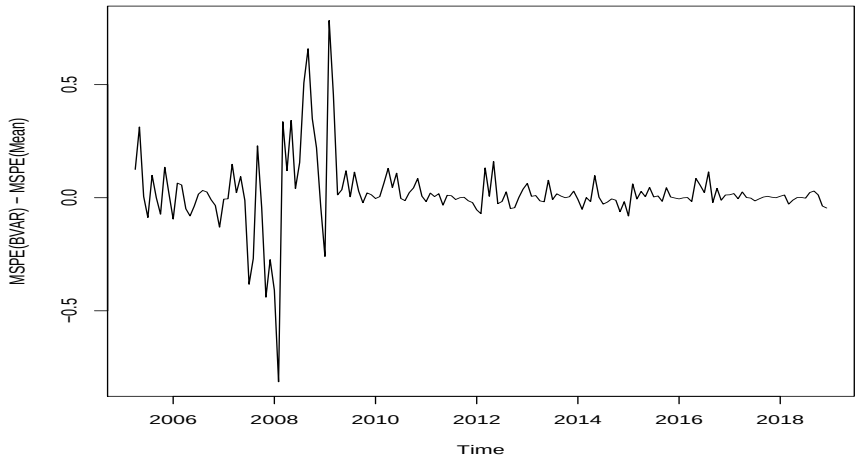


Figure 413: Mean squared forecasting errors of 3-step-ahead Factor(2) forecast of CPI: Difference from benchmark

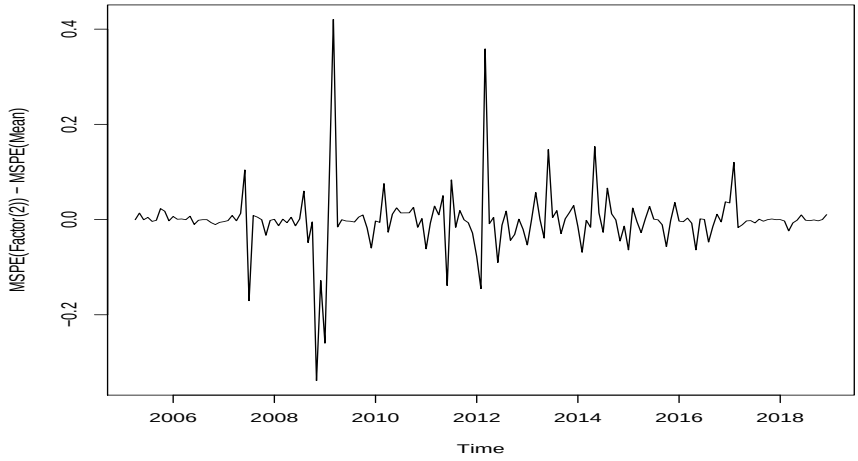


Figure 414: Mean squared forecasting errors of 3-step-ahead Factor(k) forecast of CPI: Difference from benchmark

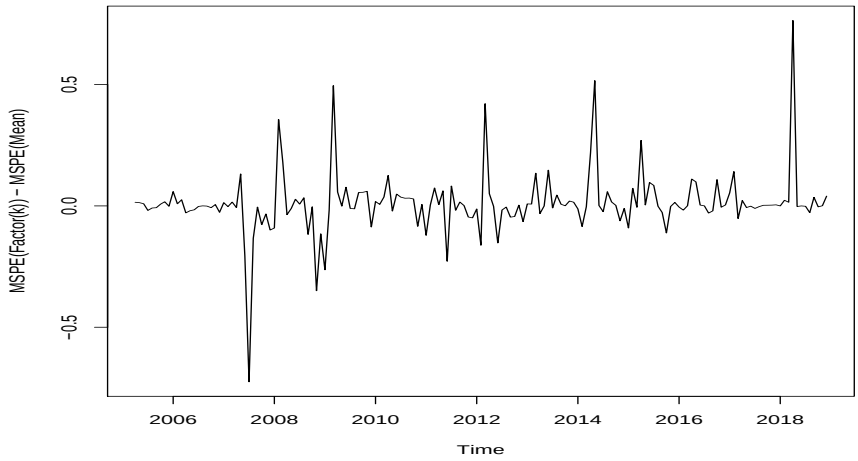


Figure 415: Mean squared forecasting errors of 3-step-ahead F(2)VAR(1) forecast of CPI: Difference from benchmark

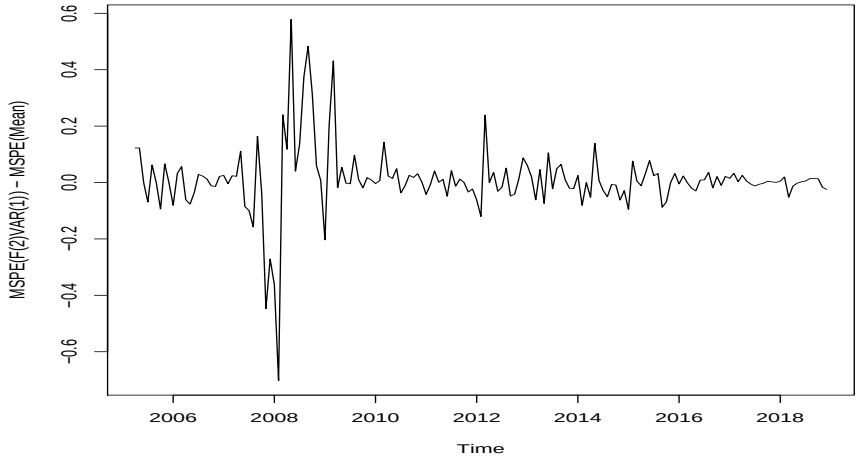
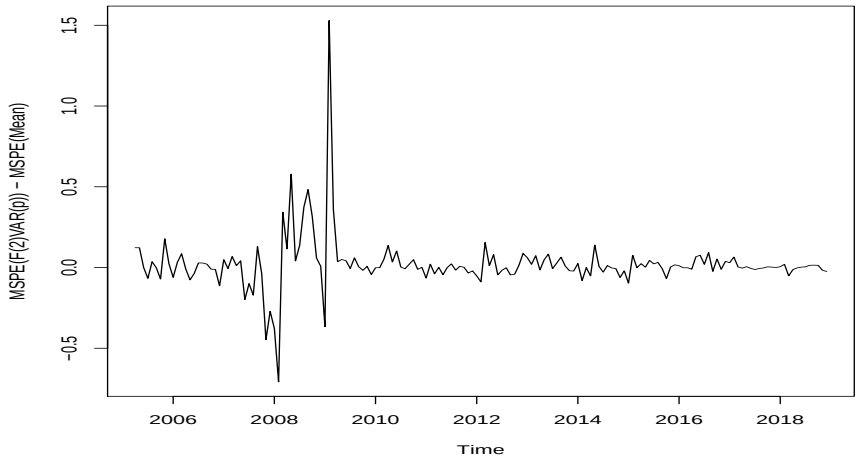


Figure 416: Mean squared forecasting errors of 3-step-ahead F(2)VAR(p) forecast of CPI: Difference from benchmark



4.1.3 Forecast Horizon = 6

Figure 417: Mean squared forecasting errors of 6-step-ahead Naive forecast of CPI: Difference from benchmark

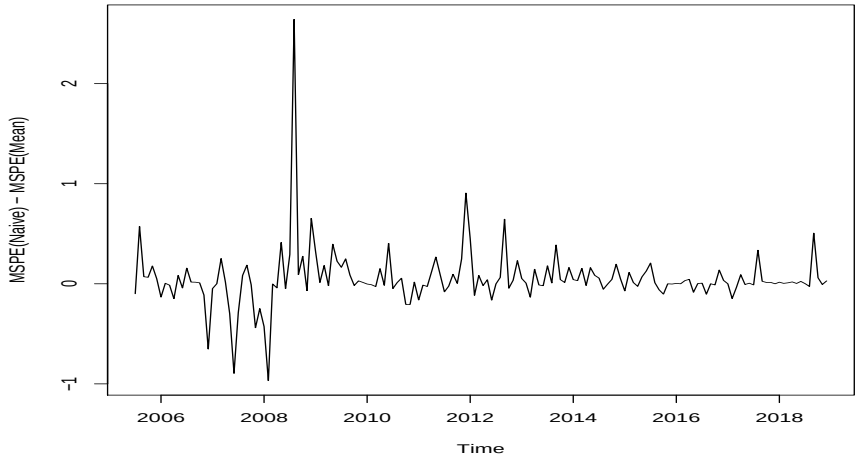


Figure 418: Mean squared forecasting errors of 6-step-ahead MA forecast of CPI: Difference from benchmark

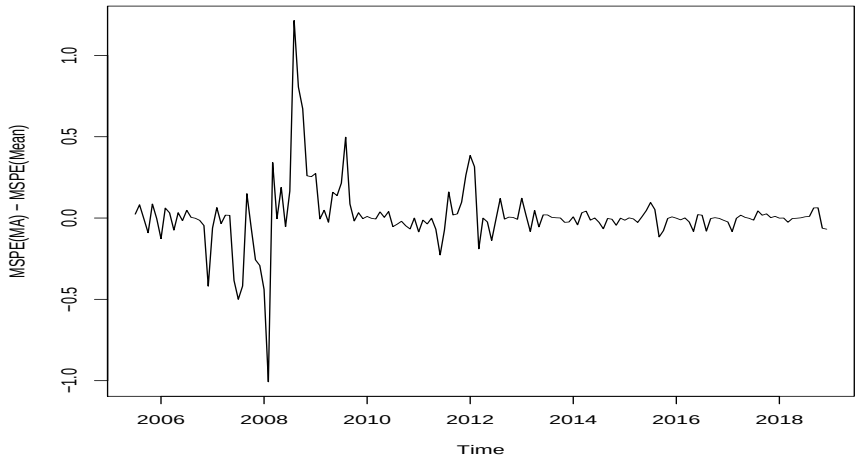


Figure 419: Mean squared forecasting errors of 6-step-ahead MA-opt forecast of CPI: Difference from benchmark

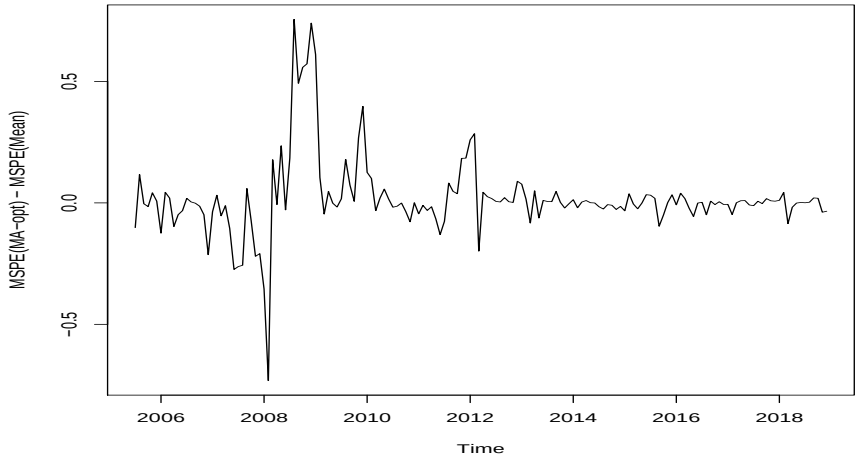


Figure 420: Mean squared forecasting errors of 6-step-ahead SES forecast of CPI: Difference from benchmark

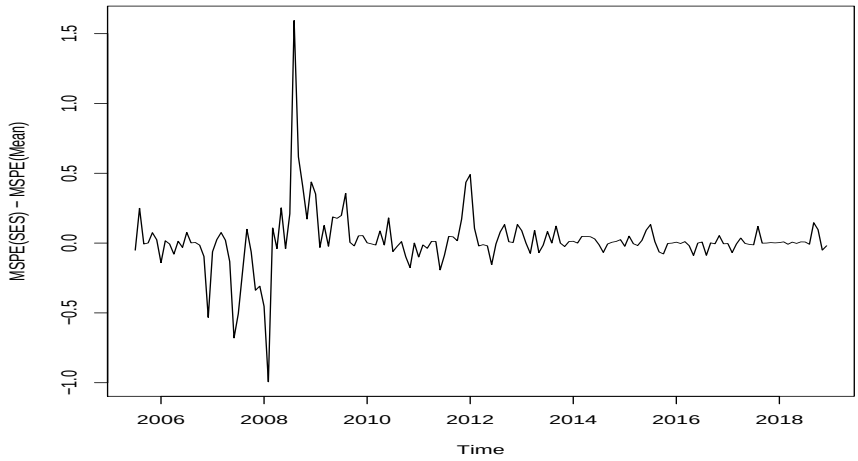


Figure 421: Mean squared forecasting errors of 6-step-ahead SES-opt forecast of CPI: Difference from benchmark

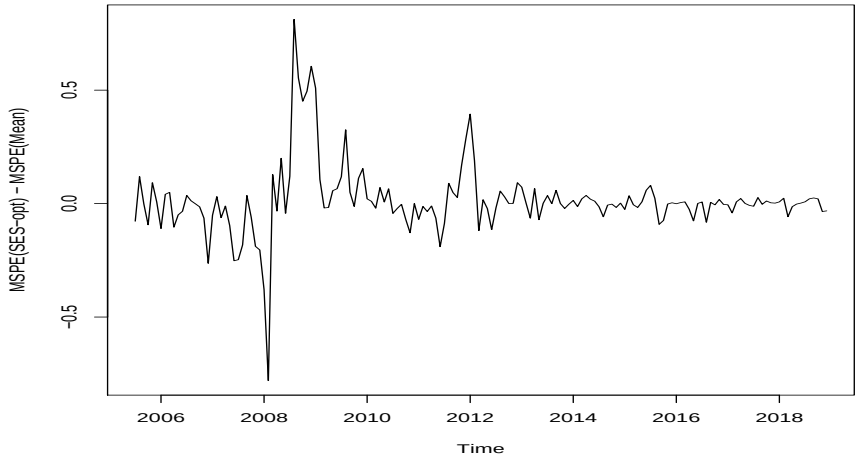


Figure 422: Mean squared forecasting errors of 6-step-ahead AR(1) forecast of CPI: Difference from benchmark

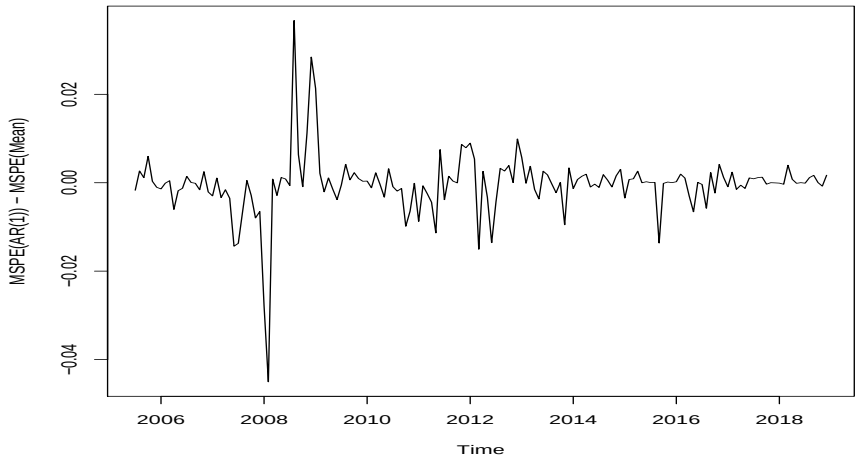


Figure 423: Mean squared forecasting errors of 6-step-ahead AR(p) forecast of CPI: Difference from benchmark

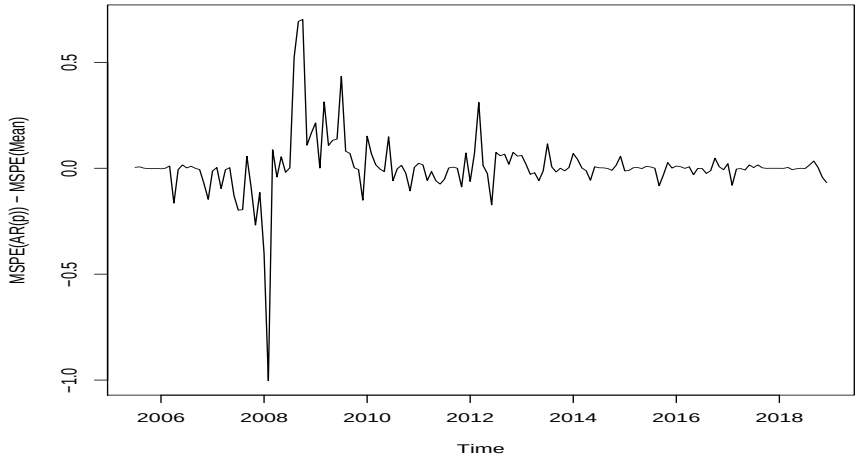


Figure 424: Mean squared forecasting errors of 6-step-ahead ARd(1) forecast of CPI: Difference from benchmark

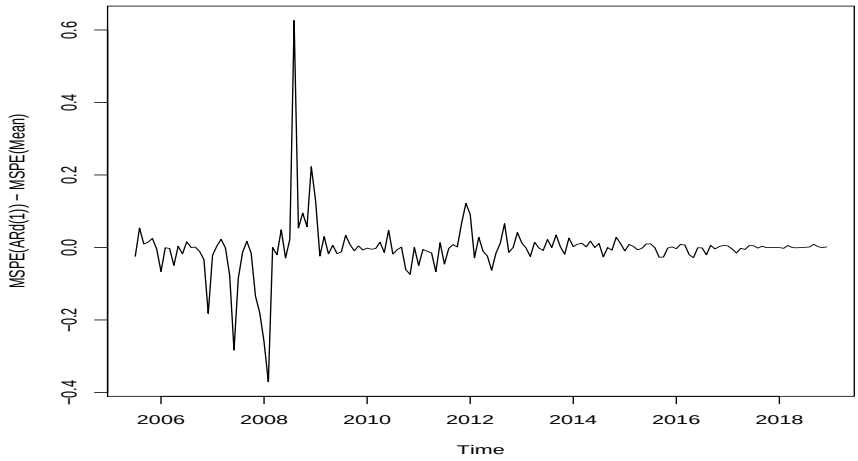


Figure 425: Mean squared forecasting errors of 6-step-ahead ARd(p) forecast of CPI: Difference from benchmark

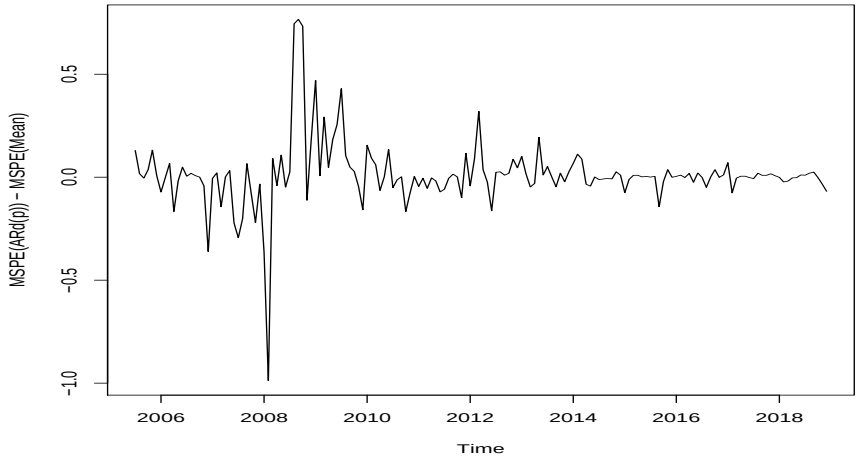


Figure 426: Mean squared forecasting errors of 6-step-ahead ARMA(1,1) forecast of CPI: Difference from benchmark

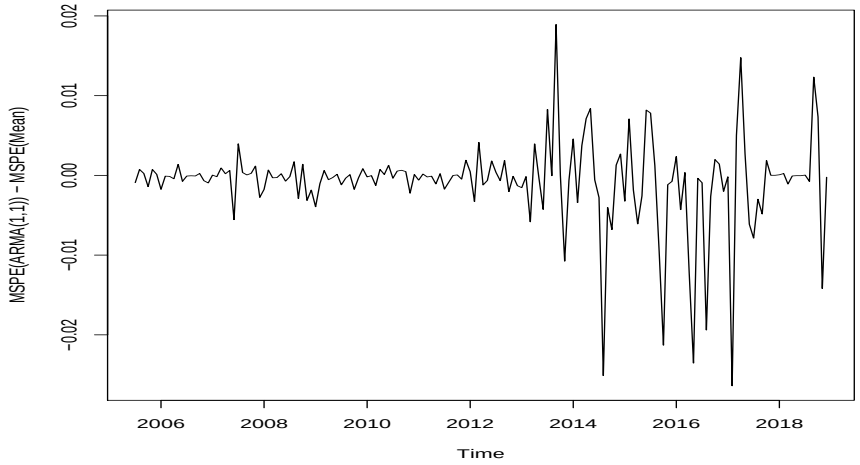


Figure 427: Mean squared forecasting errors of 6-step-ahead ARMA(p,q) forecast of CPI: Difference from benchmark

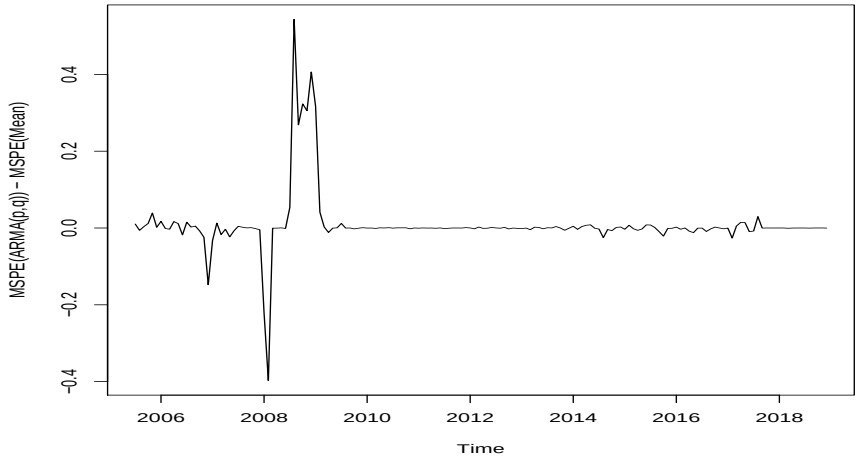


Figure 428: Mean squared forecasting errors of 6-step-ahead VAR(1) forecast of CPI: Difference from benchmark

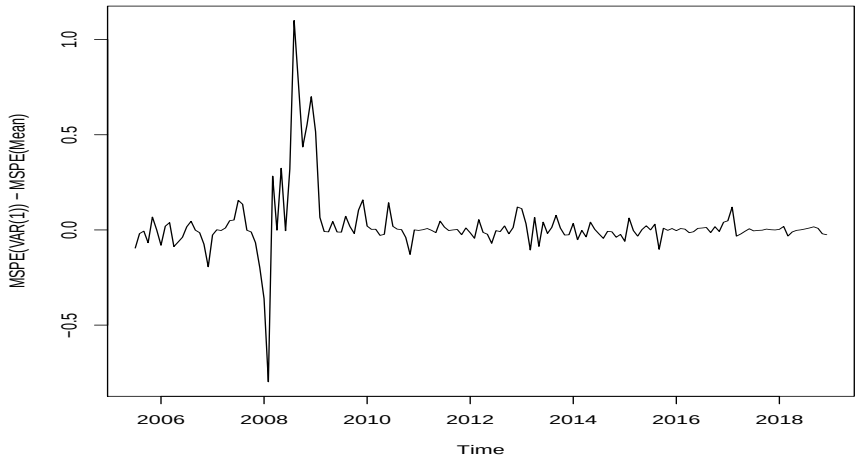


Figure 429: Mean squared forecasting errors of 6-step-ahead VAR(p) forecast of CPI: Difference from benchmark

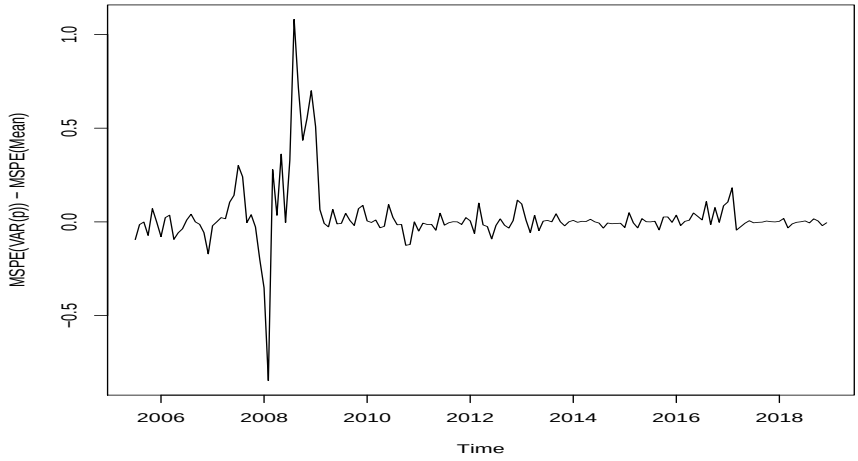


Figure 430: Mean squared forecasting errors of 6-step-ahead BVAR forecast of CPI: Difference from benchmark

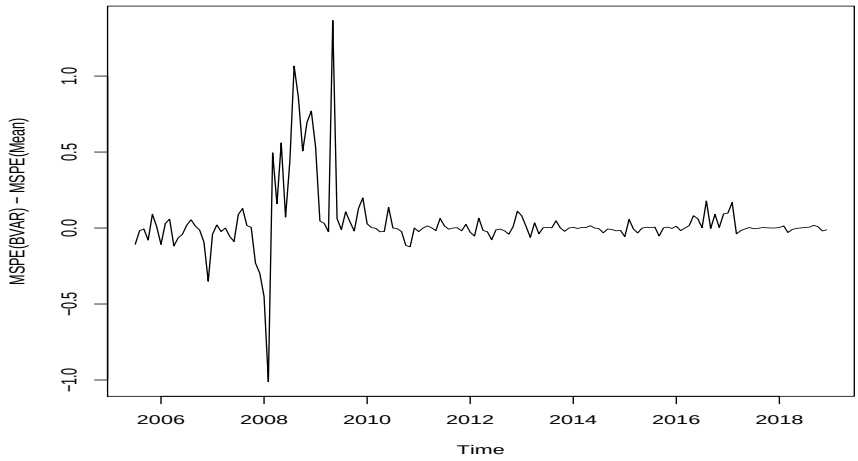


Figure 431: Mean squared forecasting errors of 6-step-ahead Factor(2) forecast of CPI: Difference from benchmark

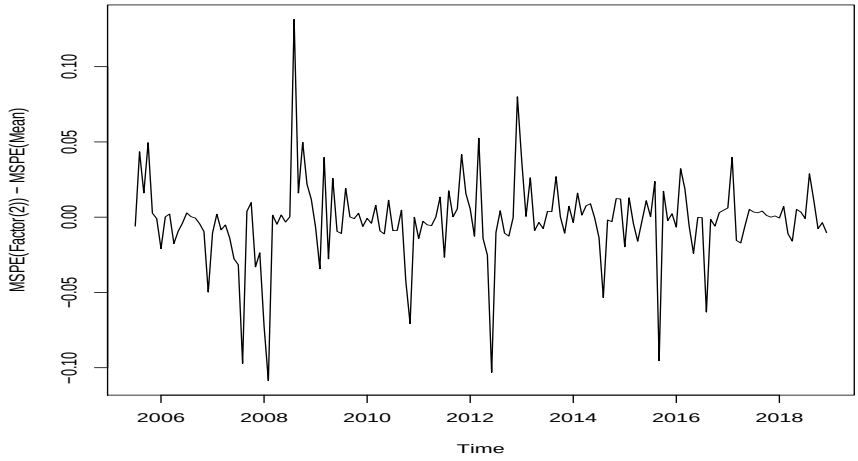


Figure 432: Mean squared forecasting errors of 6-step-ahead Factor(k) forecast of CPI: Difference from benchmark

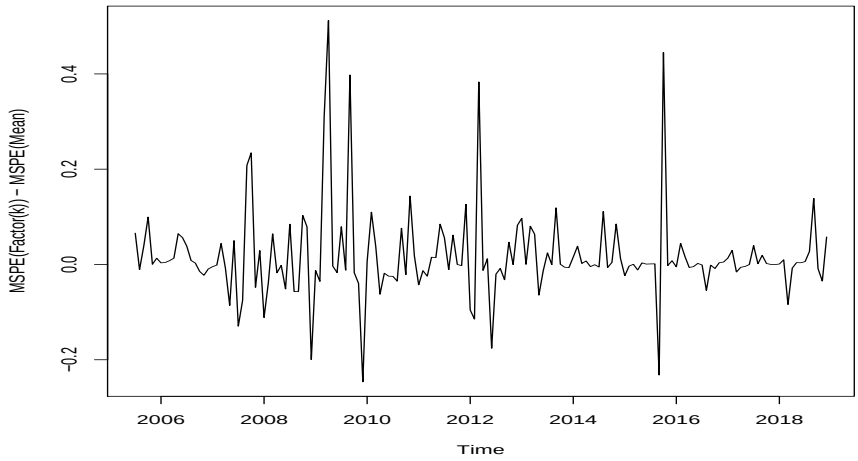


Figure 433: Mean squared forecasting errors of 6-step-ahead F(2)VAR(1) forecast of CPI: Difference from benchmark

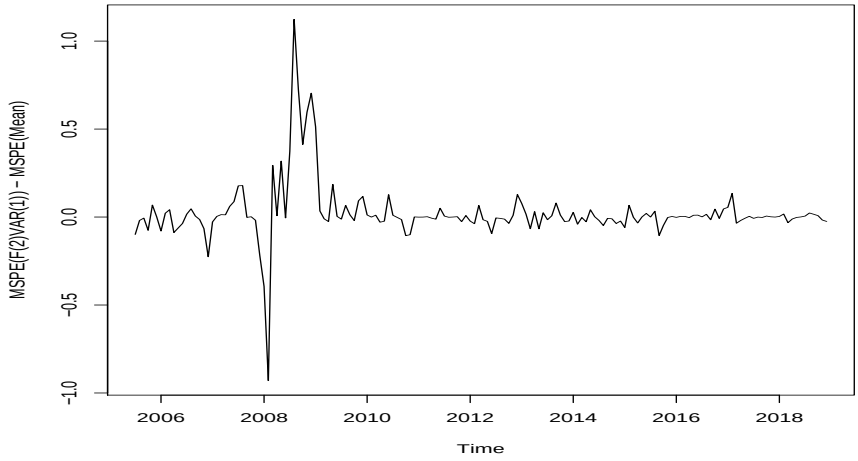
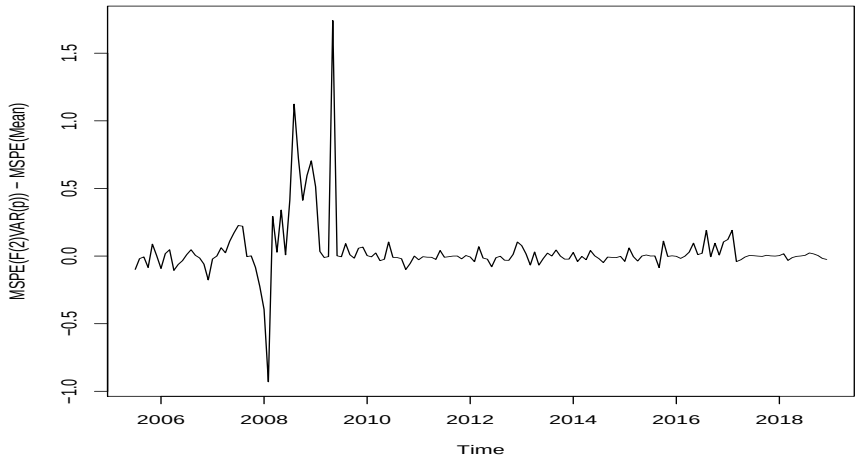


Figure 434: Mean squared forecasting errors of 6-step-ahead F(2)VAR(p) forecast of CPI: Difference from benchmark



4.1.4 Forecast Horizon = 9

Figure 435: Mean squared forecasting errors of 9-step-ahead Naive forecast of CPI: Difference from benchmark

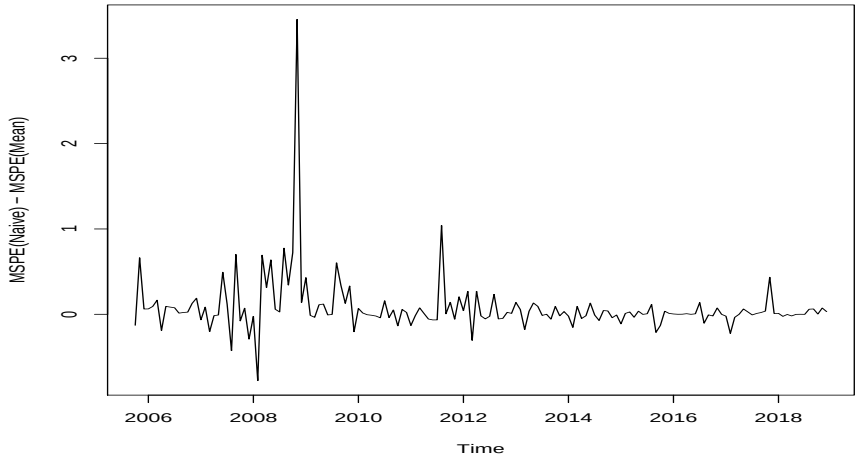


Figure 436: Mean squared forecasting errors of 9-step-ahead MA forecast of CPI: Difference from benchmark

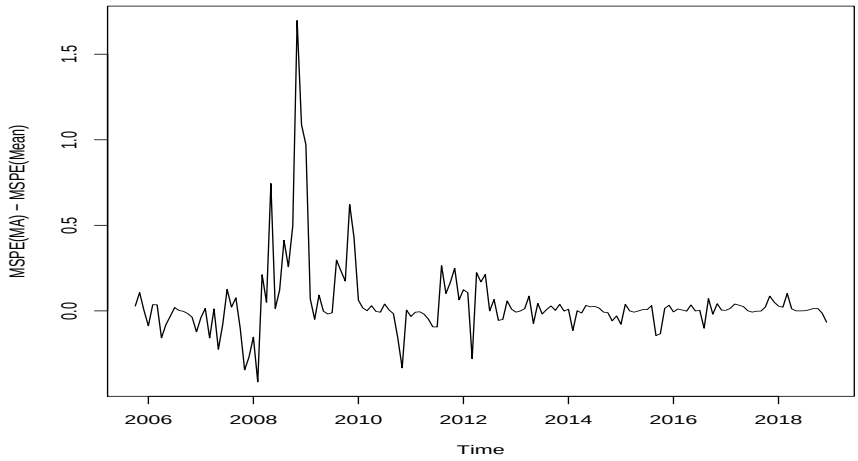


Figure 437: Mean squared forecasting errors of 9-step-ahead MA-opt forecast of CPI: Difference from benchmark

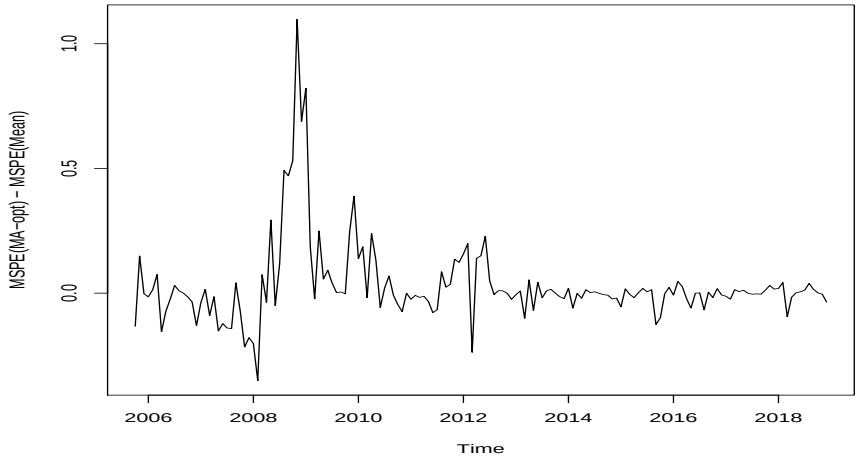


Figure 438: Mean squared forecasting errors of 9-step-ahead SES forecast of CPI: Difference from benchmark

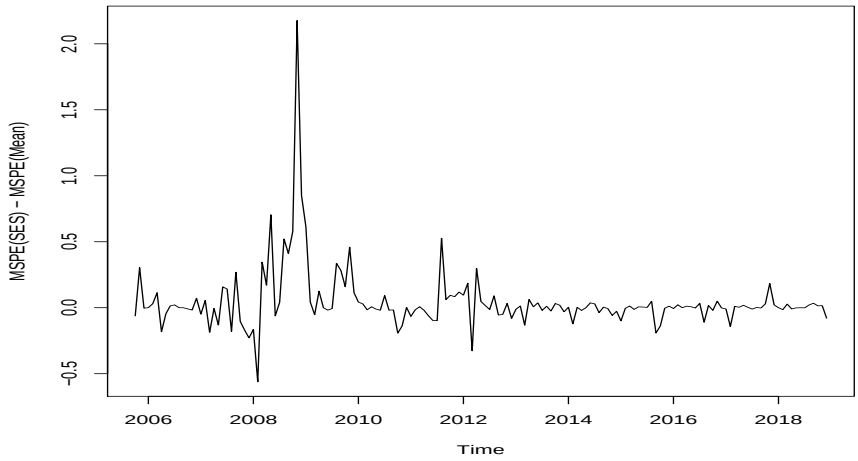


Figure 439: Mean squared forecasting errors of 9-step-ahead SES-opt forecast of CPI: Difference from benchmark

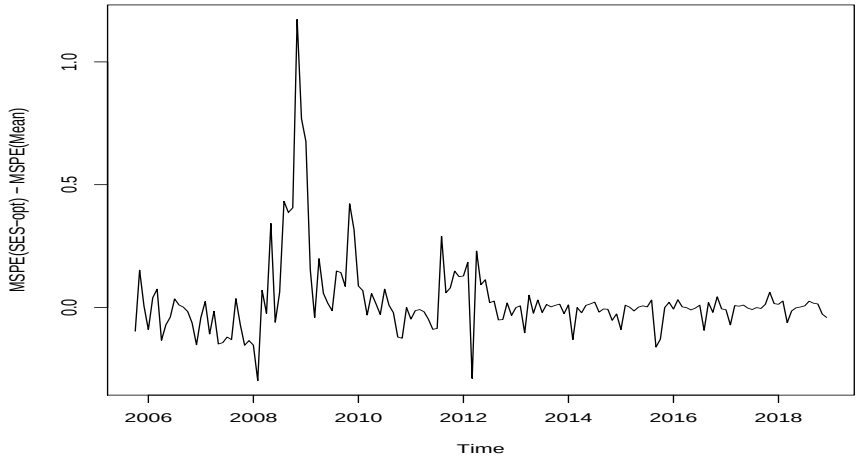


Figure 440: Mean squared forecasting errors of 9-step-ahead AR(1) forecast of CPI: Difference from benchmark

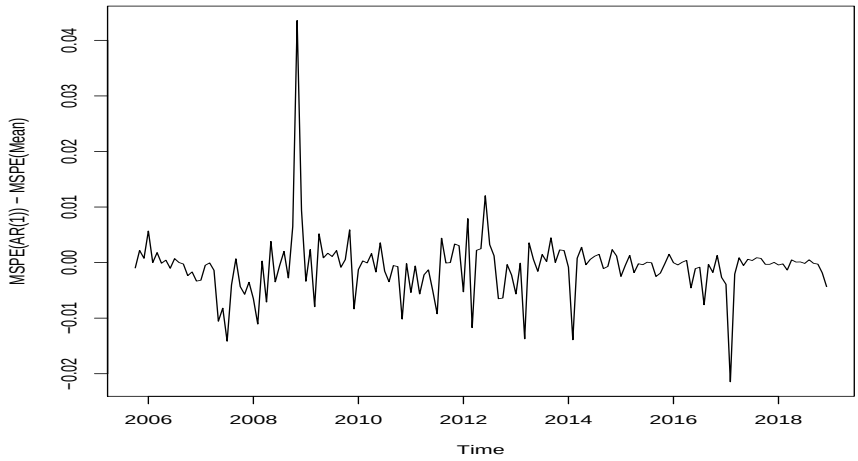


Figure 441: Mean squared forecasting errors of 9-step-ahead AR(p) forecast of CPI: Difference from benchmark

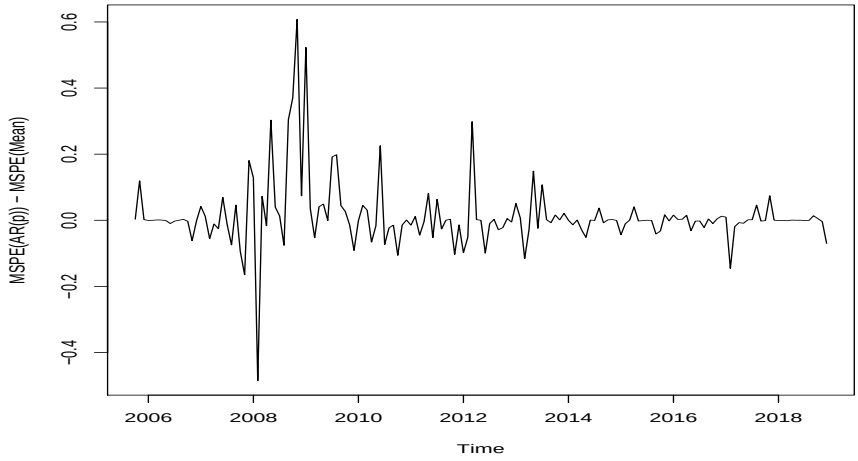


Figure 442: Mean squared forecasting errors of 9-step-ahead ARd(1) forecast of CPI: Difference from benchmark

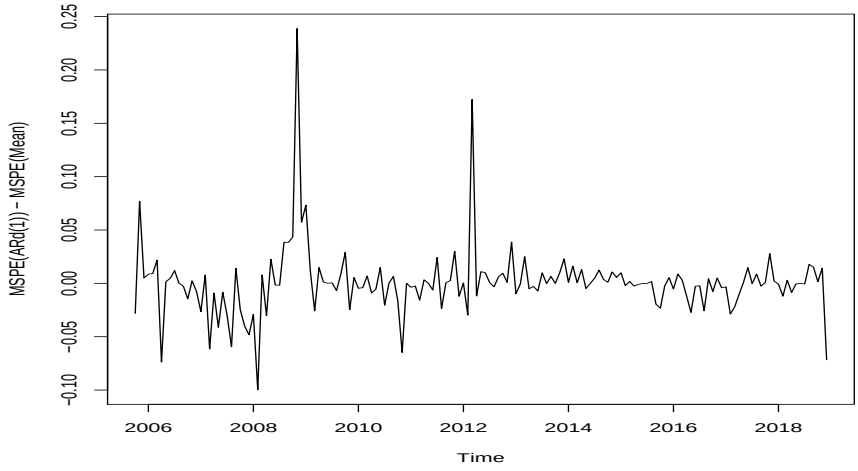


Figure 443: Mean squared forecasting errors of 9-step-ahead ARd(p) forecast of CPI: Difference from benchmark

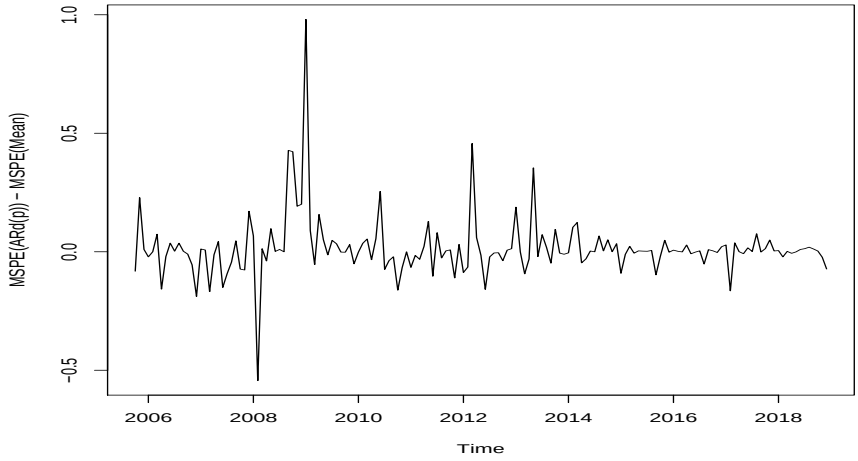


Figure 444: Mean squared forecasting errors of 9-step-ahead ARMA(1,1) forecast of CPI: Difference from benchmark

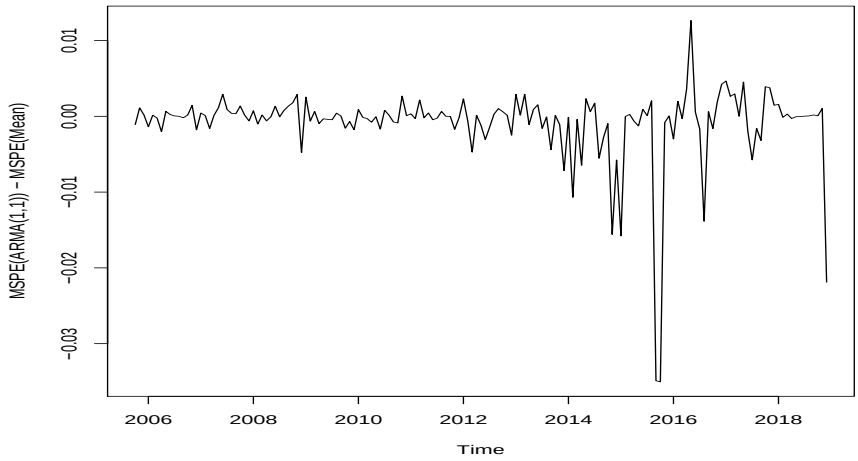


Figure 445: Mean squared forecasting errors of 9-step-ahead ARMA(p,q) forecast of CPI: Difference from benchmark

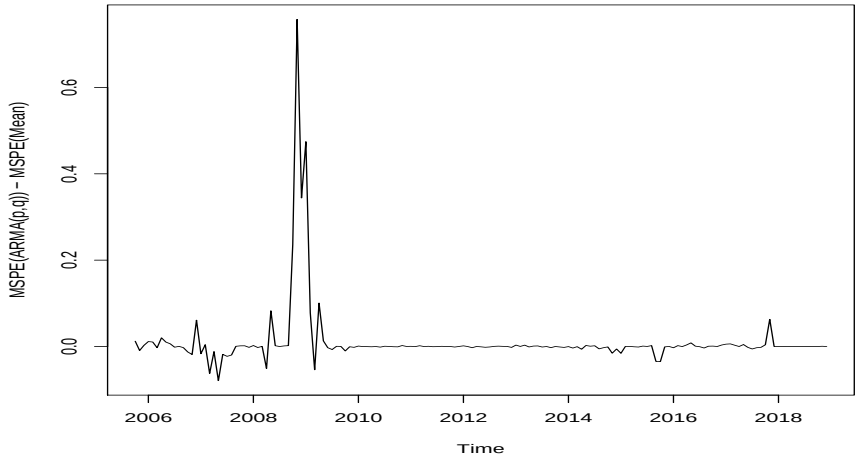


Figure 446: Mean squared forecasting errors of 9-step-ahead VAR(1) forecast of CPI: Difference from benchmark

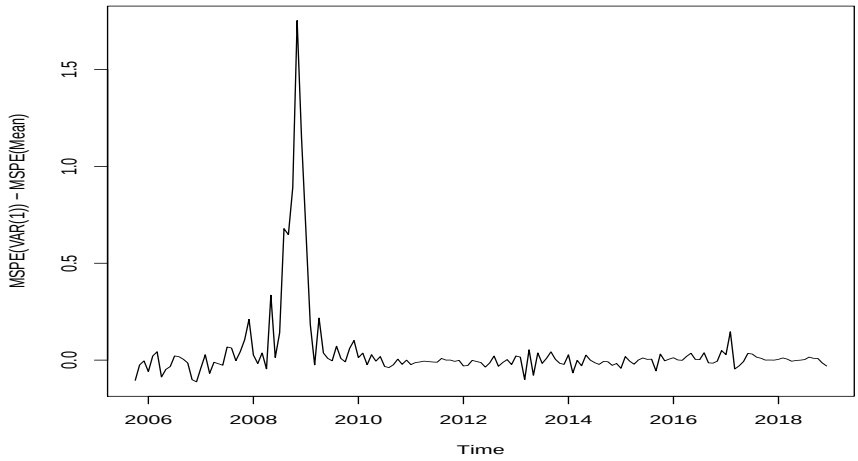


Figure 447: Mean squared forecasting errors of 9-step-ahead VAR(p) forecast of CPI: Difference from benchmark

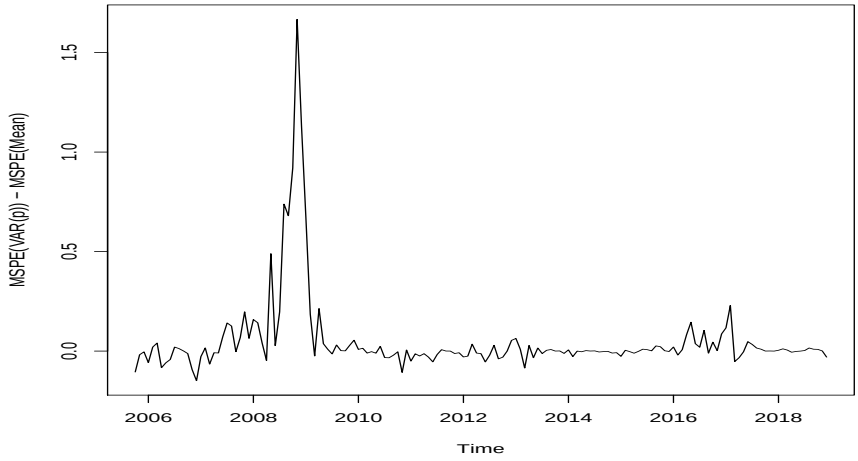


Figure 448: Mean squared forecasting errors of 9-step-ahead BVAR forecast of CPI: Difference from benchmark

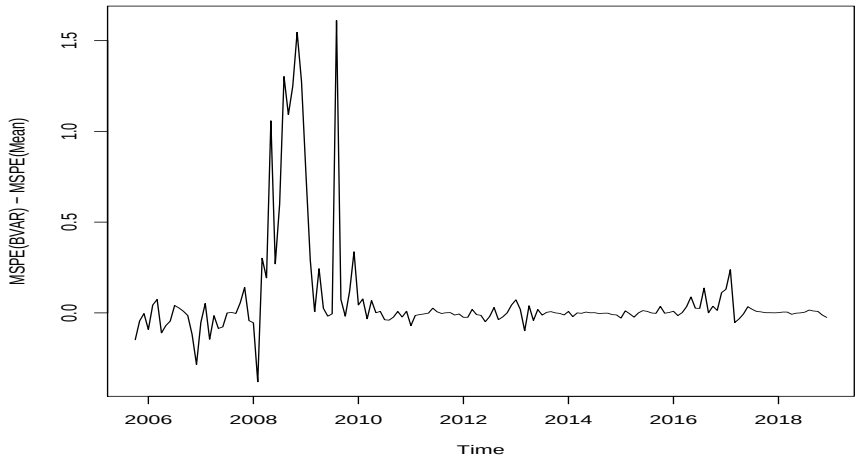


Figure 449: Mean squared forecasting errors of 9-step-ahead Factor(2) forecast of CPI: Difference from benchmark

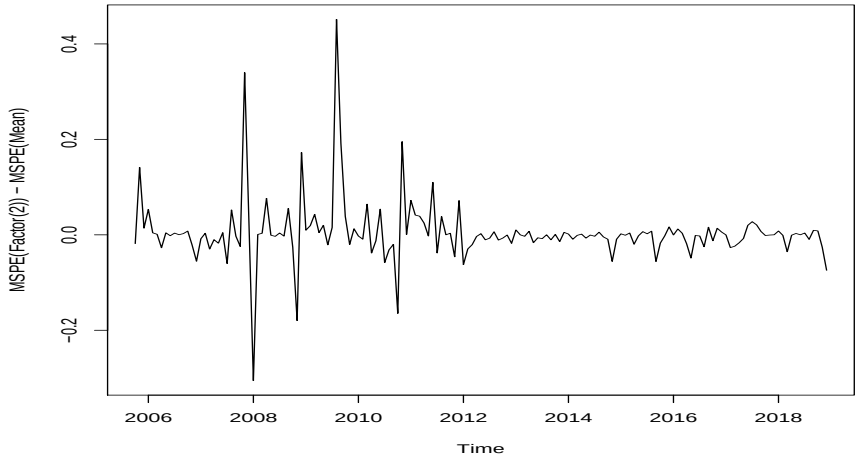


Figure 450: Mean squared forecasting errors of 9-step-ahead Factor(k) forecast of CPI: Difference from benchmark

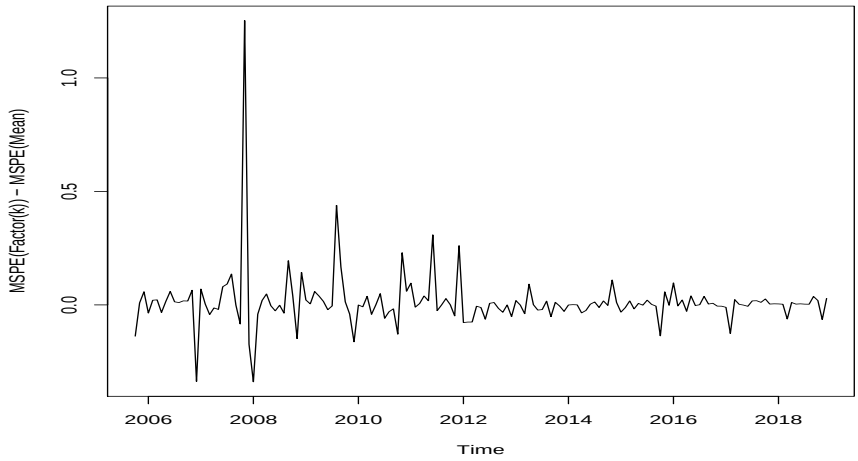


Figure 451: Mean squared forecasting errors of 9-step-ahead F(2)VAR(1) forecast of CPI: Difference from benchmark

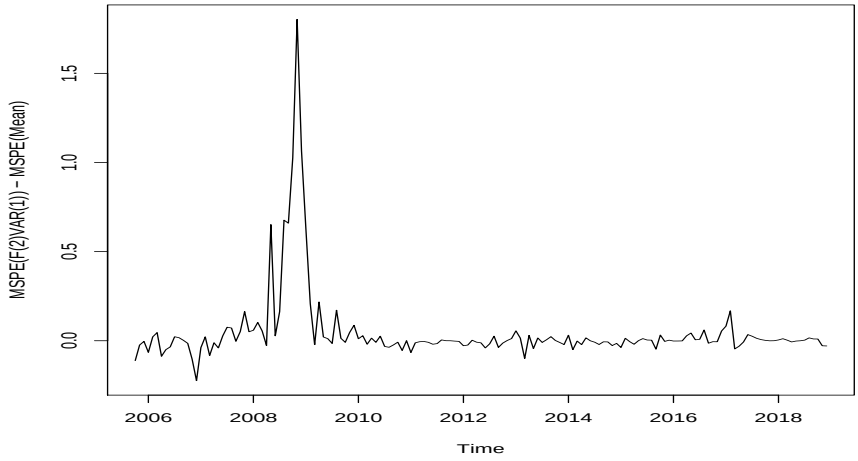
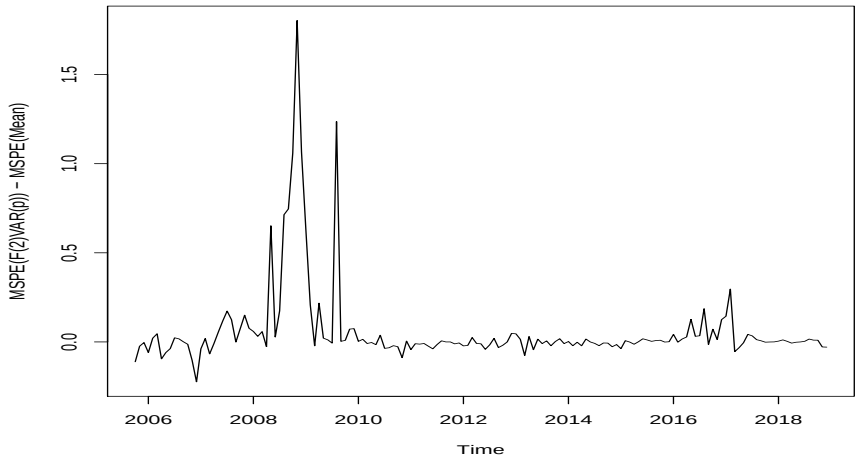


Figure 452: Mean squared forecasting errors of 9-step-ahead F(2)VAR(p) forecast of CPI: Difference from benchmark



4.1.5 Forecast Horizon = 12

Figure 453: Mean squared forecasting errors of 12-step-ahead Naive forecast of CPI: Difference from benchmark

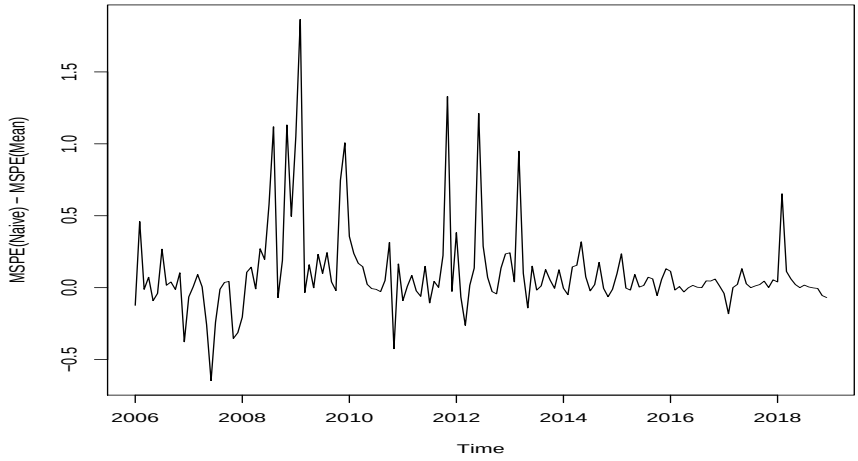


Figure 454: Mean squared forecasting errors of 12-step-ahead MA forecast of CPI: Difference from benchmark

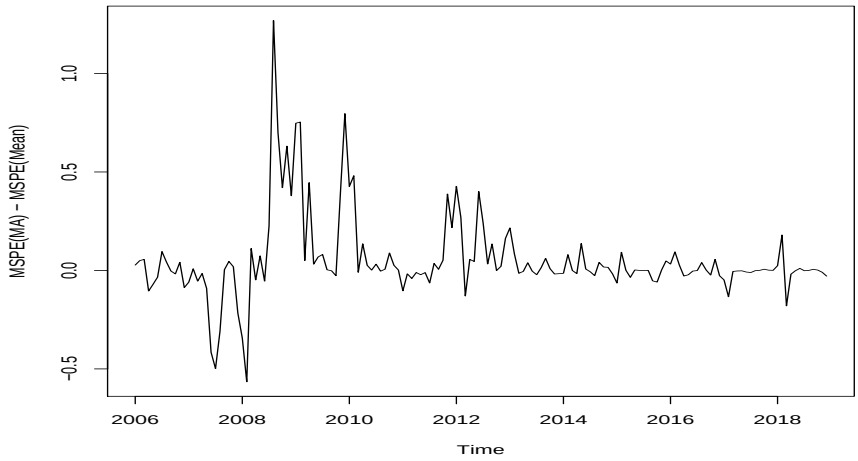


Figure 455: Mean squared forecasting errors of 12-step-ahead MA-opt forecast of CPI: Difference from benchmark

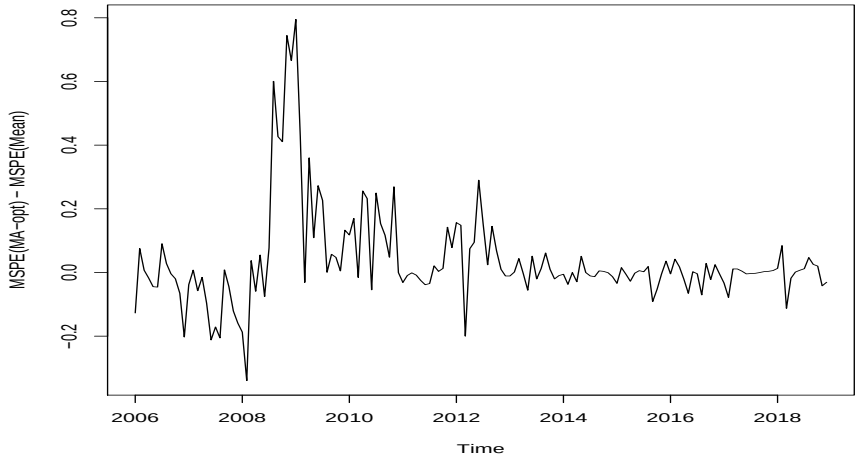


Figure 456: Mean squared forecasting errors of 12-step-ahead SES forecast of CPI: Difference from benchmark

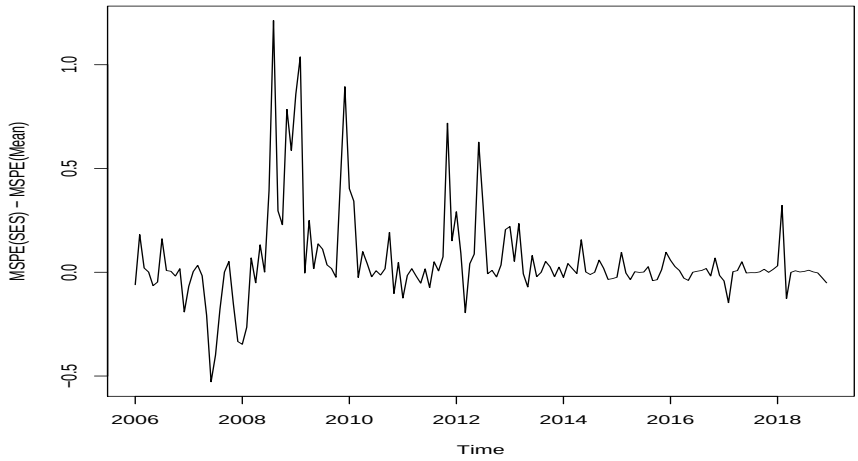


Figure 457: Mean squared forecasting errors of 12-step-ahead SES-opt forecast of CPI: Difference from benchmark

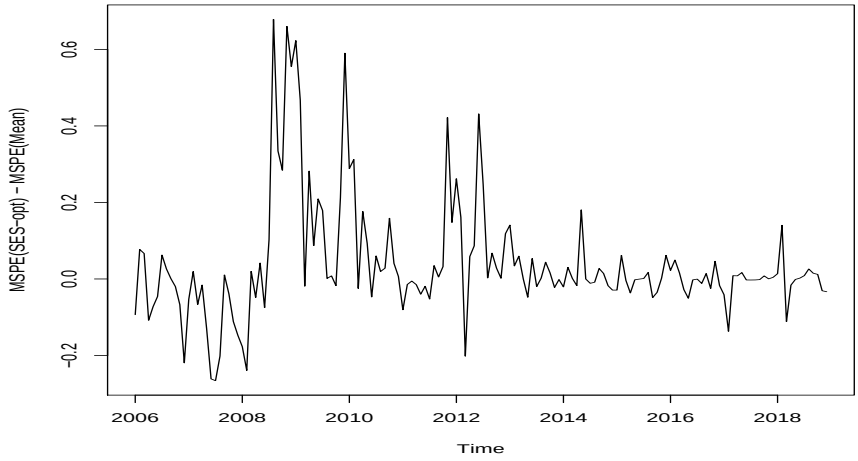


Figure 458: Mean squared forecasting errors of 12-step-ahead AR(1) forecast of CPI: Difference from benchmark

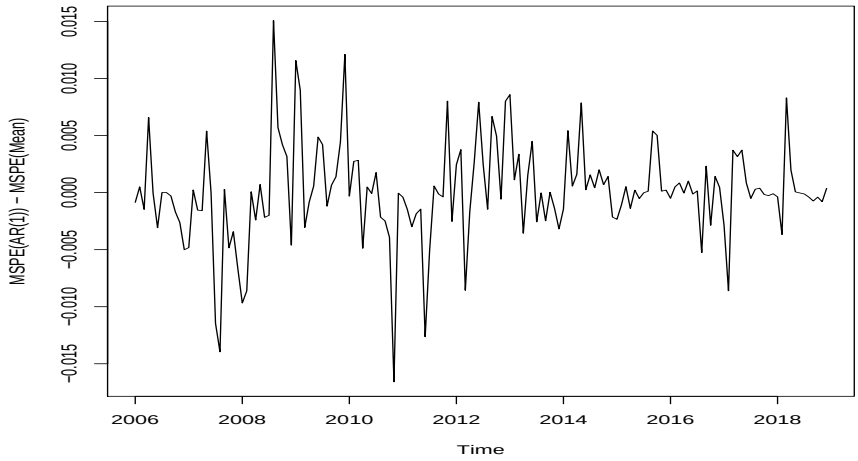


Figure 459: Mean squared forecasting errors of 12-step-ahead AR(p) forecast of CPI: Difference from benchmark

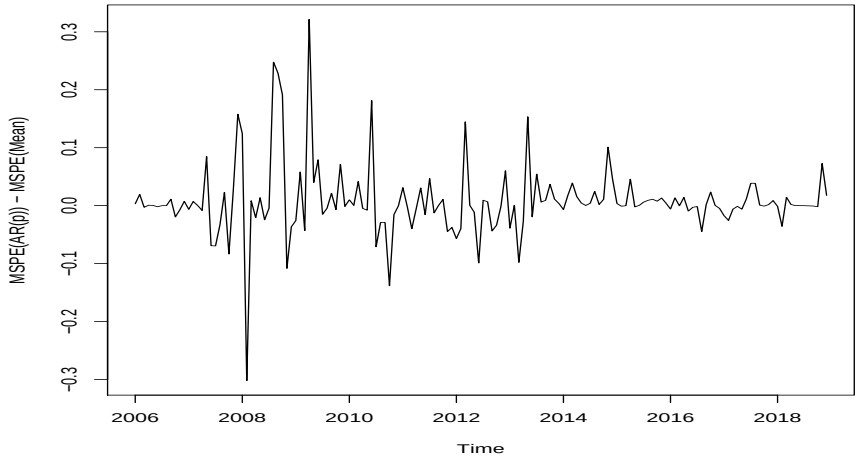


Figure 460: Mean squared forecasting errors of 12-step-ahead ARd(1) forecast of CPI: Difference from benchmark

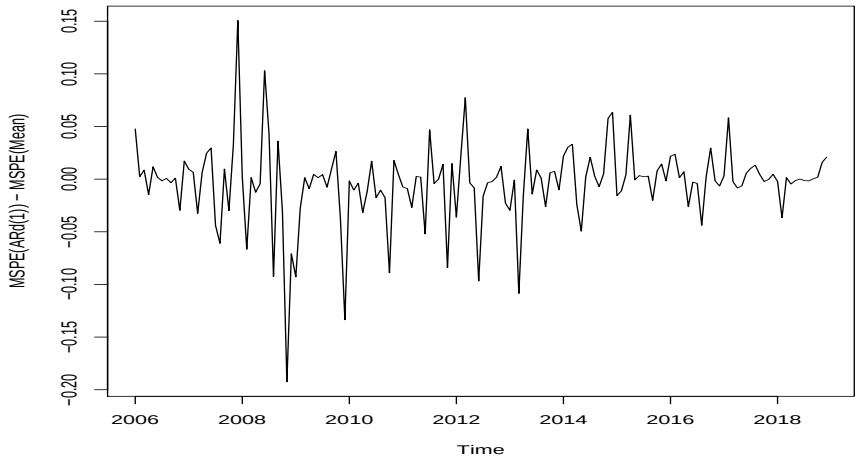


Figure 461: Mean squared forecasting errors of 12-step-ahead ARd(p) forecast of CPI: Difference from benchmark

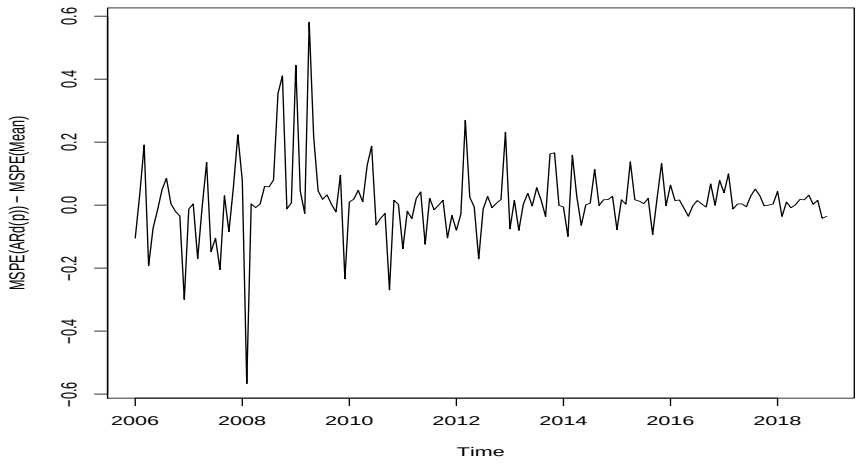


Figure 462: Mean squared forecasting errors of 12-step-ahead ARMA(1,1) forecast of CPI: Difference from benchmark

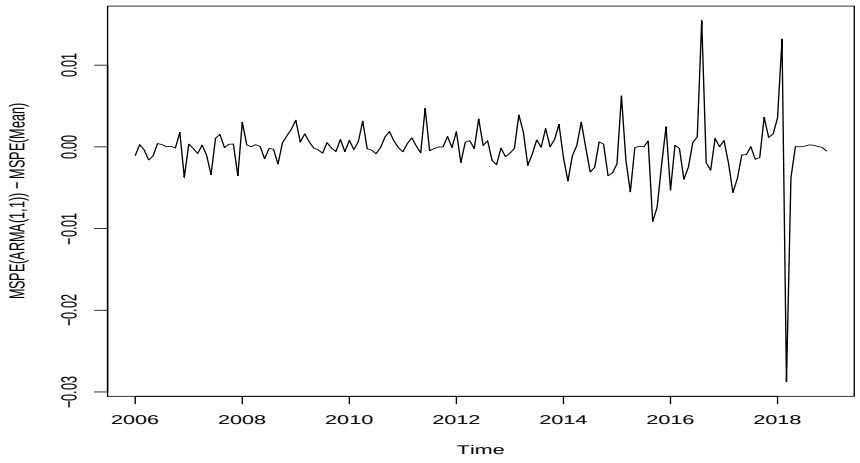


Figure 463: Mean squared forecasting errors of 12-step-ahead ARMA(p,q) forecast of CPI: Difference from benchmark

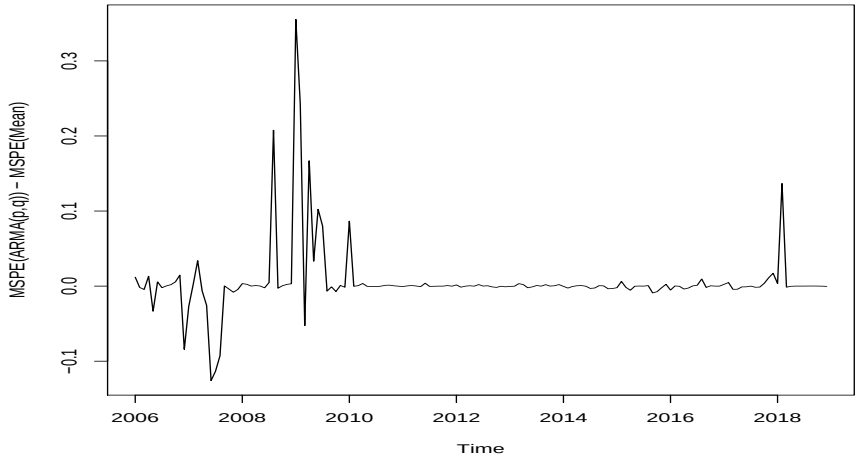


Figure 464: Mean squared forecasting errors of 12-step-ahead VAR(1) forecast of CPI: Difference from benchmark

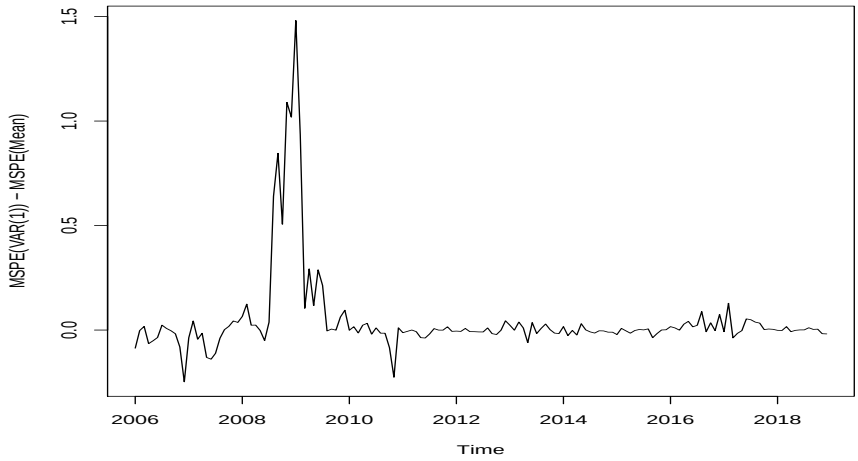


Figure 465: Mean squared forecasting errors of 12-step-ahead VAR(p) forecast of CPI: Difference from benchmark

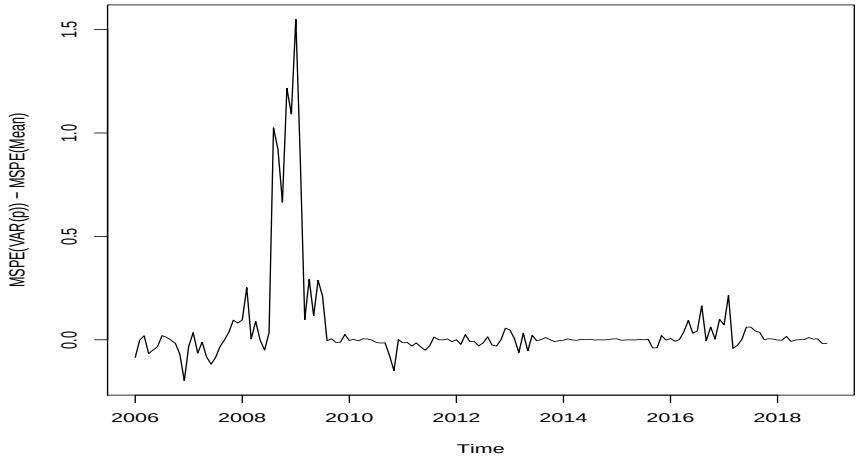


Figure 466: Mean squared forecasting errors of 12-step-ahead BVAR forecast of CPI: Difference from benchmark

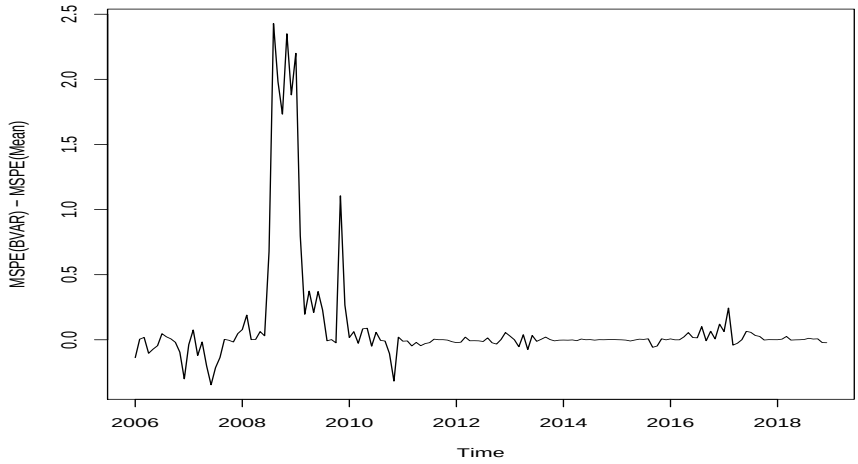


Figure 467: Mean squared forecasting errors of 12-step-ahead Factor(2) forecast of CPI: Difference from benchmark

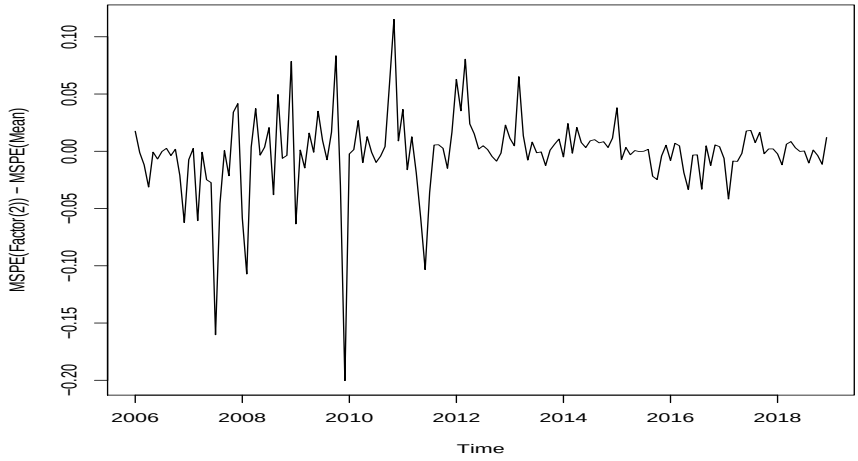


Figure 468: Mean squared forecasting errors of 12-step-ahead Factor(k) forecast of CPI: Difference from benchmark

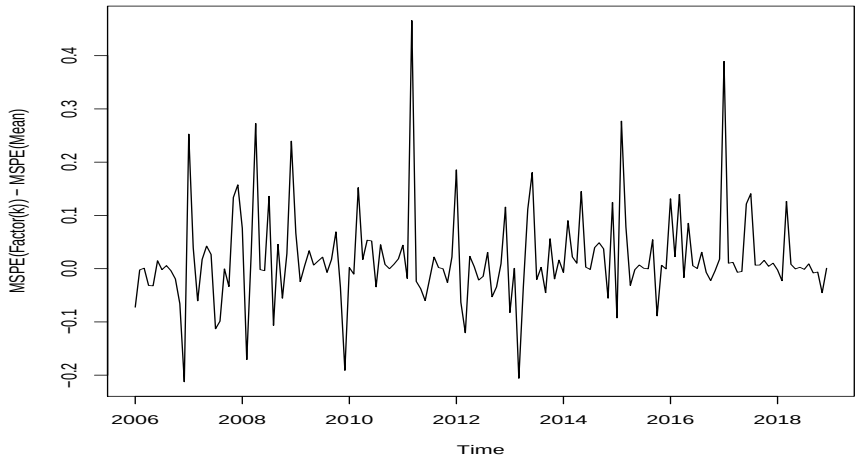


Figure 469: Mean squared forecasting errors of 12-step-ahead F(2)VAR(1) forecast of CPI: Difference from benchmark

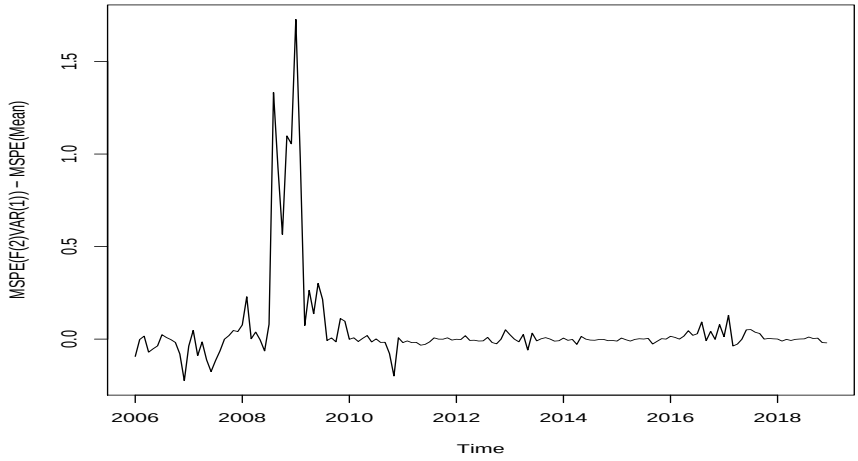
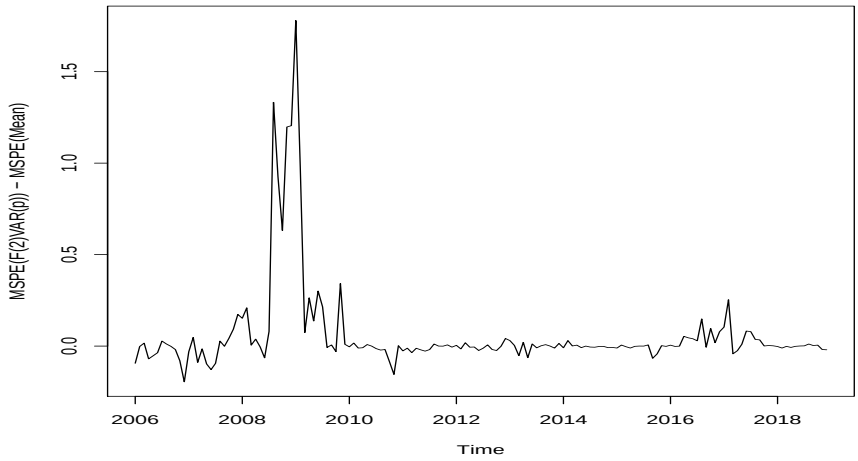


Figure 470: Mean squared forecasting errors of 12-step-ahead F(2)VAR(p) forecast of CPI: Difference from benchmark



4.2 PPI

4.2.1 Forecast Horizon = 1

Figure 471: Mean squared forecasting errors of 1-step-ahead Mean forecast of PPI: Difference from benchmark

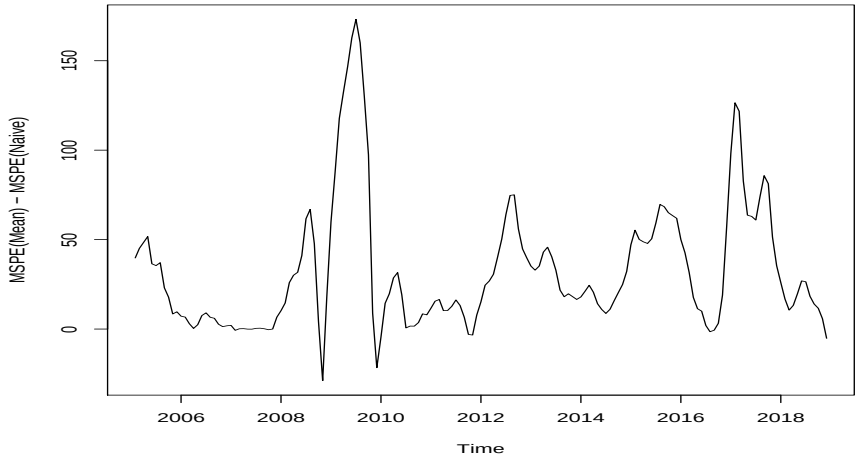


Figure 472: Mean squared forecasting errors of 1-step-ahead MA forecast of PPI: Difference from benchmark

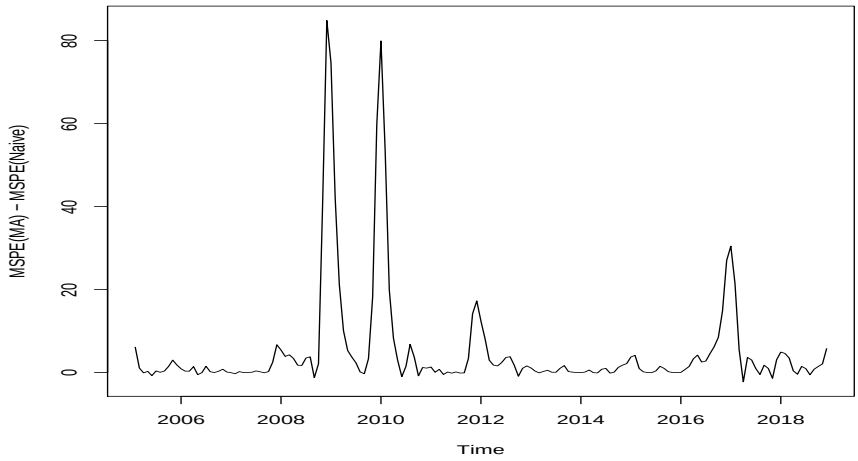


Figure 473: Mean squared forecasting errors of 1-step-ahead MA-opt forecast of PPI: Difference from benchmark

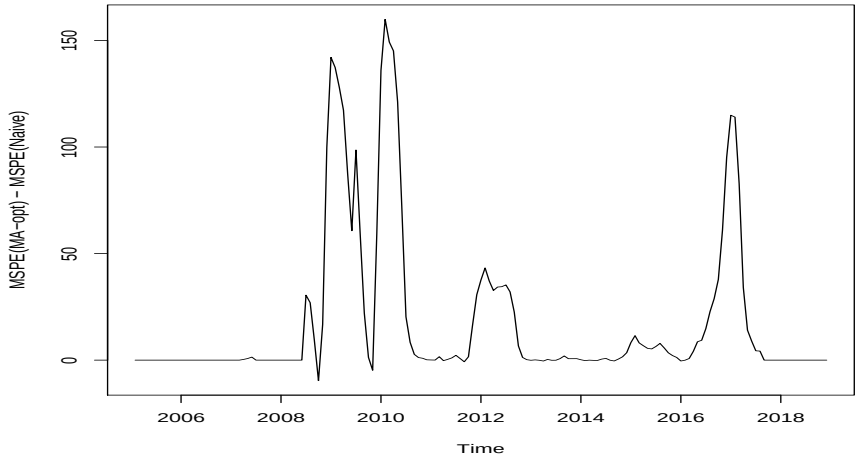


Figure 474: Mean squared forecasting errors of 1-step-ahead SES forecast of PPI: Difference from benchmark

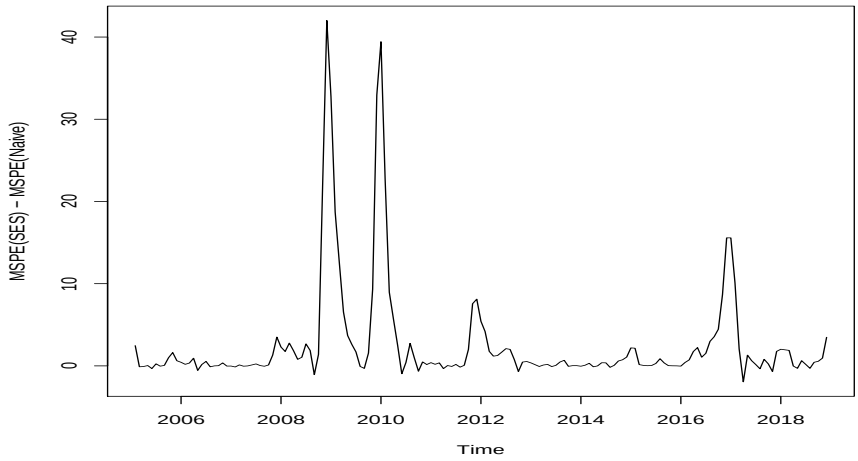


Figure 475: Mean squared forecasting errors of 1-step-ahead SES-opt forecast of PPI: Difference from benchmark

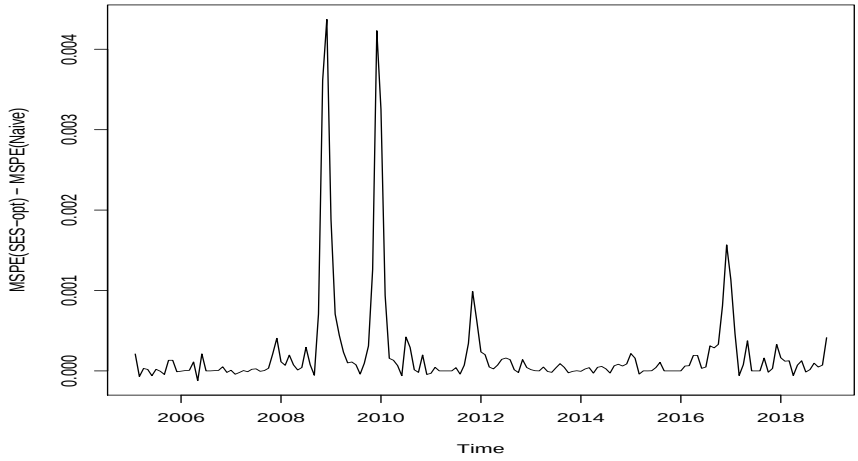


Figure 476: Mean squared forecasting errors of 1-step-ahead AR(1) forecast of PPI: Difference from benchmark

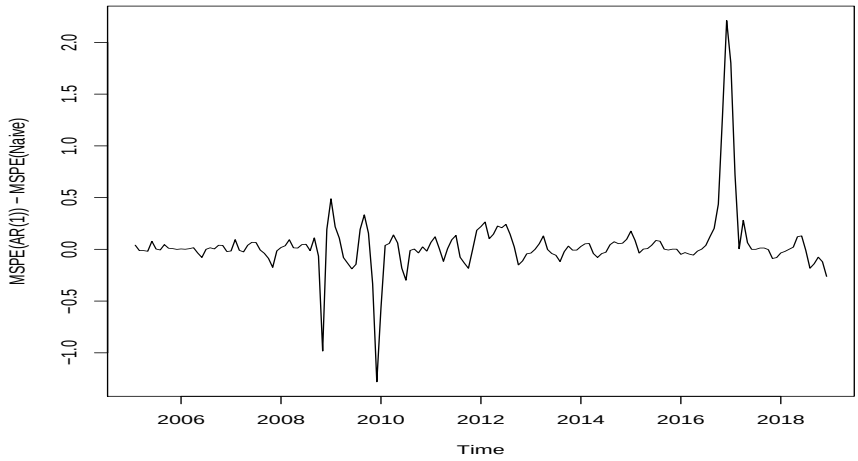


Figure 477: Mean squared forecasting errors of 1-step-ahead AR(p) forecast of PPI: Difference from benchmark

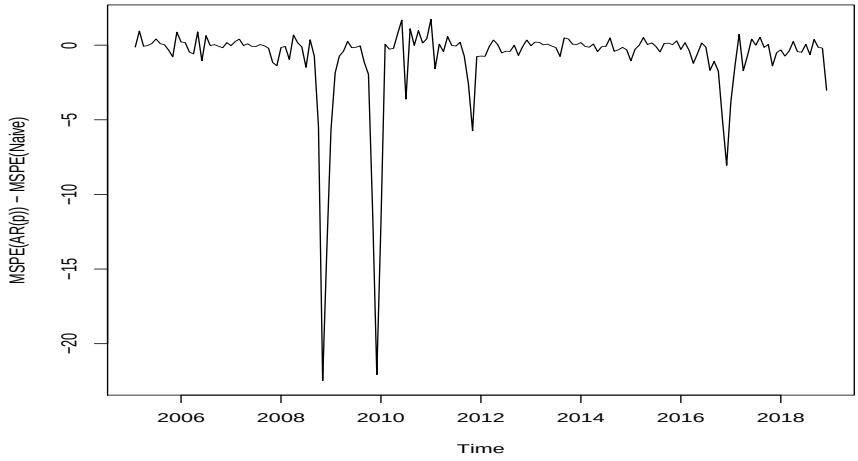


Figure 478: Mean squared forecasting errors of 1-step-ahead ARd(1) forecast of PPI: Difference from benchmark

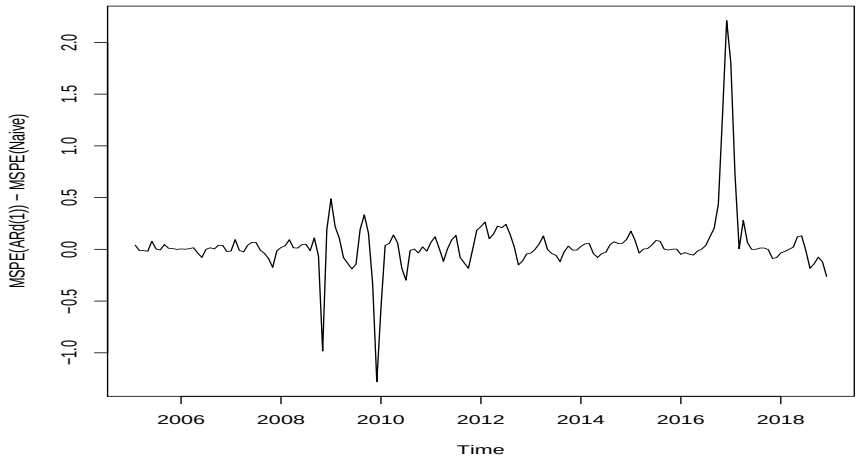


Figure 479: Mean squared forecasting errors of 1-step-ahead ARd(p) forecast of PPI: Difference from benchmark

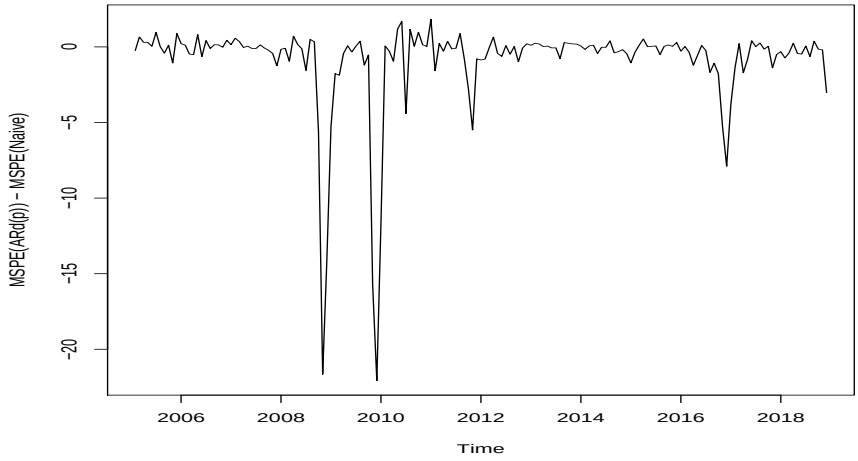


Figure 480: Mean squared forecasting errors of 1-step-ahead ARMA(1,1) forecast of PPI: Difference from benchmark

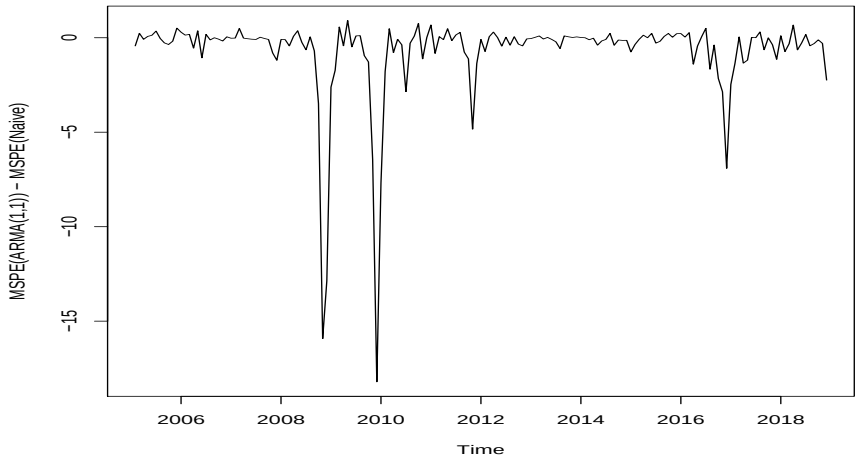


Figure 481: Mean squared forecasting errors of 1-step-ahead ARMA(p,q) forecast of PPI: Difference from benchmark

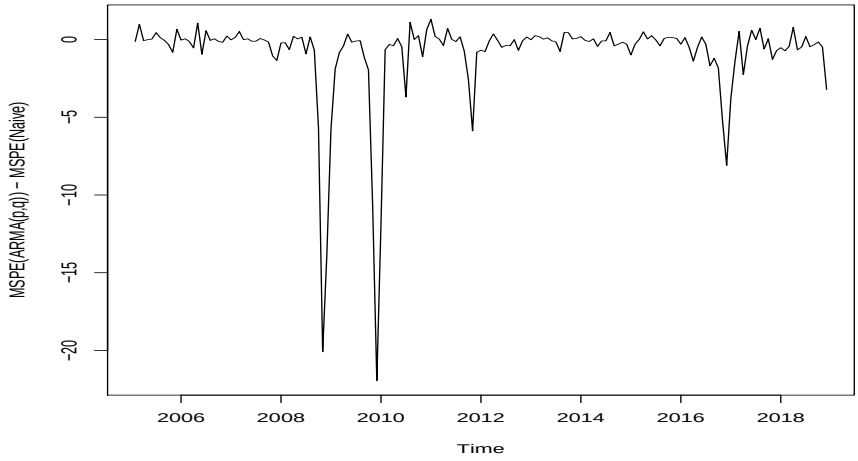


Figure 482: Mean squared forecasting errors of 1-step-ahead VAR(1) forecast of PPI: Difference from benchmark

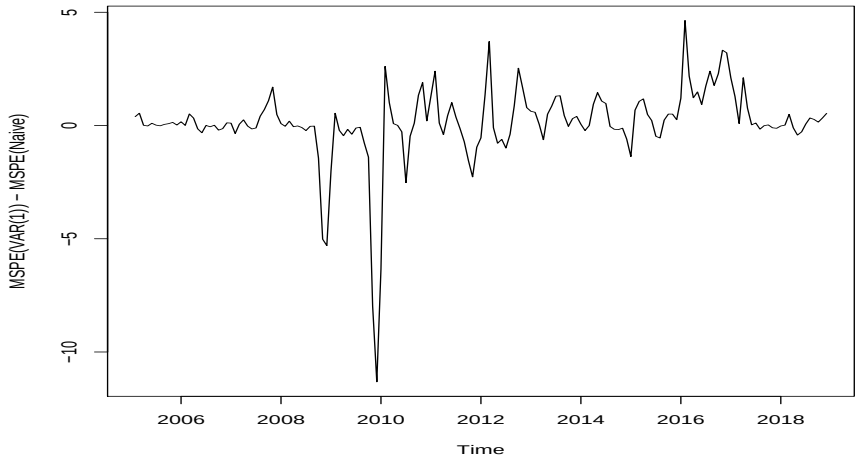


Figure 483: Mean squared forecasting errors of 1-step-ahead VAR(p) forecast of PPI: Difference from benchmark

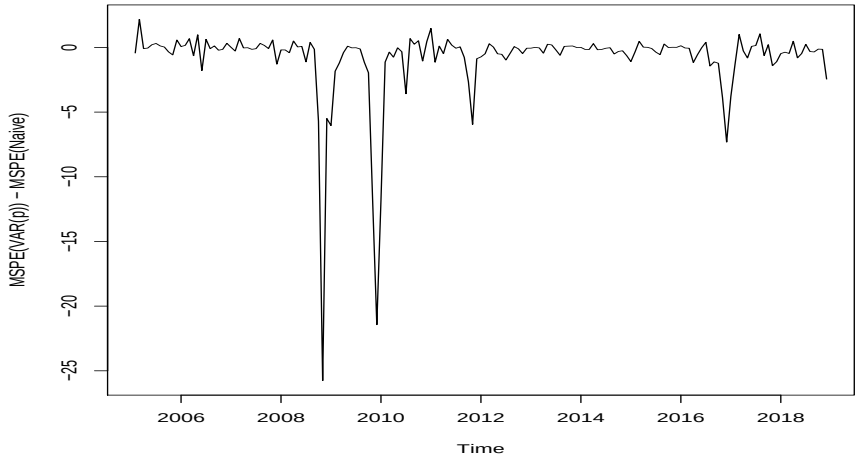


Figure 484: Mean squared forecasting errors of 1-step-ahead BVAR forecast of PPI: Difference from benchmark

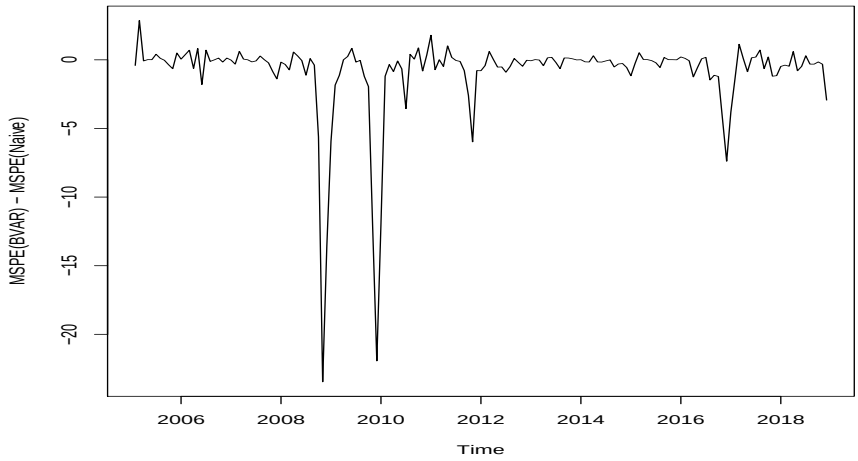


Figure 485: Mean squared forecasting errors of 1-step-ahead Factor(2) forecast of PPI: Difference from benchmark

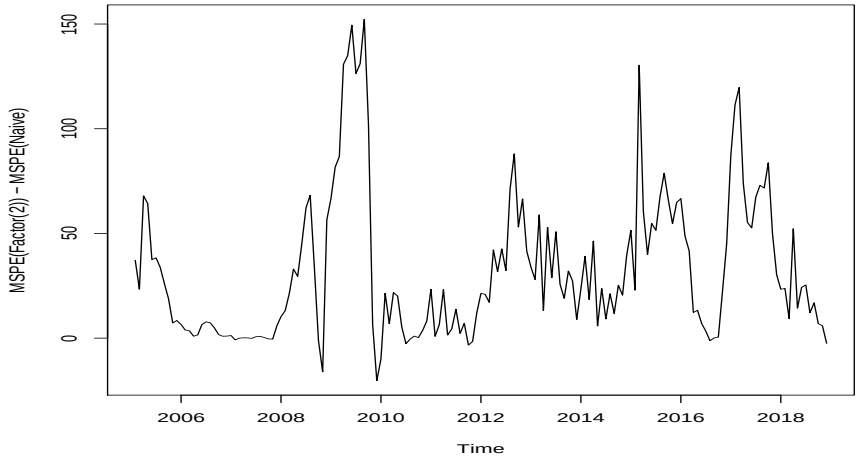


Figure 486: Mean squared forecasting errors of 1-step-ahead Factor(k) forecast of PPI: Difference from benchmark

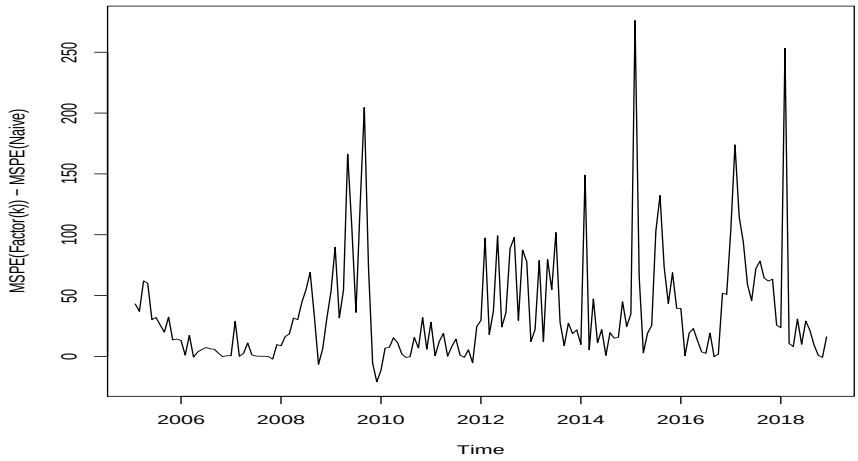


Figure 487: Mean squared forecasting errors of 1-step-ahead F(2)VAR(1) forecast of PPI: Difference from benchmark

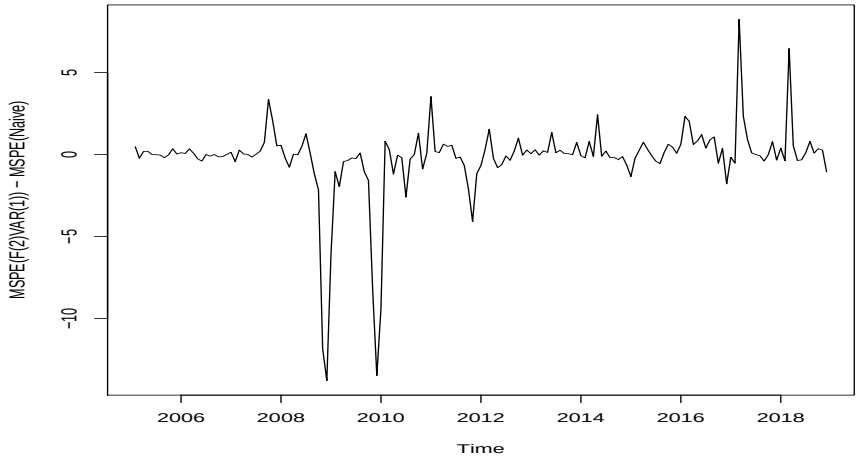
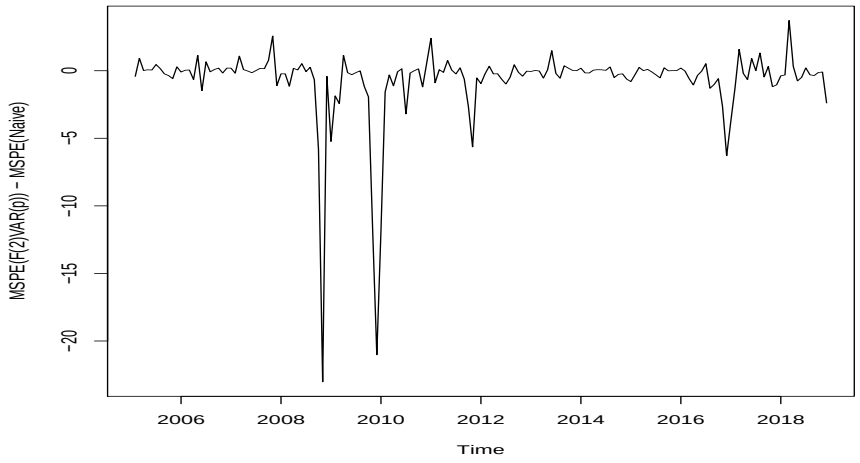


Figure 488: Mean squared forecasting errors of 1-step-ahead F(2)VAR(p) forecast of PPI: Difference from benchmark



4.2.2 Forecast Horizon = 3

Figure 489: Mean squared forecasting errors of 3-step-ahead Mean forecast of PPI: Difference from benchmark

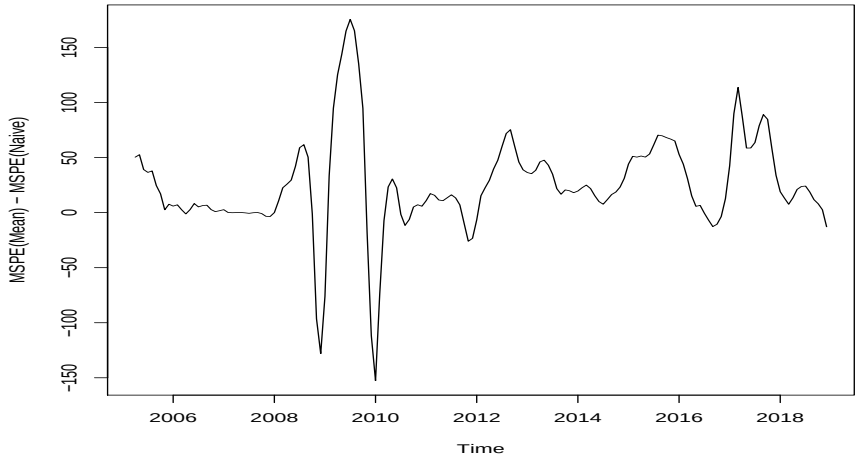


Figure 490: Mean squared forecasting errors of 3-step-ahead MA forecast of PPI: Difference from benchmark

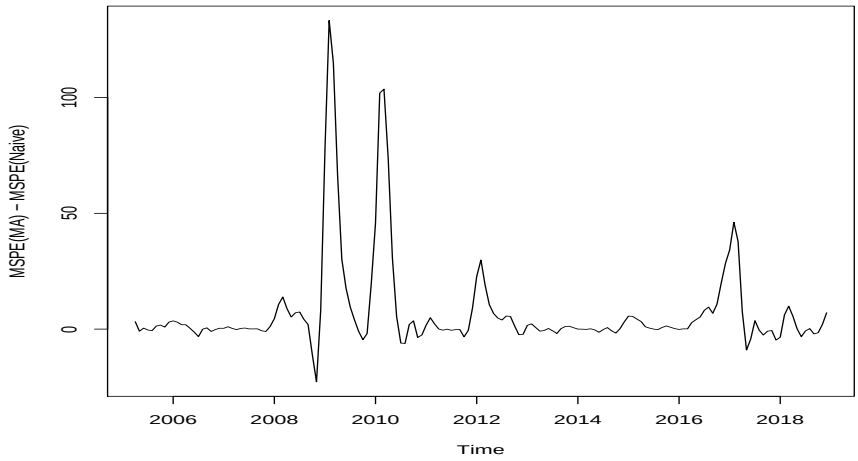


Figure 491: Mean squared forecasting errors of 3-step-ahead MA-opt forecast of PPI: Difference from benchmark

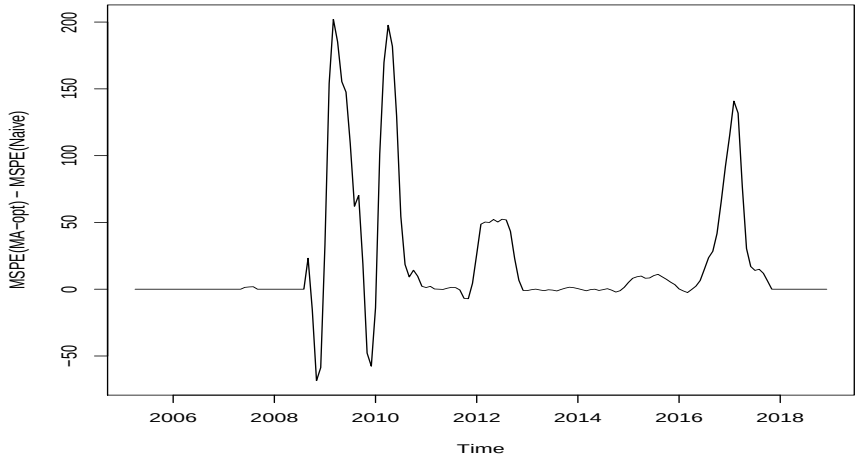


Figure 492: Mean squared forecasting errors of 3-step-ahead SES forecast of PPI: Difference from benchmark

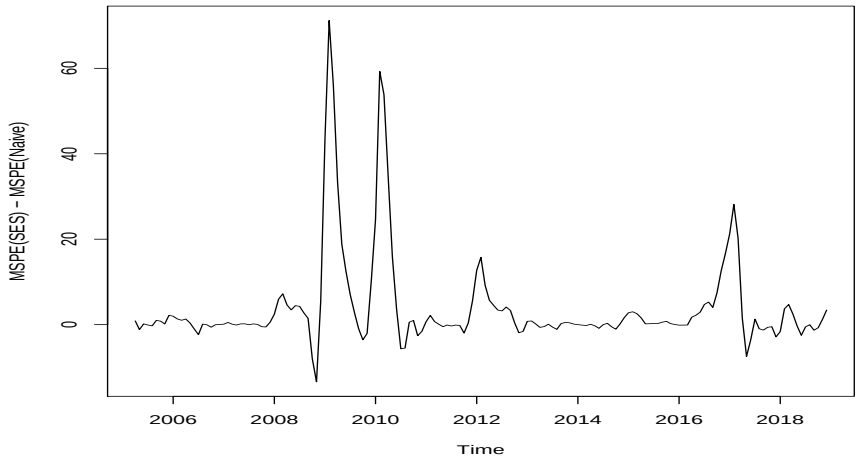


Figure 493: Mean squared forecasting errors of 3-step-ahead SES-opt forecast of PPI: Difference from benchmark

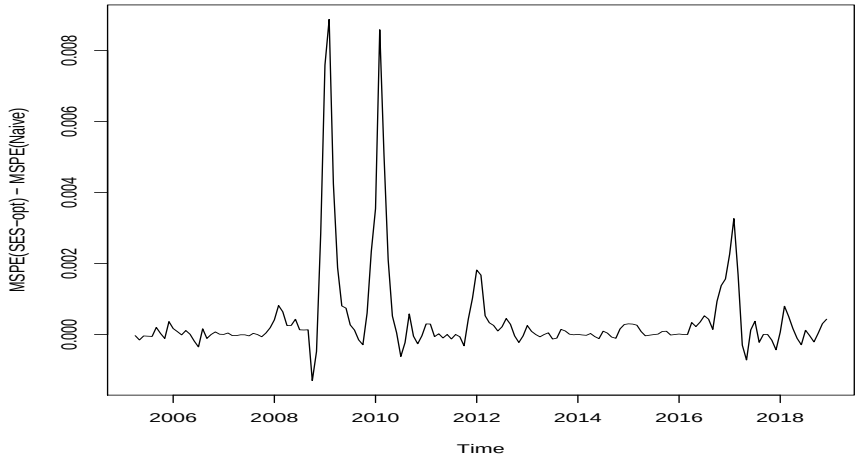


Figure 494: Mean squared forecasting errors of 3-step-ahead AR(1) forecast of PPI: Difference from benchmark

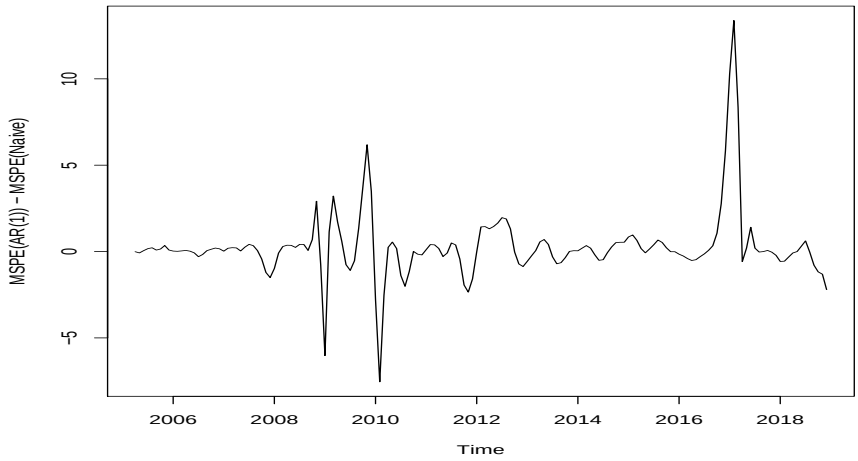


Figure 495: Mean squared forecasting errors of 3-step-ahead AR(p) forecast of PPI: Difference from benchmark

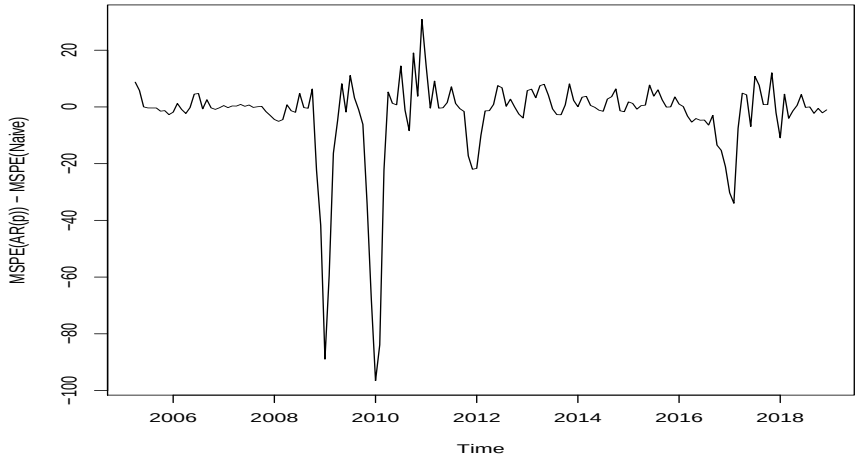


Figure 496: Mean squared forecasting errors of 3-step-ahead ARd(1) forecast of PPI: Difference from benchmark

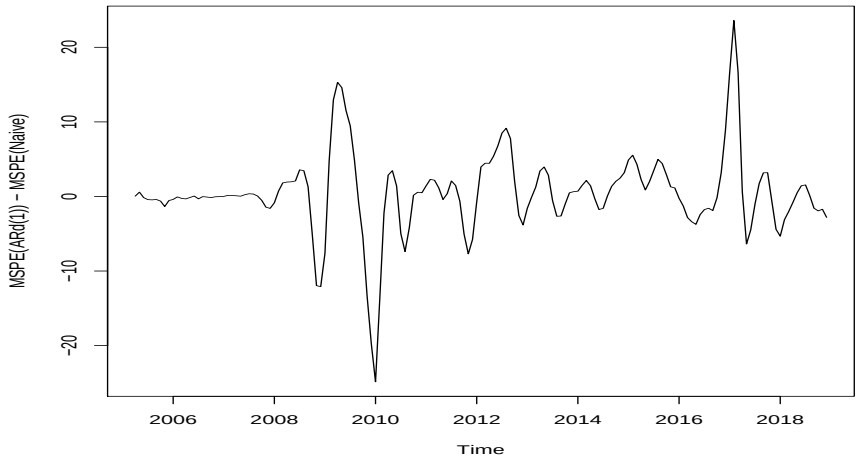


Figure 497: Mean squared forecasting errors of 3-step-ahead ARd(p) forecast of PPI: Difference from benchmark

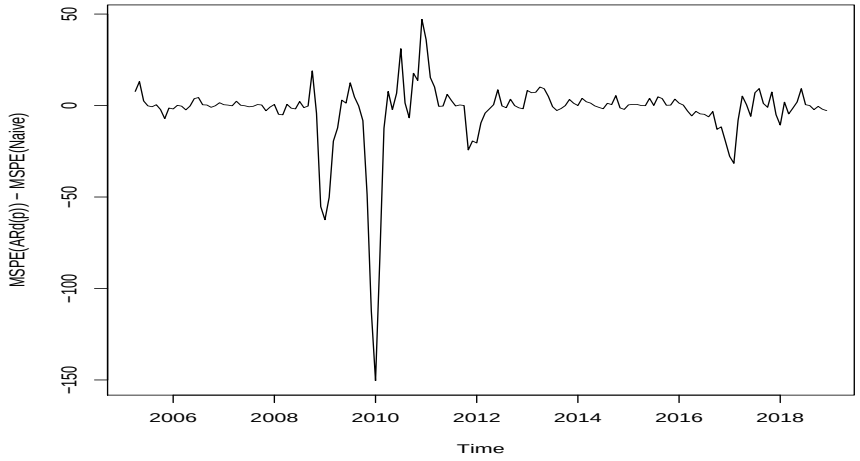


Figure 498: Mean squared forecasting errors of 3-step-ahead ARMA(1,1) forecast of PPI: Difference from benchmark

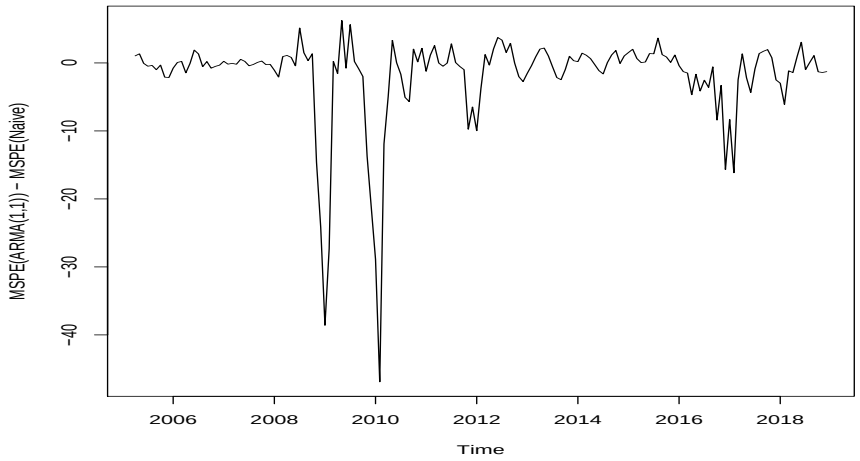


Figure 499: Mean squared forecasting errors of 3-step-ahead ARMA(p,q) forecast of PPI: Difference from benchmark

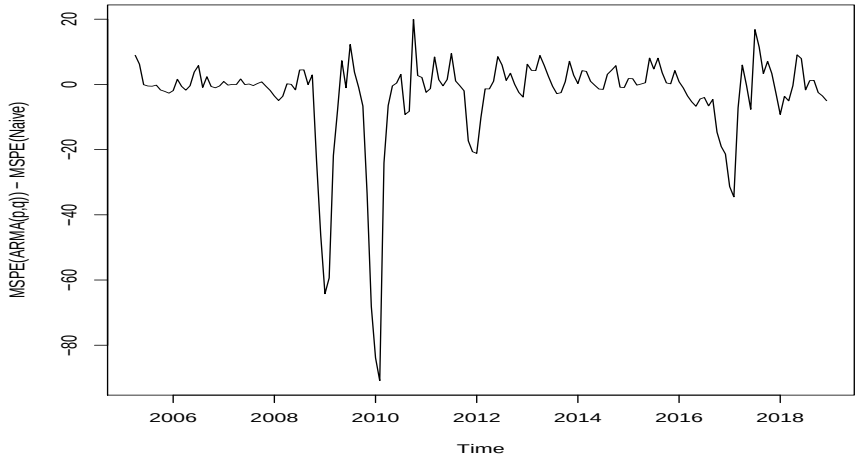


Figure 500: Mean squared forecasting errors of 3-step-ahead VAR(1) forecast of PPI: Difference from benchmark

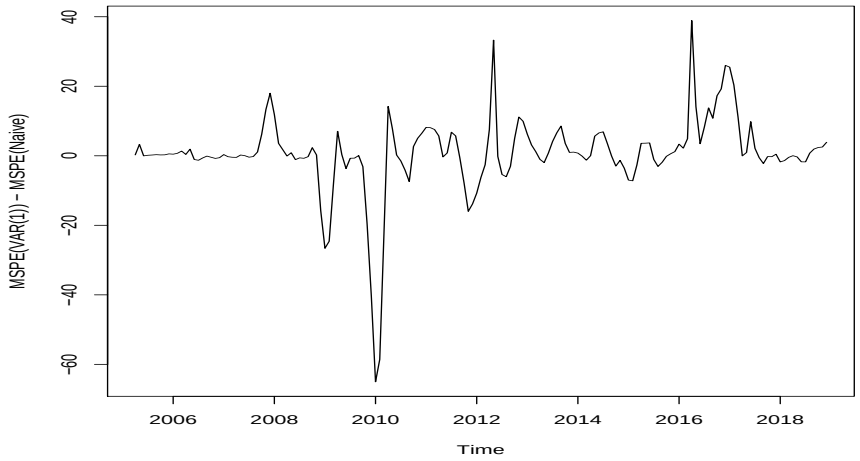


Figure 501: Mean squared forecasting errors of 3-step-ahead VAR(p) forecast of PPI: Difference from benchmark

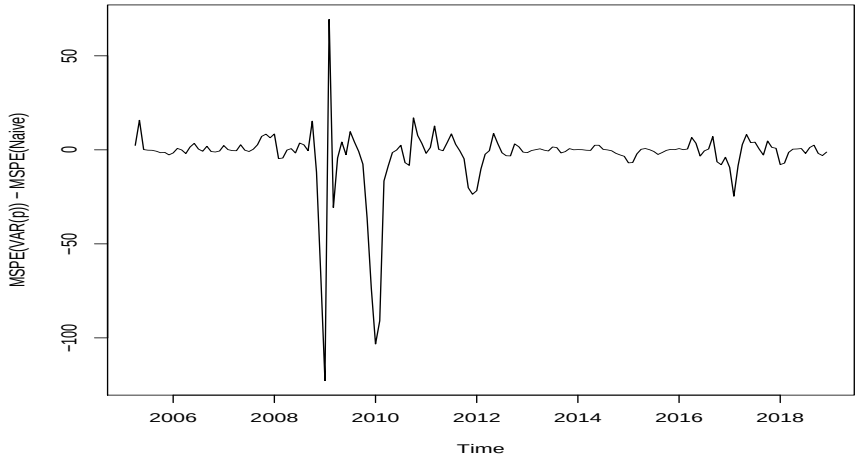


Figure 502: Mean squared forecasting errors of 3-step-ahead BVAR forecast of PPI: Difference from benchmark

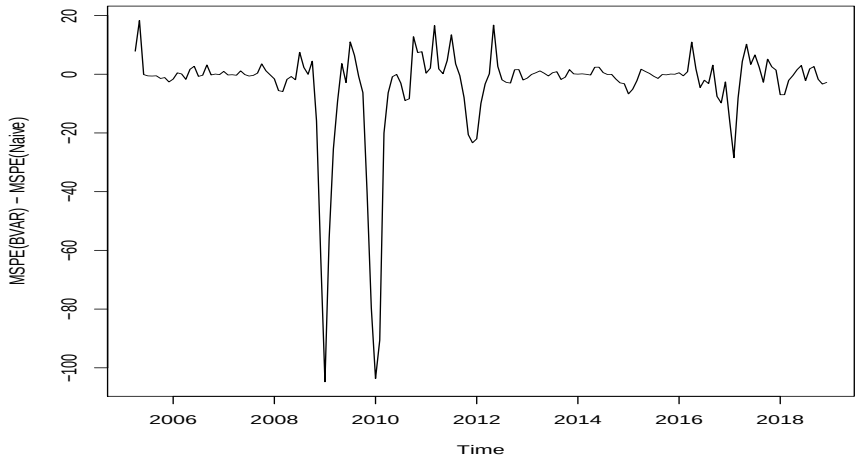


Figure 503: Mean squared forecasting errors of 3-step-ahead Factor(2) forecast of PPI: Difference from benchmark

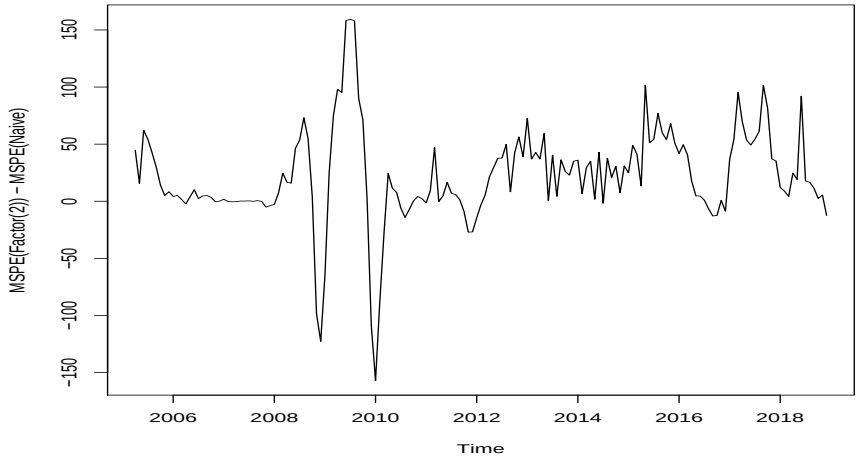


Figure 504: Mean squared forecasting errors of 3-step-ahead Factor(k) forecast of PPI: Difference from benchmark

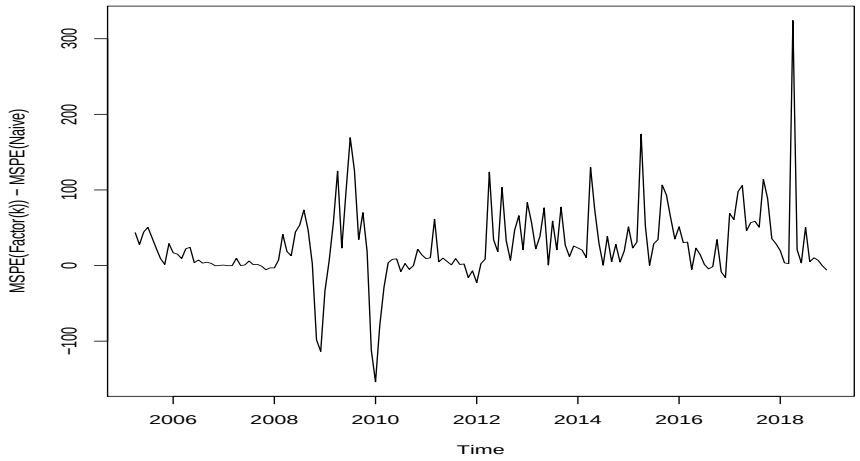


Figure 505: Mean squared forecasting errors of 3-step-ahead F(2)VAR(1) forecast of PPI: Difference from benchmark

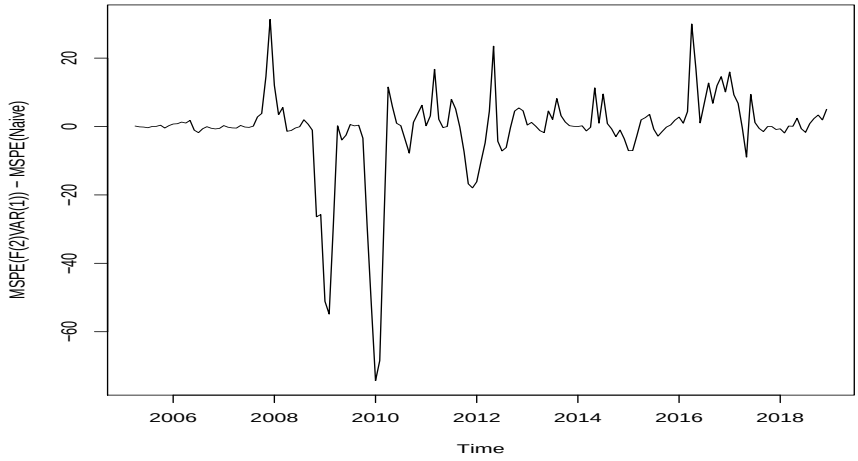
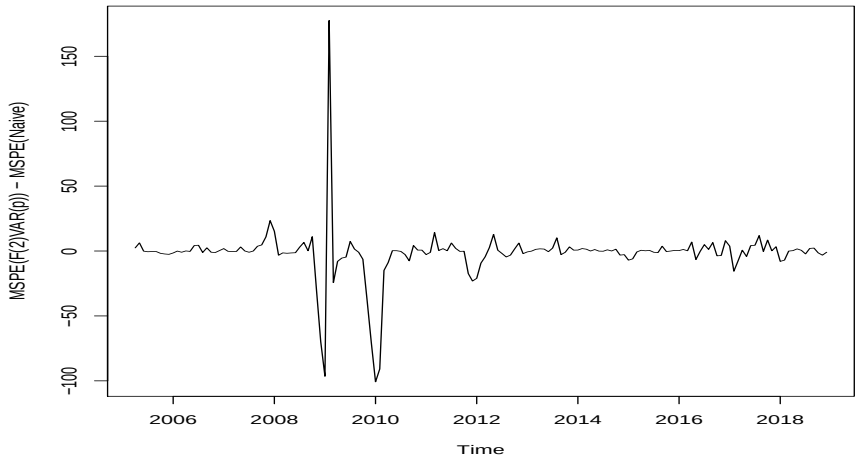


Figure 506: Mean squared forecasting errors of 3-step-ahead F(2)VAR(p) forecast of PPI: Difference from benchmark



4.2.3 Forecast Horizon = 6

Figure 507: Mean squared forecasting errors of 6-step-ahead Mean forecast of PPI: Difference from benchmark

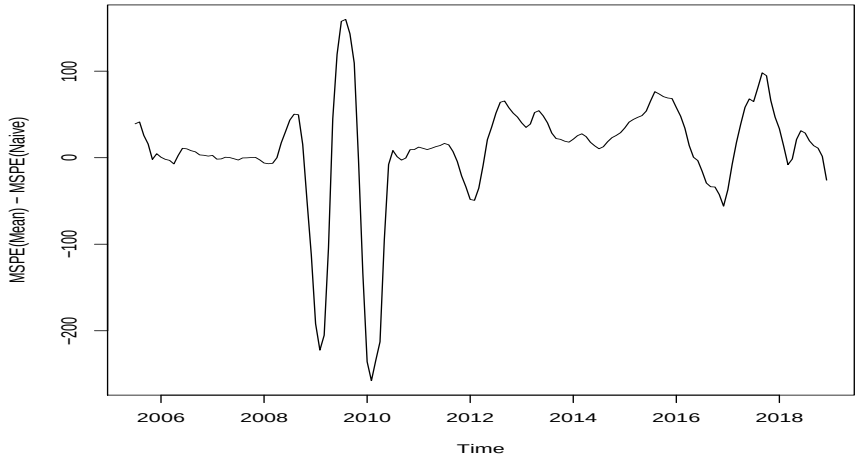


Figure 508: Mean squared forecasting errors of 6-step-ahead MA forecast of PPI: Difference from benchmark

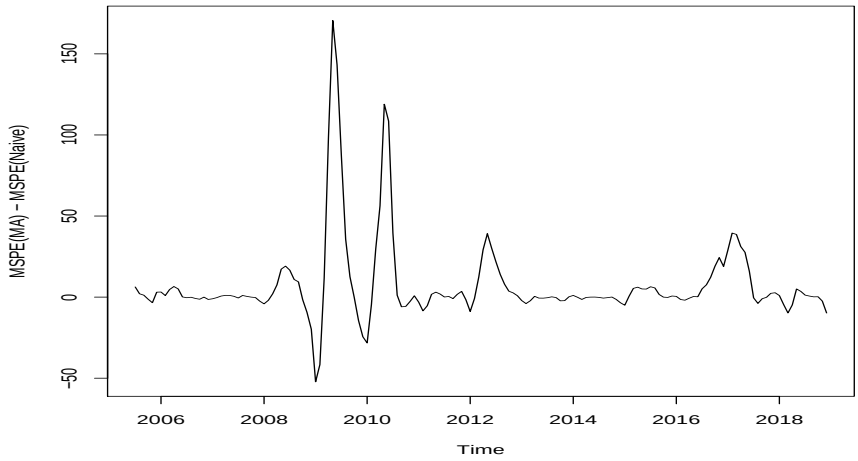


Figure 509: Mean squared forecasting errors of 6-step-ahead MA-opt forecast of PPI: Difference from benchmark

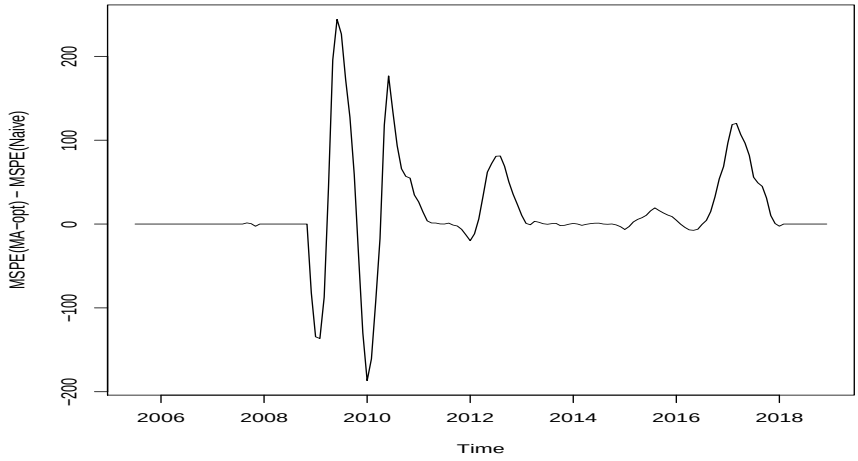


Figure 510: Mean squared forecasting errors of 6-step-ahead SES forecast of PPI: Difference from benchmark

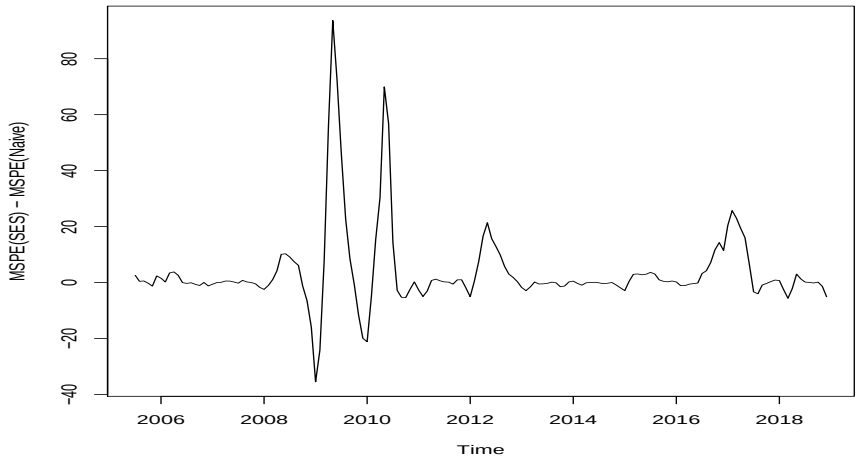


Figure 511: Mean squared forecasting errors of 6-step-ahead SES-opt forecast of PPI: Difference from benchmark

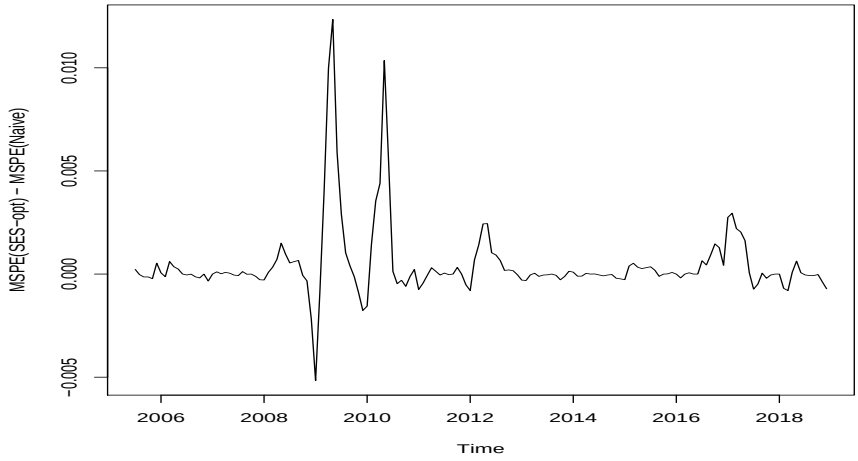


Figure 512: Mean squared forecasting errors of 6-step-ahead AR(1) forecast of PPI: Difference from benchmark

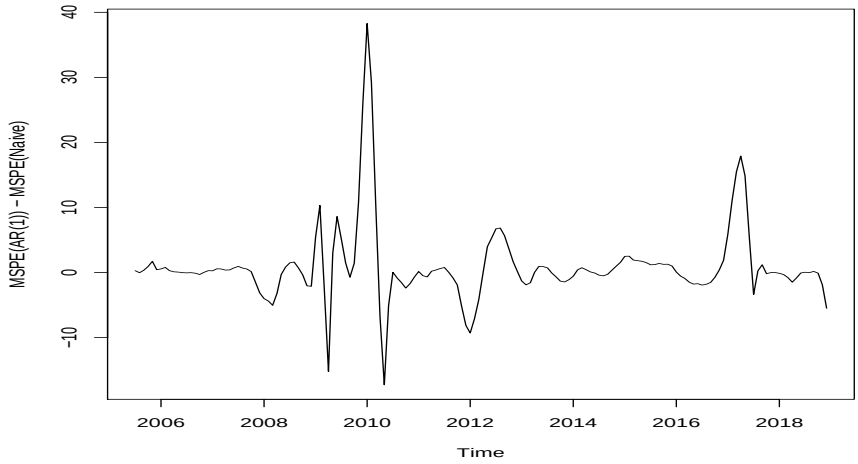


Figure 513: Mean squared forecasting errors of 6-step-ahead AR(p) forecast of PPI: Difference from benchmark

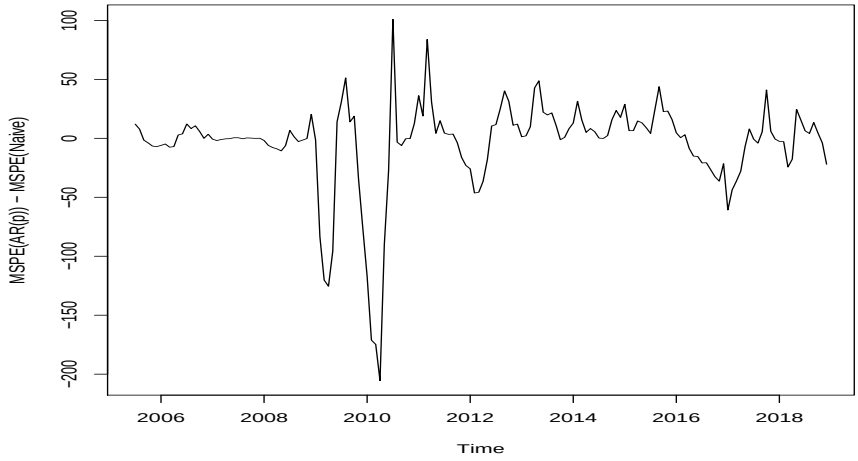


Figure 514: Mean squared forecasting errors of 6-step-ahead ARd(1) forecast of PPI: Difference from benchmark

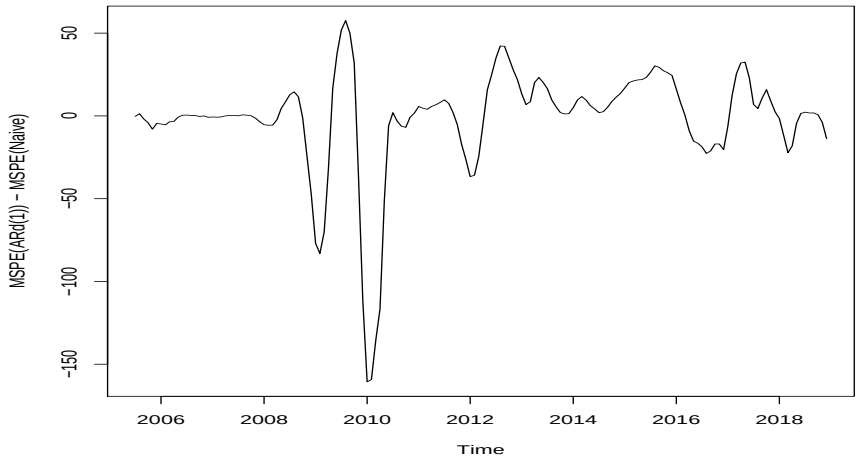


Figure 515: Mean squared forecasting errors of 6-step-ahead ARd(p) forecast of PPI: Difference from benchmark

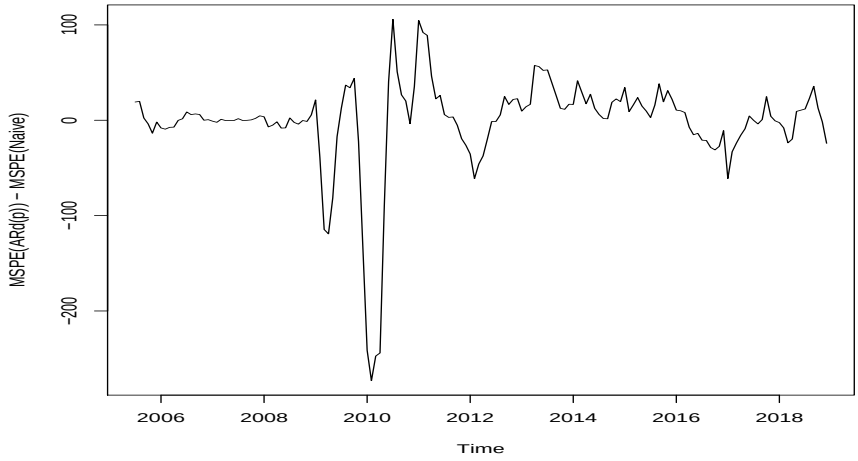


Figure 516: Mean squared forecasting errors of 6-step-ahead ARMA(1,1) forecast of PPI: Difference from benchmark

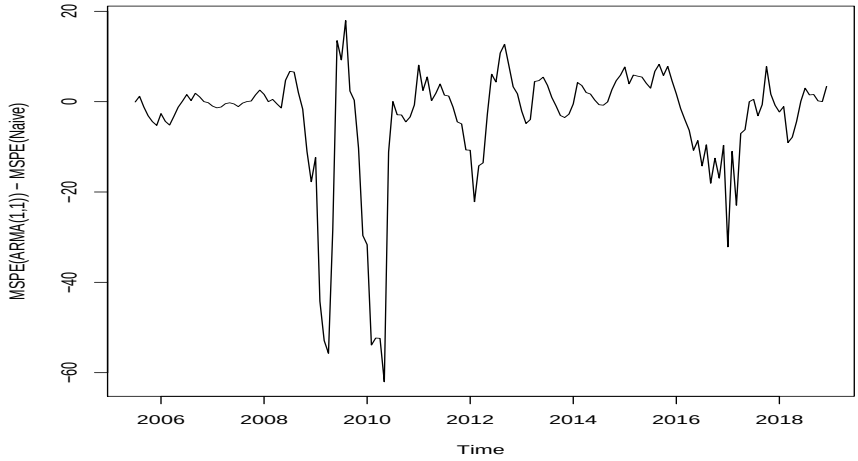


Figure 517: Mean squared forecasting errors of 6-step-ahead ARMA(p,q) forecast of PPI: Difference from benchmark

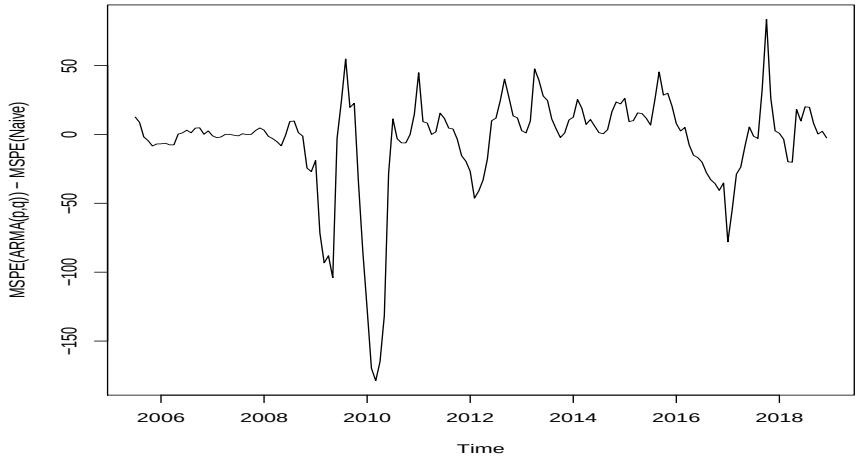


Figure 518: Mean squared forecasting errors of 6-step-ahead VAR(1) forecast of PPI: Difference from benchmark

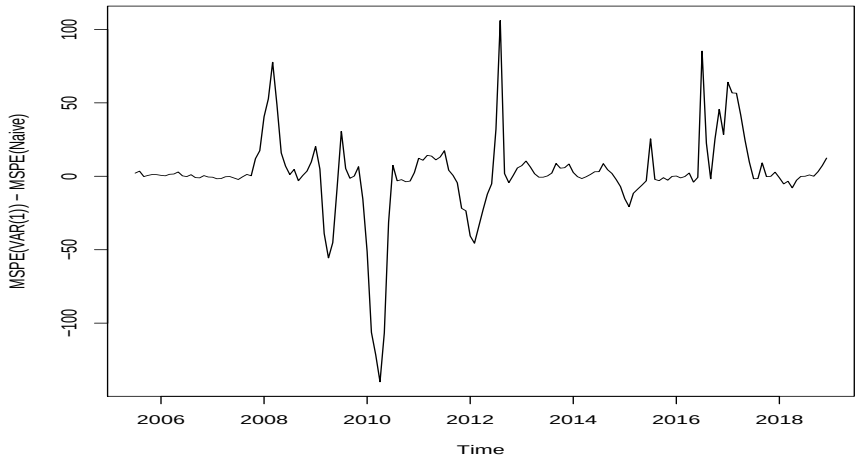


Figure 519: Mean squared forecasting errors of 6-step-ahead VAR(p) forecast of PPI: Difference from benchmark

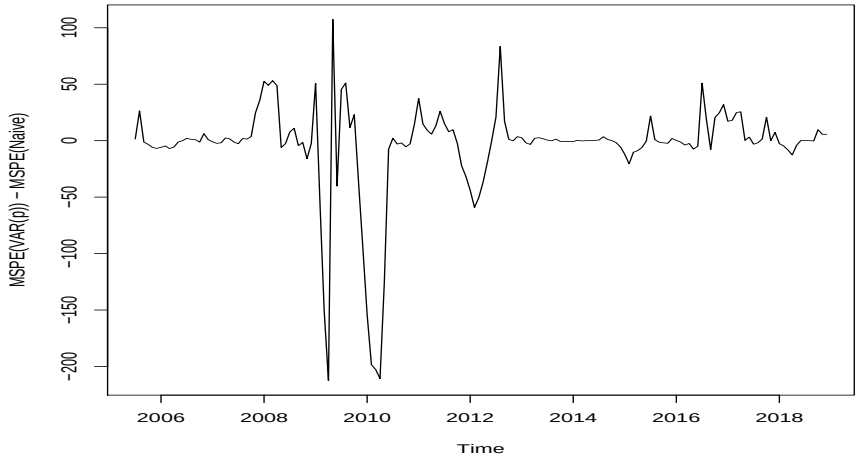


Figure 520: Mean squared forecasting errors of 6-step-ahead BVAR forecast of PPI: Difference from benchmark

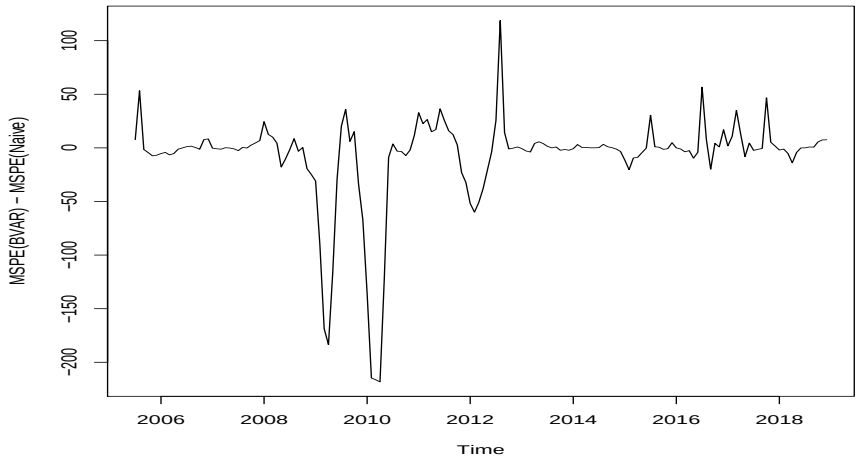


Figure 521: Mean squared forecasting errors of 6-step-ahead Factor(2) forecast of PPI: Difference from benchmark

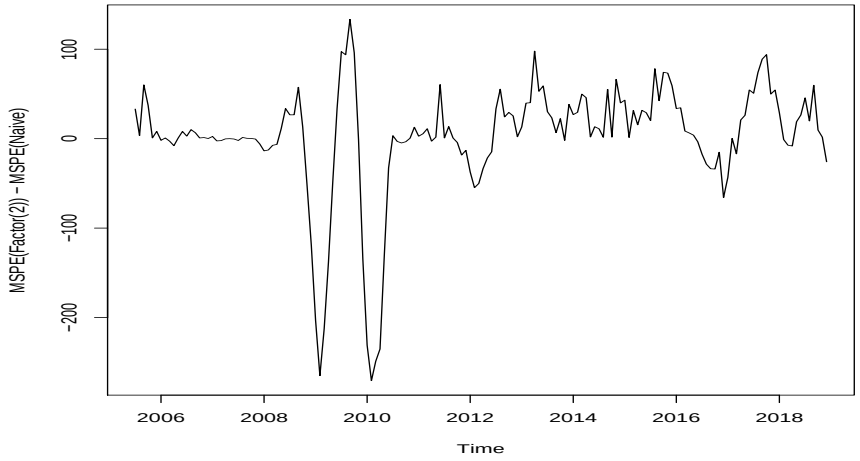


Figure 522: Mean squared forecasting errors of 6-step-ahead Factor(k) forecast of PPI: Difference from benchmark

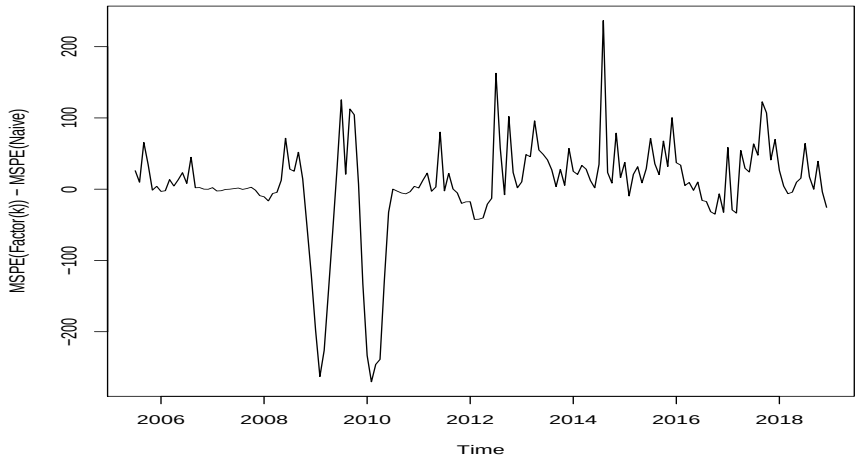


Figure 523: Mean squared forecasting errors of 6-step-ahead F(2)VAR(1) forecast of PPI: Difference from benchmark

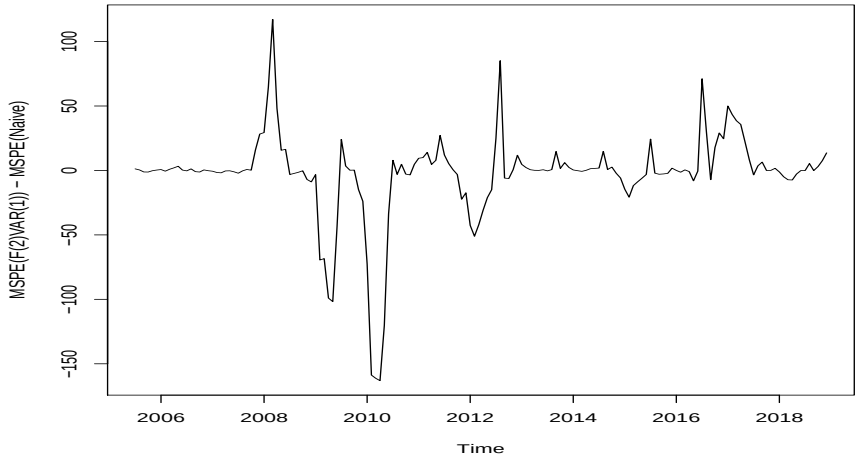
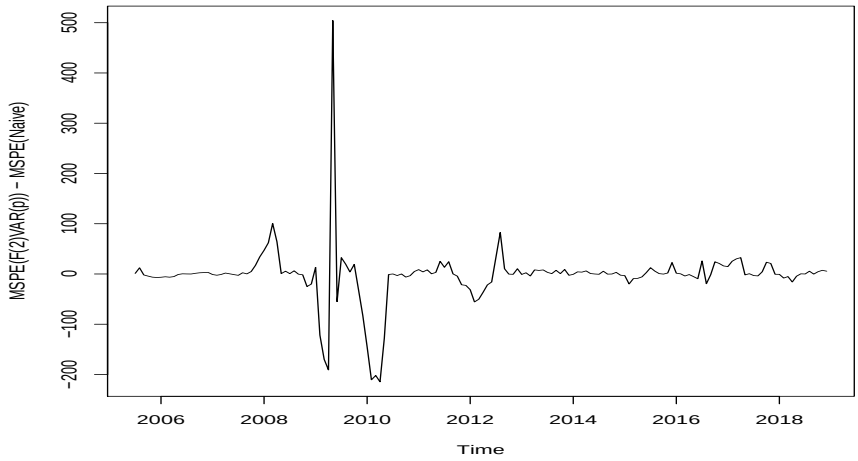


Figure 524: Mean squared forecasting errors of 6-step-ahead F(2)VAR(p) forecast of PPI: Difference from benchmark



4.2.4 Forecast Horizon = 9

Figure 525: Mean squared forecasting errors of 9-step-ahead Mean forecast of PPI: Difference from benchmark

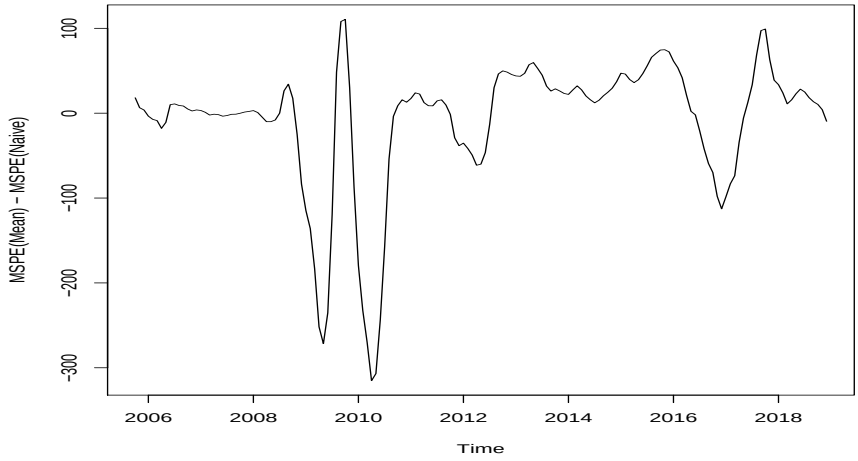


Figure 526: Mean squared forecasting errors of 9-step-ahead MA forecast of PPI: Difference from benchmark

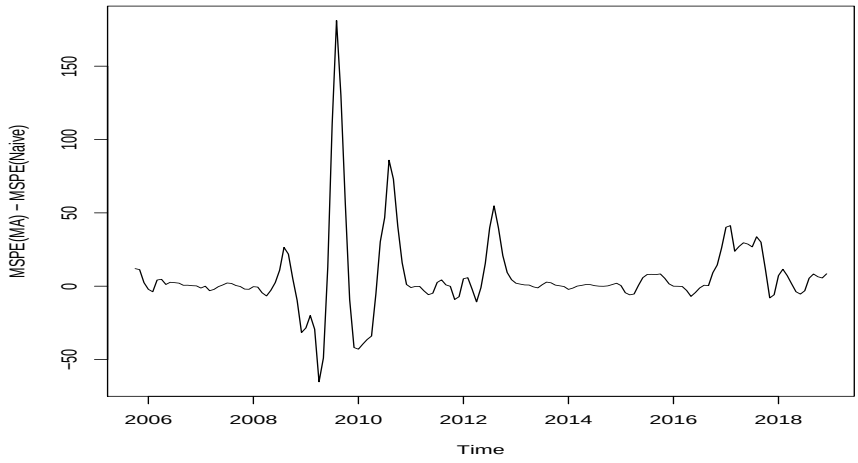


Figure 527: Mean squared forecasting errors of 9-step-ahead MA-opt forecast of PPI: Difference from benchmark

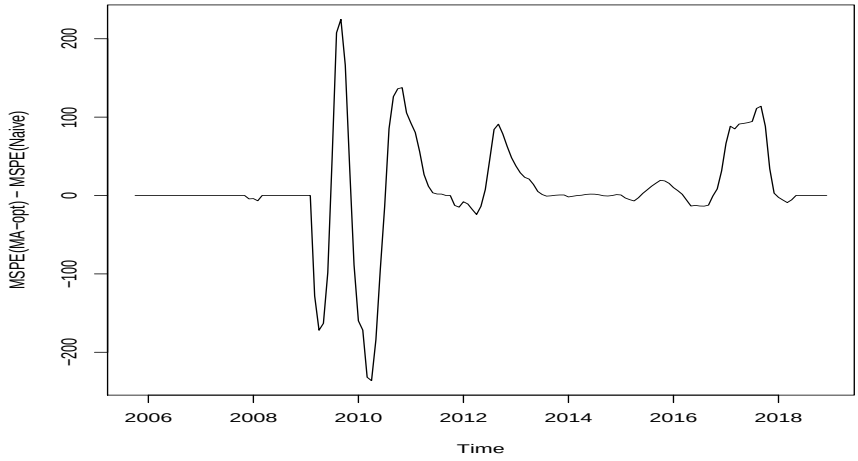


Figure 528: Mean squared forecasting errors of 9-step-ahead SES forecast of PPI: Difference from benchmark

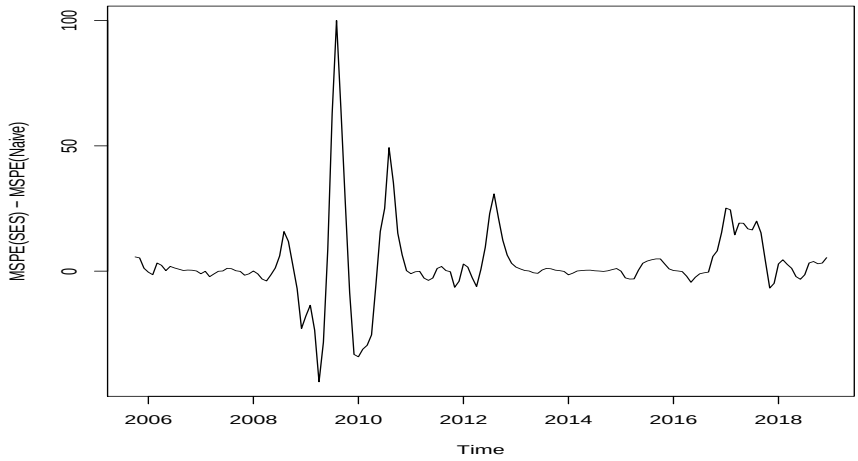


Figure 529: Mean squared forecasting errors of 9-step-ahead SES-opt forecast of PPI: Difference from benchmark

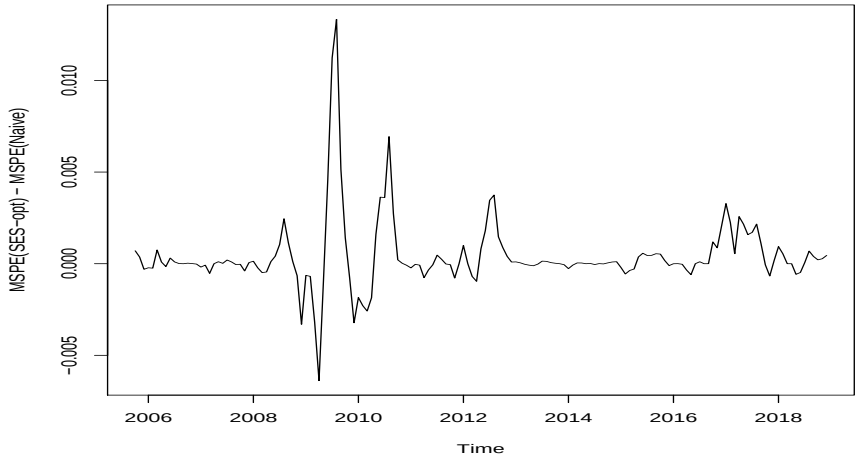


Figure 530: Mean squared forecasting errors of 9-step-ahead AR(1) forecast of PPI: Difference from benchmark

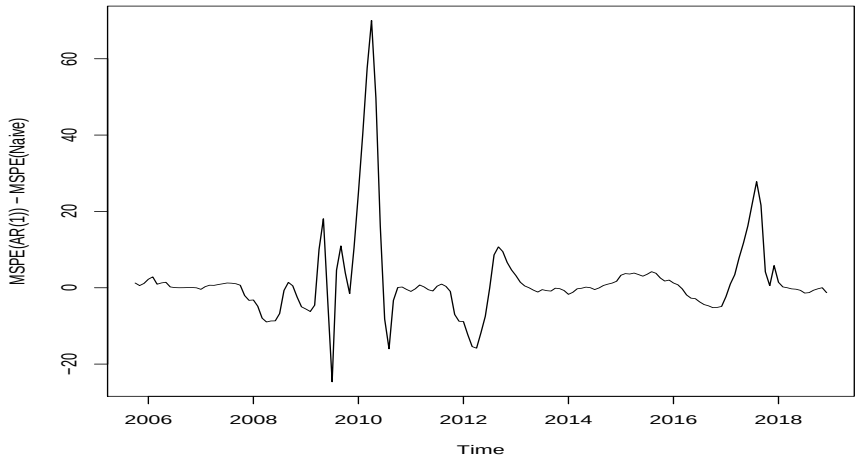


Figure 531: Mean squared forecasting errors of 9-step-ahead AR(p) forecast of PPI: Difference from benchmark

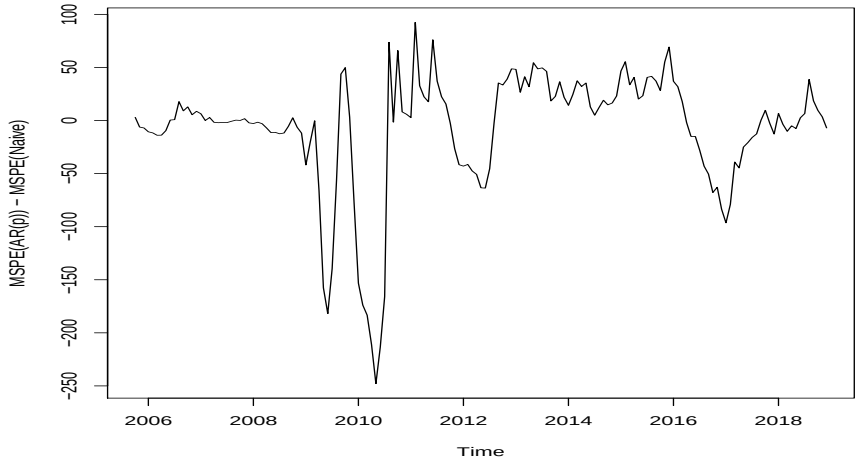


Figure 532: Mean squared forecasting errors of 9-step-ahead ARd(1) forecast of PPI: Difference from benchmark

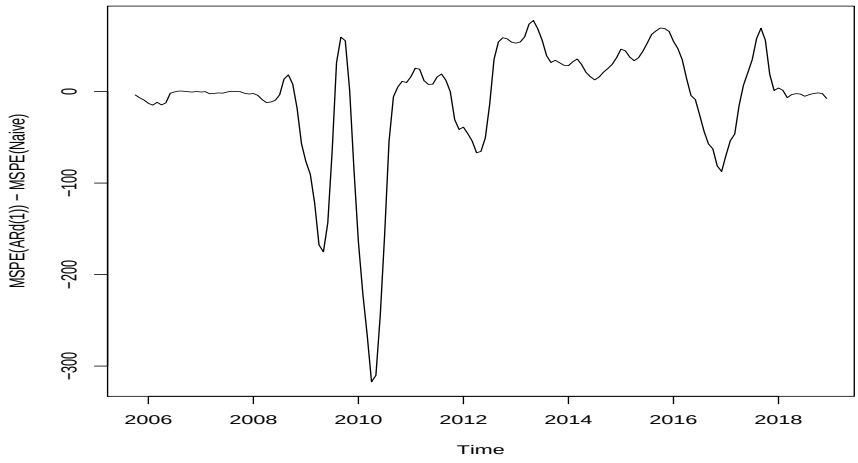


Figure 533: Mean squared forecasting errors of 9-step-ahead ARd(p) forecast of PPI: Difference from benchmark

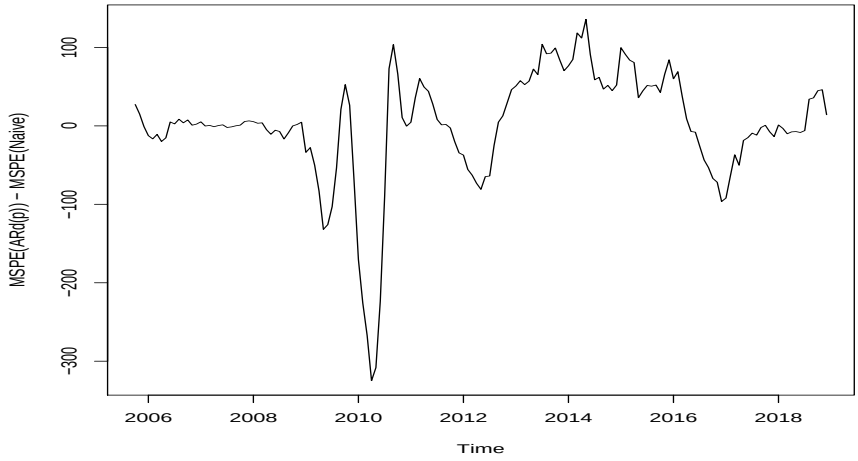


Figure 534: Mean squared forecasting errors of 9-step-ahead ARMA(1,1) forecast of PPI: Difference from benchmark

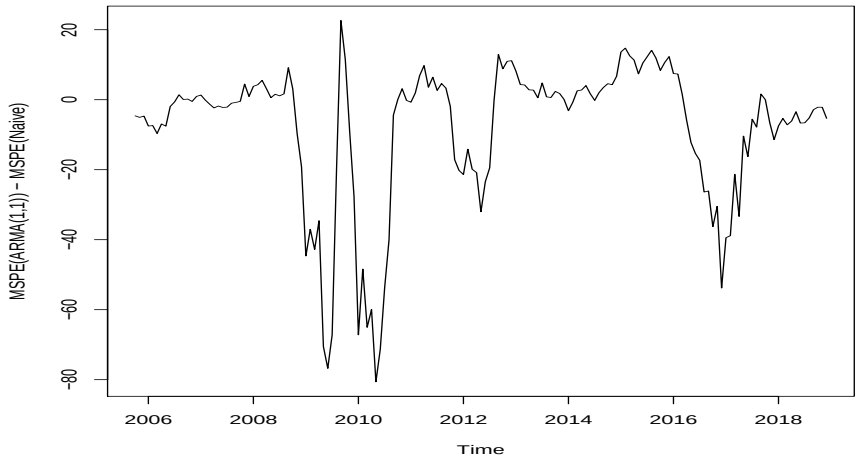


Figure 535: Mean squared forecasting errors of 9-step-ahead ARMA(p,q) forecast of PPI: Difference from benchmark

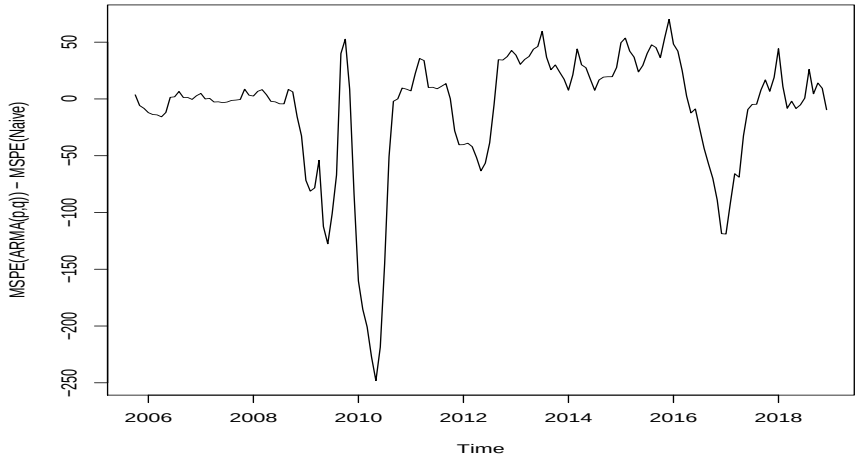


Figure 536: Mean squared forecasting errors of 9-step-ahead VAR(1) forecast of PPI: Difference from benchmark

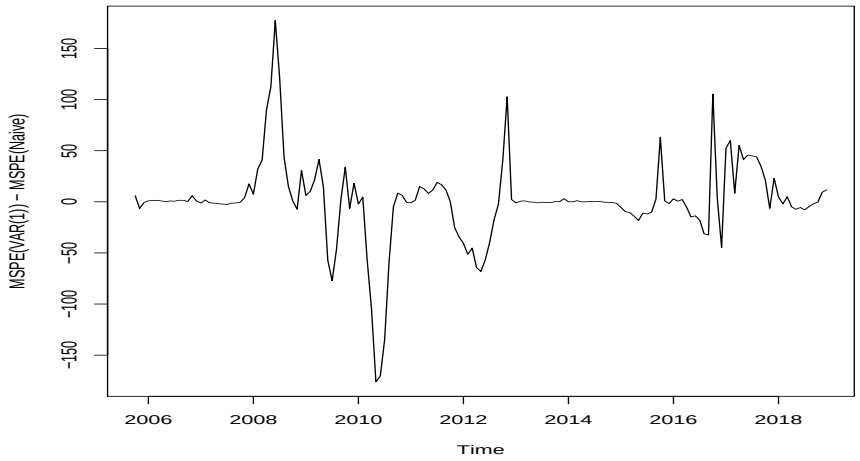


Figure 537: Mean squared forecasting errors of 9-step-ahead VAR(p) forecast of PPI: Difference from benchmark

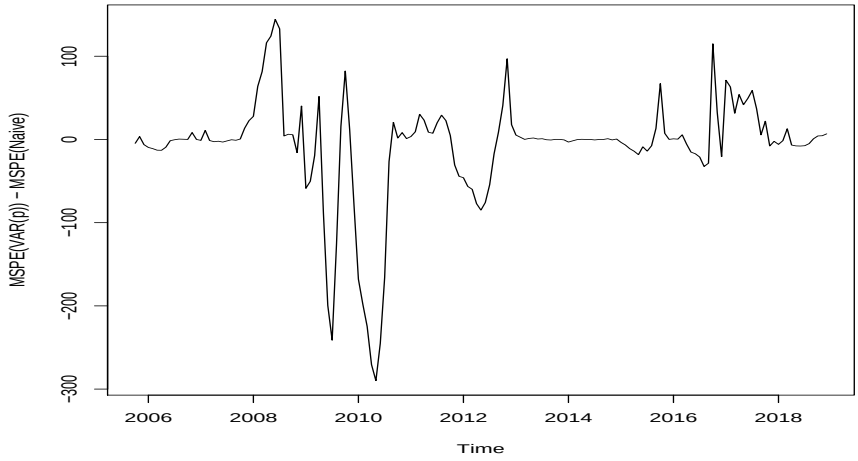


Figure 538: Mean squared forecasting errors of 9-step-ahead BVAR forecast of PPI: Difference from benchmark

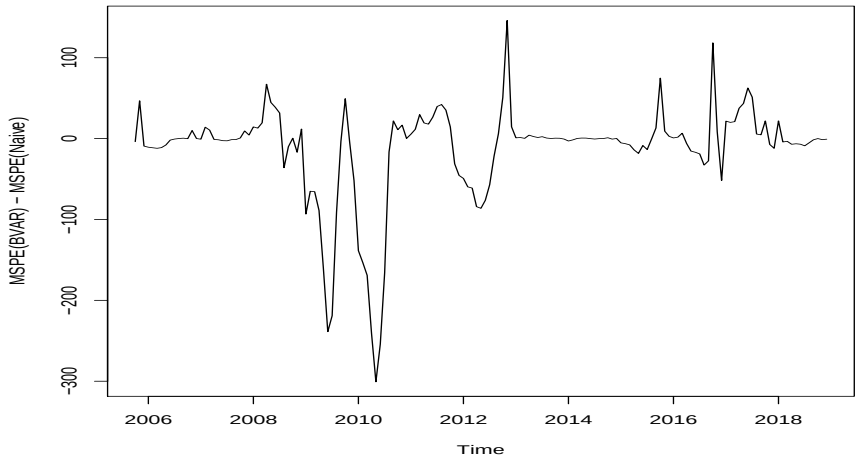


Figure 539: Mean squared forecasting errors of 9-step-ahead Factor(2) forecast of PPI: Difference from benchmark

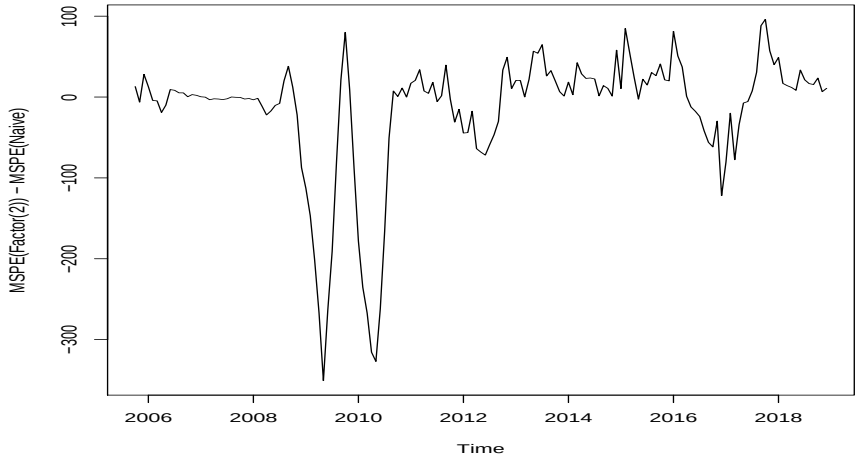


Figure 540: Mean squared forecasting errors of 9-step-ahead Factor(k) forecast of PPI: Difference from benchmark

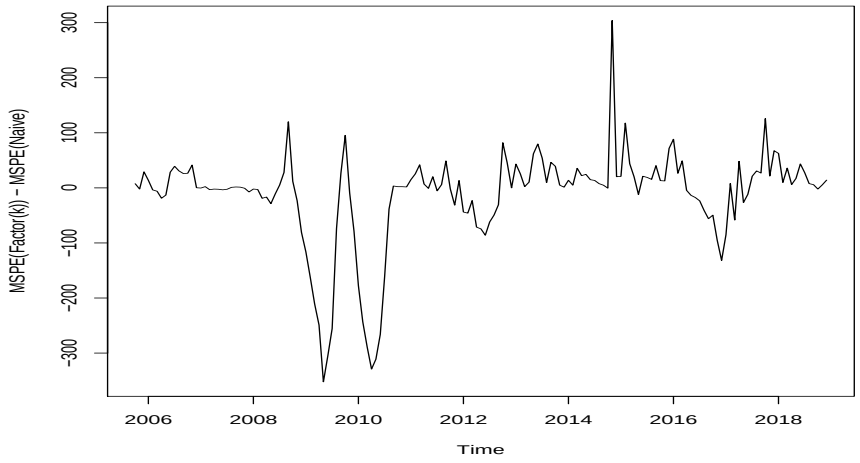


Figure 541: Mean squared forecasting errors of 9-step-ahead F(2)VAR(1) forecast of PPI: Difference from benchmark

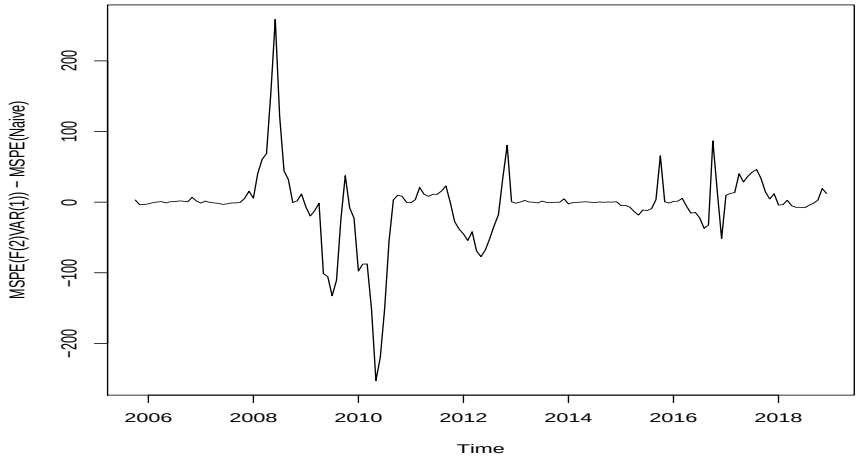
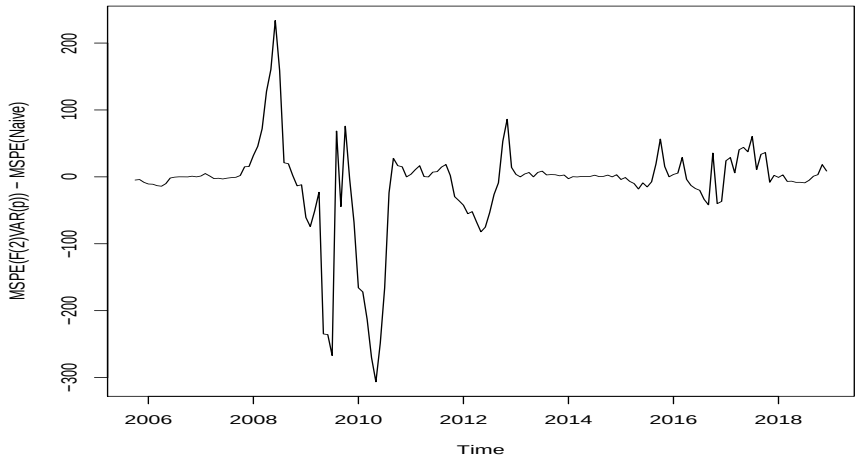


Figure 542: Mean squared forecasting errors of 9-step-ahead F(2)VAR(p) forecast of PPI: Difference from benchmark



4.2.5 Forecast Horizon = 12

Figure 543: Mean squared forecasting errors of 12-step-ahead Mean forecast of PPI: Difference from benchmark

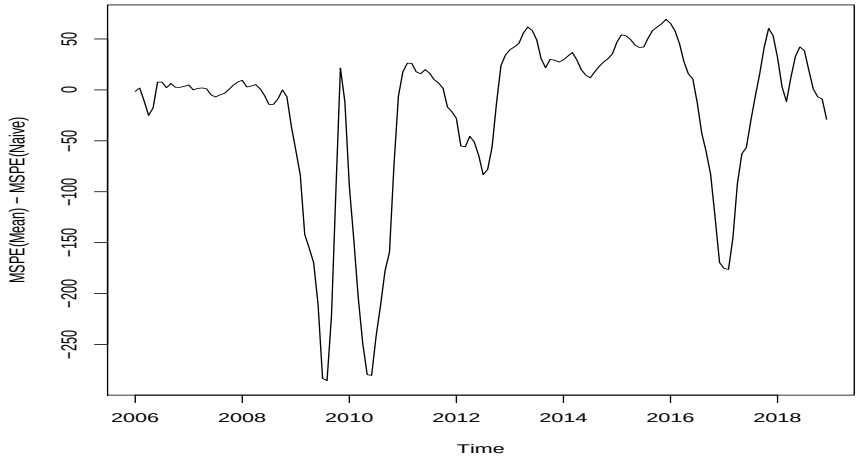


Figure 544: Mean squared forecasting errors of 12-step-ahead MA forecast of PPI: Difference from benchmark

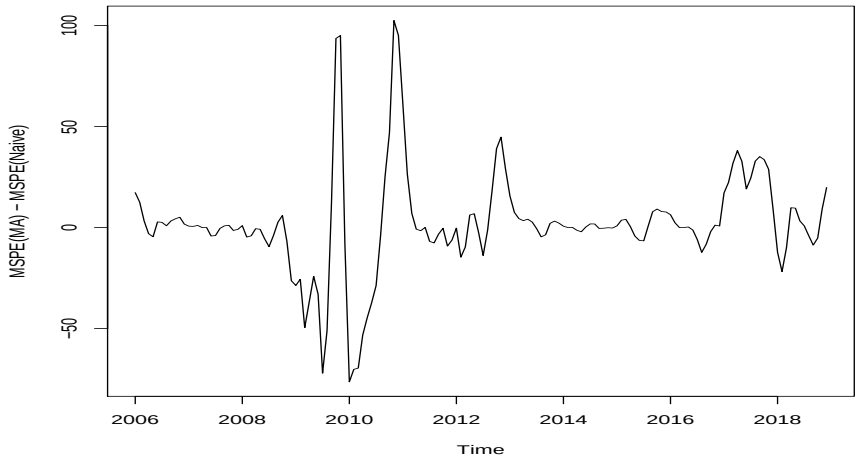


Figure 545: Mean squared forecasting errors of 12-step-ahead MA-opt forecast of PPI: Difference from benchmark

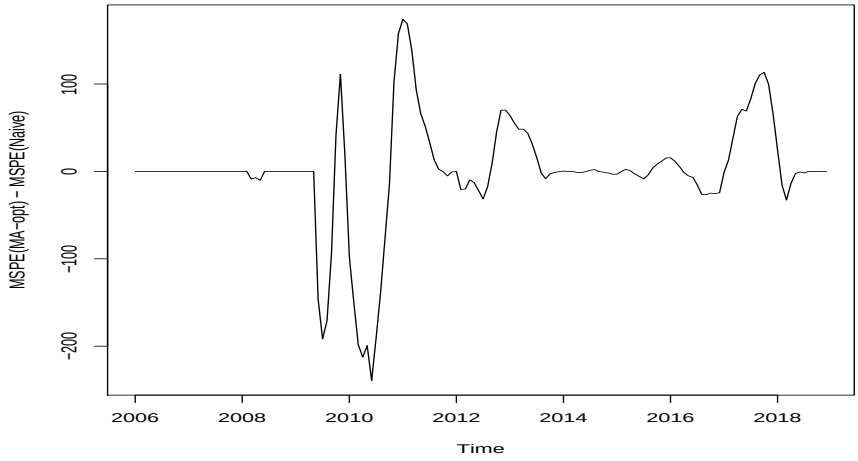


Figure 546: Mean squared forecasting errors of 12-step-ahead SES forecast of PPI: Difference from benchmark

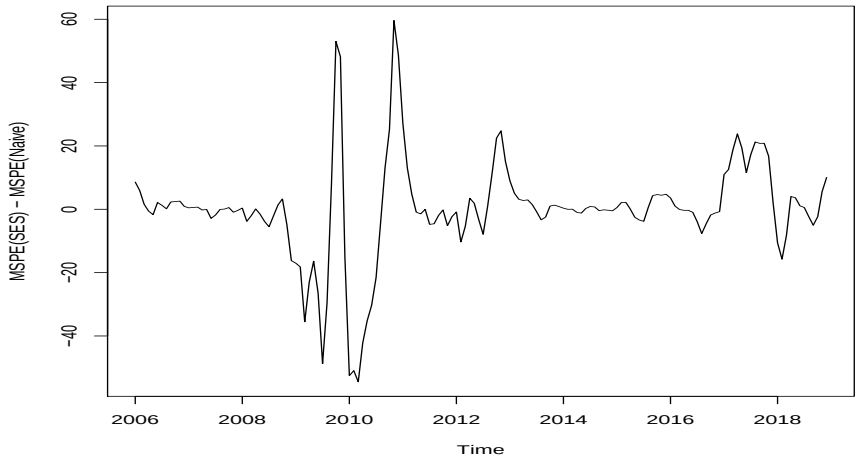


Figure 547: Mean squared forecasting errors of 12-step-ahead SES-opt forecast of PPI: Difference from benchmark

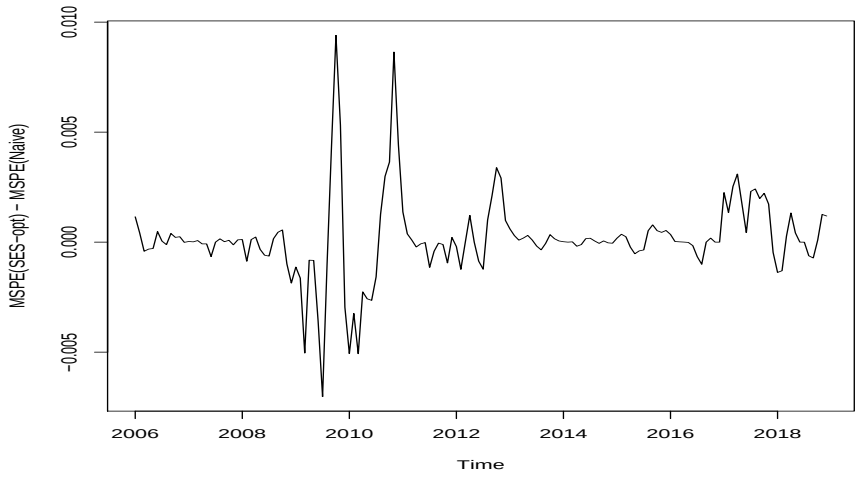


Figure 548: Mean squared forecasting errors of 12-step-ahead AR(1) forecast of PPI: Difference from benchmark

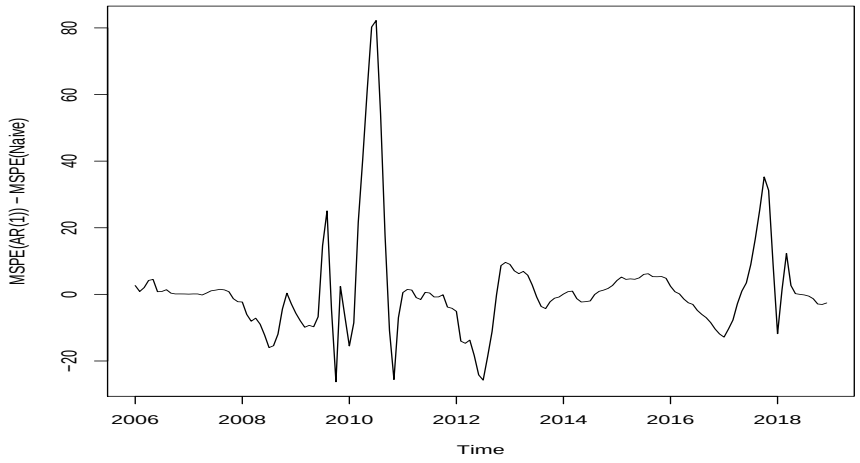


Figure 549: Mean squared forecasting errors of 12-step-ahead AR(p) forecast of PPI: Difference from benchmark

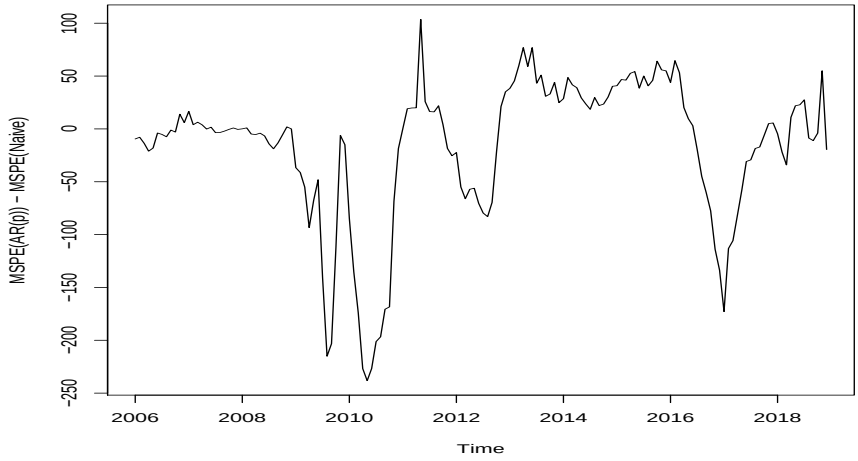


Figure 550: Mean squared forecasting errors of 12-step-ahead ARd(1) forecast of PPI: Difference from benchmark

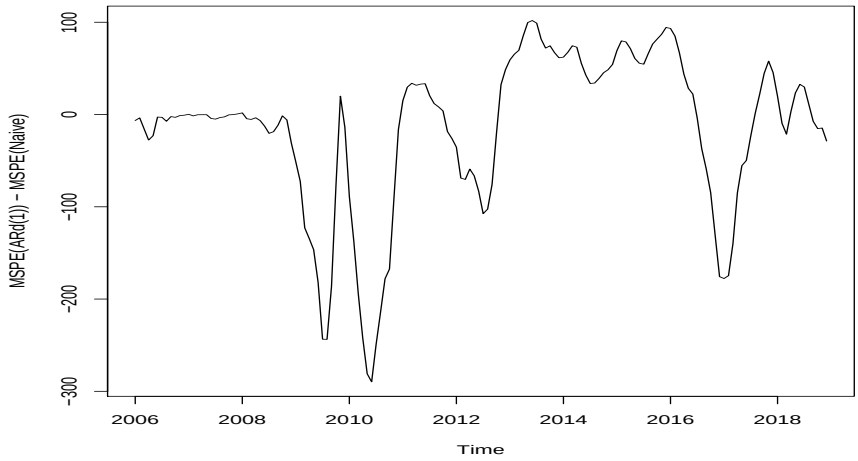


Figure 551: Mean squared forecasting errors of 12-step-ahead ARd(p) forecast of PPI: Difference from benchmark

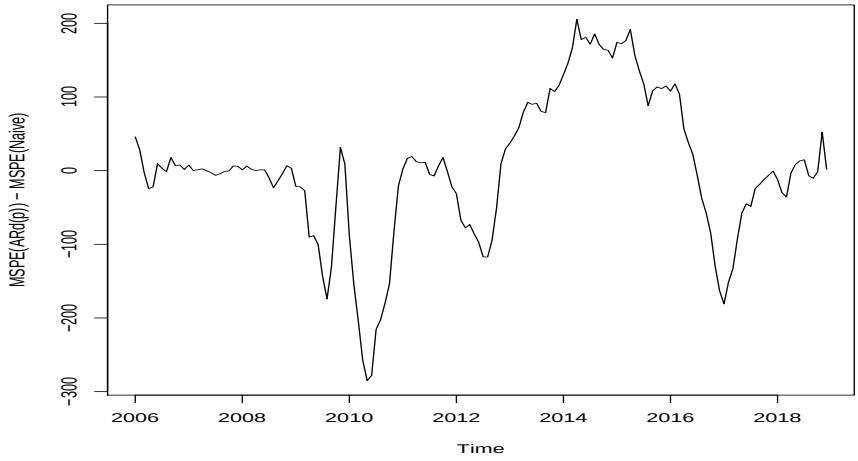


Figure 552: Mean squared forecasting errors of 12-step-ahead ARMA(1,1) forecast of PPI: Difference from benchmark

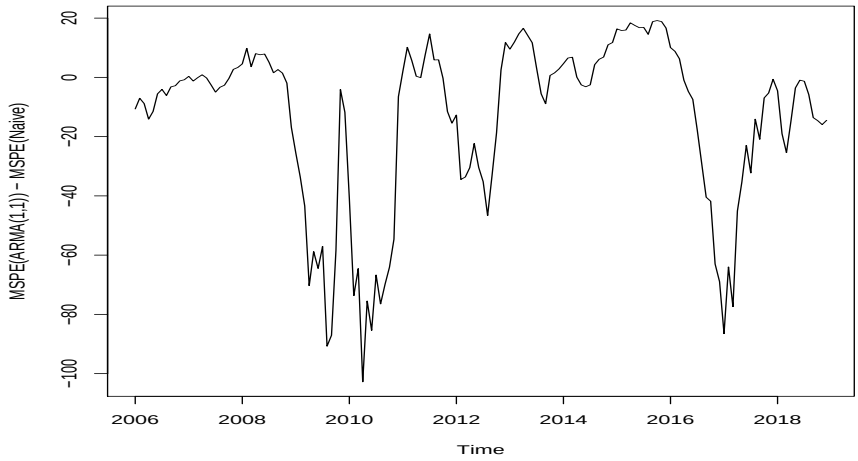


Figure 553: Mean squared forecasting errors of 12-step-ahead ARMA(p,q) forecast of PPI: Difference from benchmark

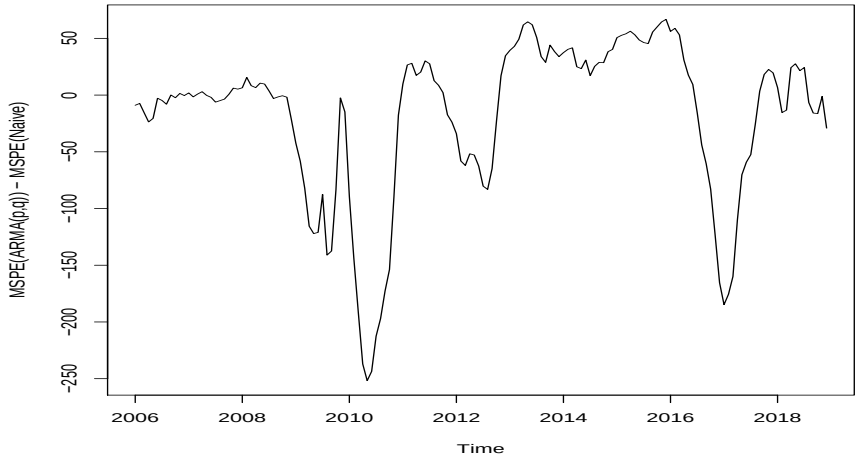


Figure 554: Mean squared forecasting errors of 12-step-ahead VAR(1) forecast of PPI: Difference from benchmark

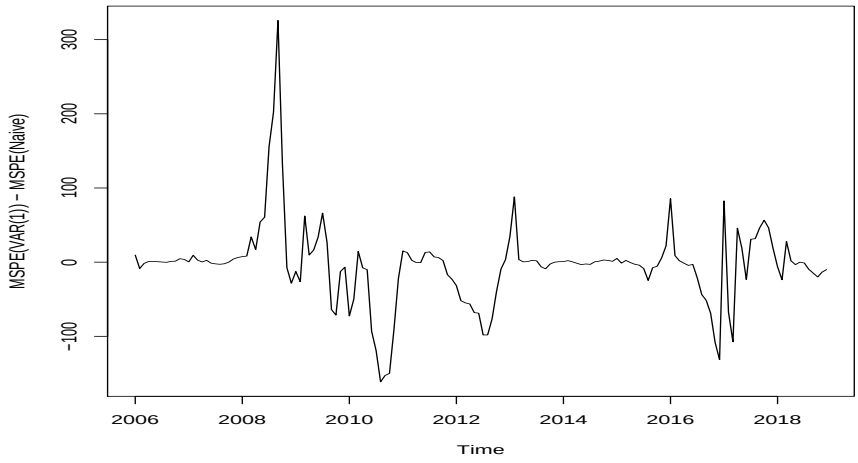


Figure 555: Mean squared forecasting errors of 12-step-ahead VAR(p) forecast of PPI: Difference from benchmark

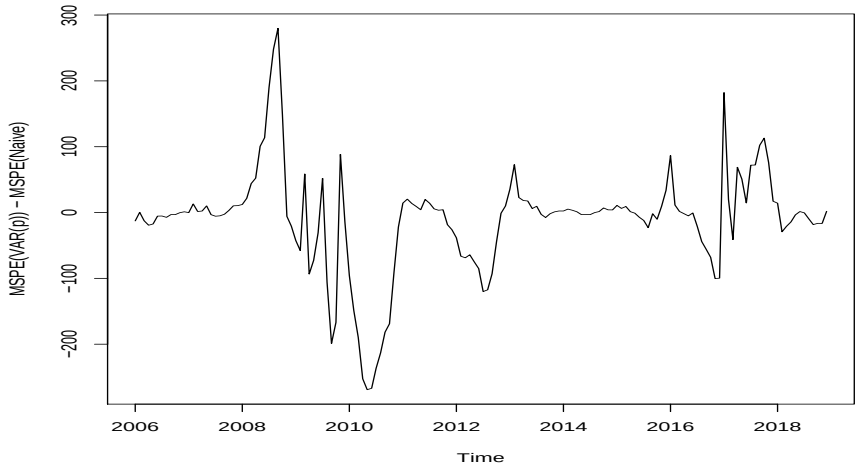


Figure 556: Mean squared forecasting errors of 12-step-ahead BVAR forecast of PPI: Difference from benchmark

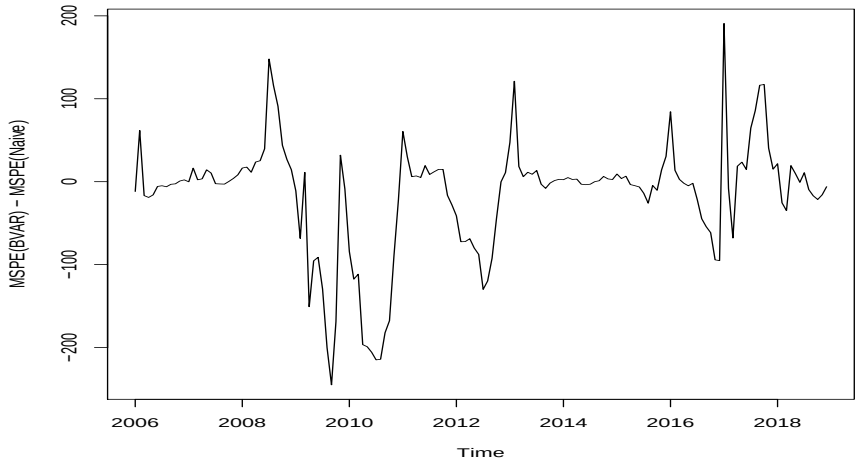


Figure 557: Mean squared forecasting errors of 12-step-ahead Factor(2) forecast of PPI: Difference from benchmark

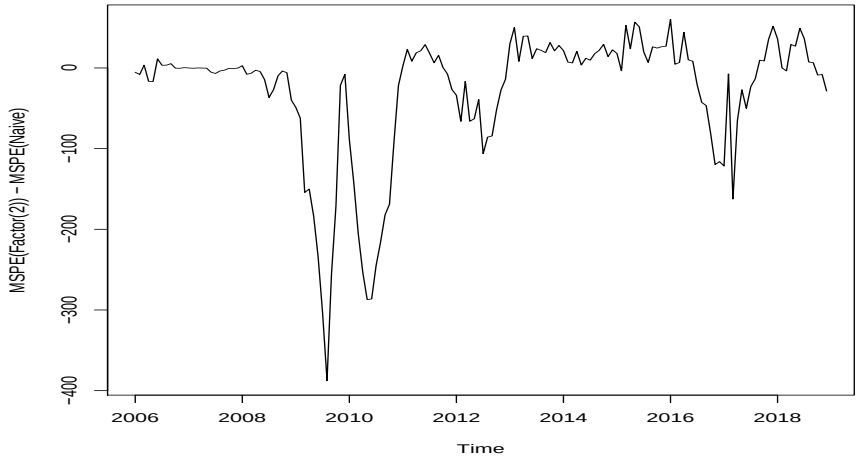


Figure 558: Mean squared forecasting errors of 12-step-ahead Factor(k) forecast of PPI: Difference from benchmark

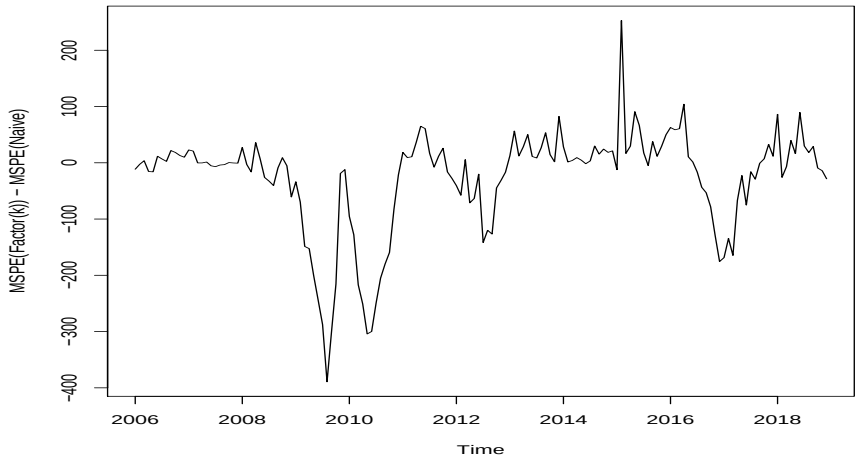


Figure 559: Mean squared forecasting errors of 12-step-ahead F(2)VAR(1) forecast of PPI: Difference from benchmark

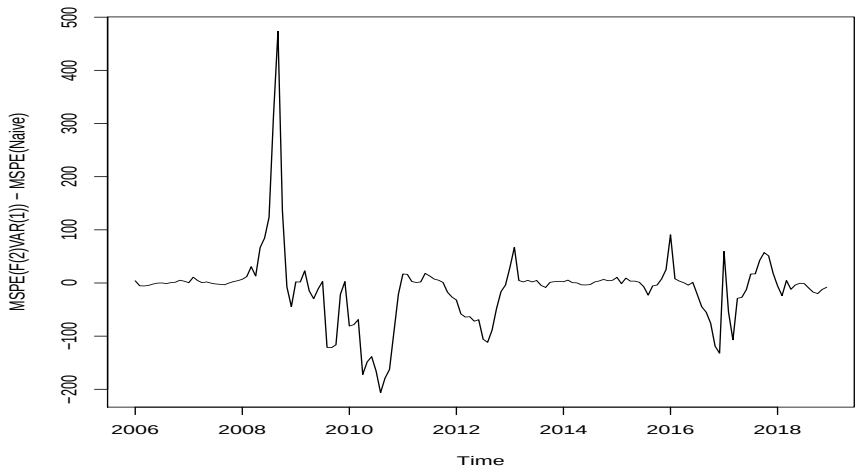
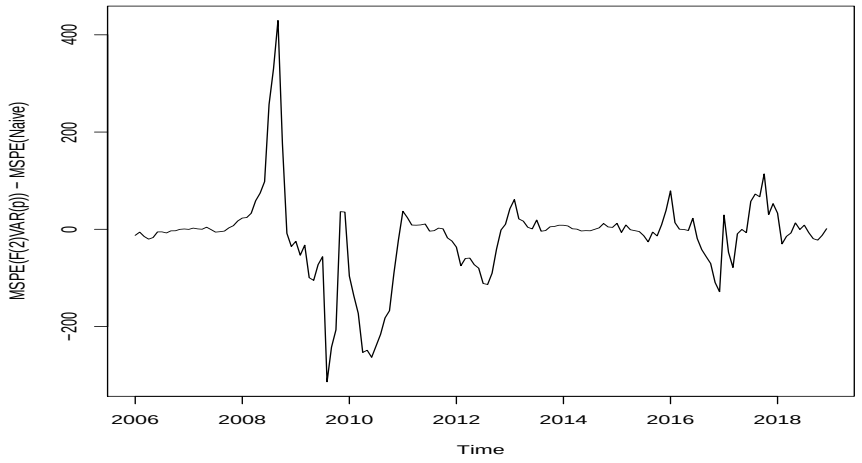


Figure 560: Mean squared forecasting errors of 12-step-ahead F(2)VAR(p) forecast of PPI: Difference from benchmark



4.3 IP

4.3.1 Forecast Horizon = 1

Figure 561: Mean squared forecasting errors of 1-step-ahead Naive forecast of IP: Difference from benchmark

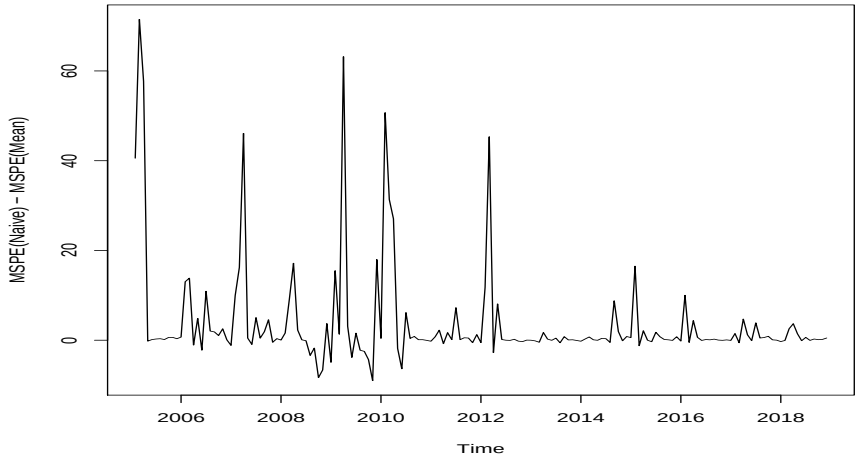


Figure 562: Mean squared forecasting errors of 1-step-ahead MA forecast of IP: Difference from benchmark

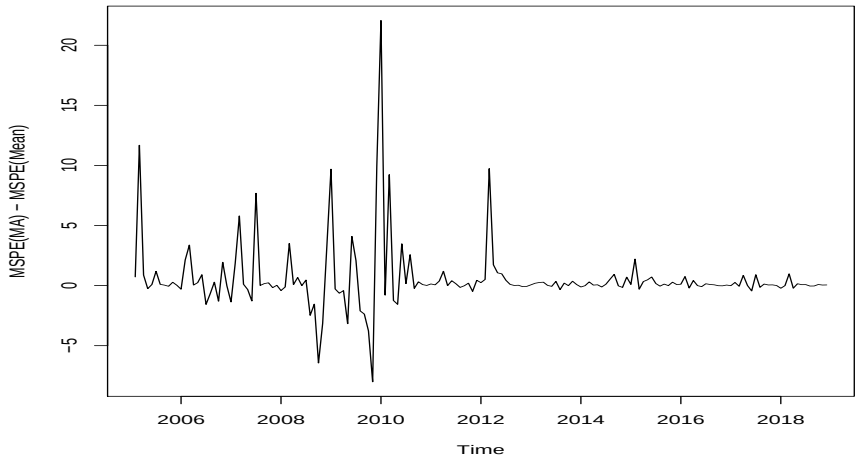


Figure 563: Mean squared forecasting errors of 1-step-ahead MA-opt forecast of IP: Difference from benchmark

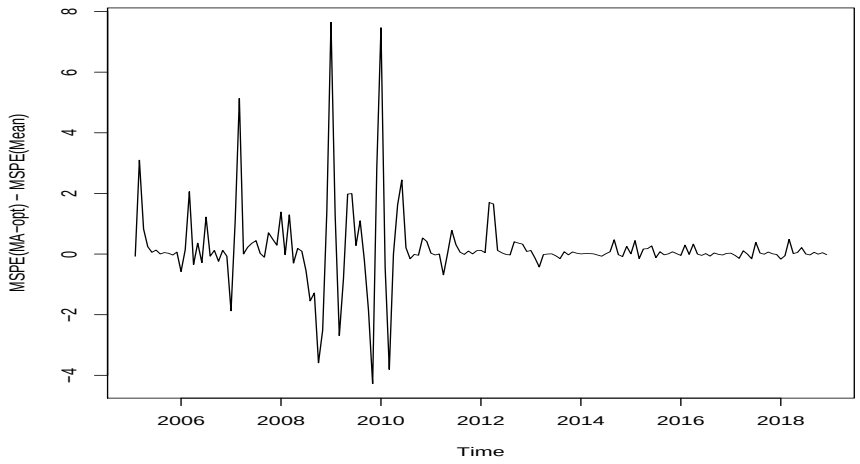


Figure 564: Mean squared forecasting errors of 1-step-ahead SES forecast of IP: Difference from benchmark

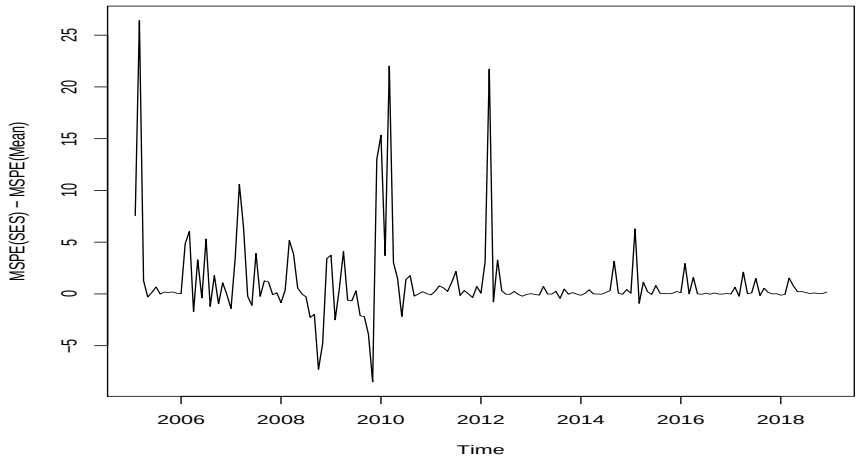


Figure 565: Mean squared forecasting errors of 1-step-ahead SES-opt forecast of IP: Difference from benchmark

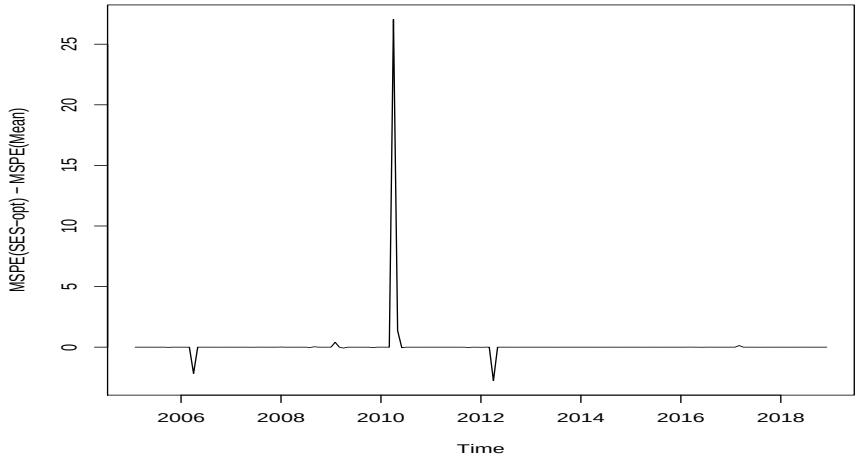


Figure 566: Mean squared forecasting errors of 1-step-ahead AR(1) forecast of IP: Difference from benchmark

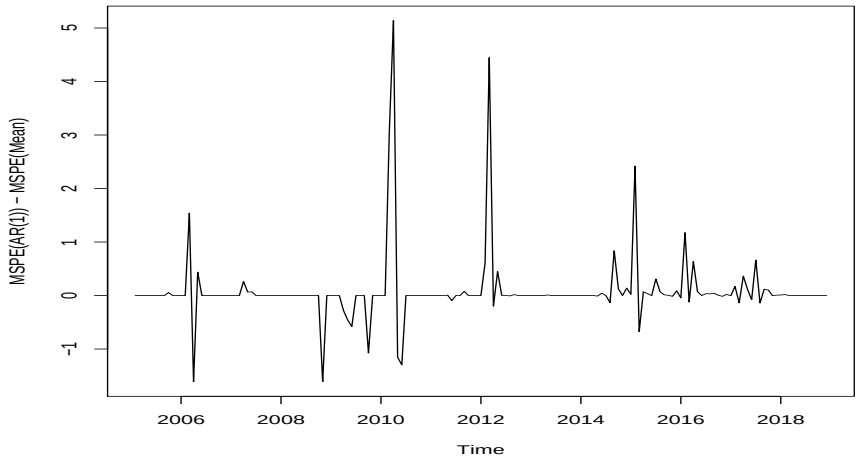


Figure 567: Mean squared forecasting errors of 1-step-ahead AR(p) forecast of IP: Difference from benchmark

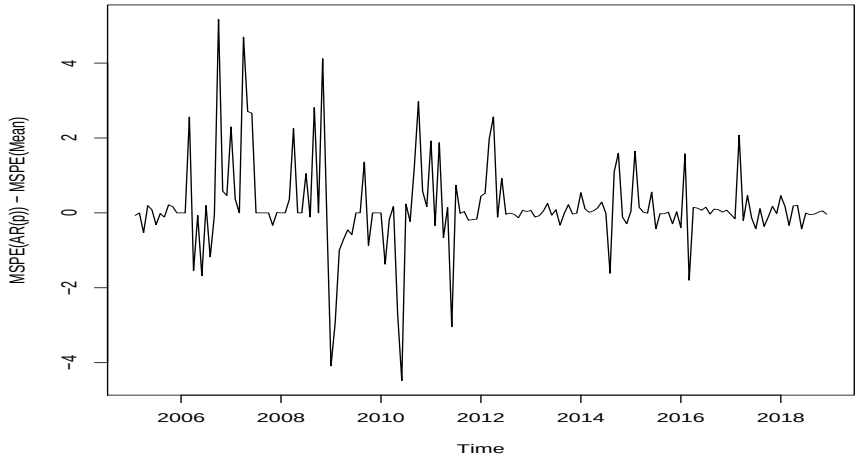


Figure 568: Mean squared forecasting errors of 1-step-ahead ARd(1) forecast of IP: Difference from benchmark

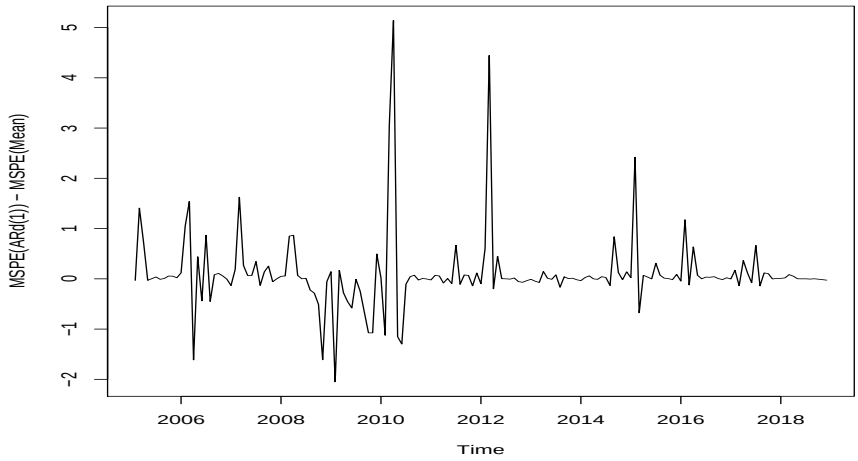


Figure 569: Mean squared forecasting errors of 1-step-ahead ARd(p) forecast of IP: Difference from benchmark

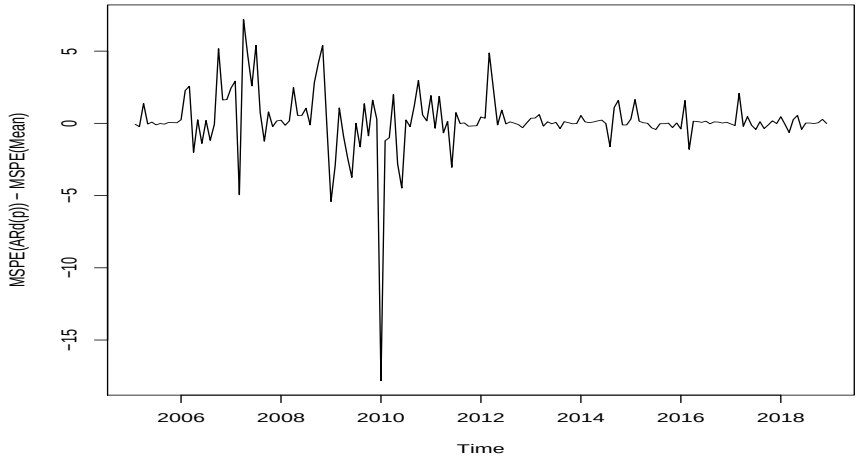


Figure 570: Mean squared forecasting errors of 1-step-ahead ARMA(1,1) forecast of IP: Difference from benchmark

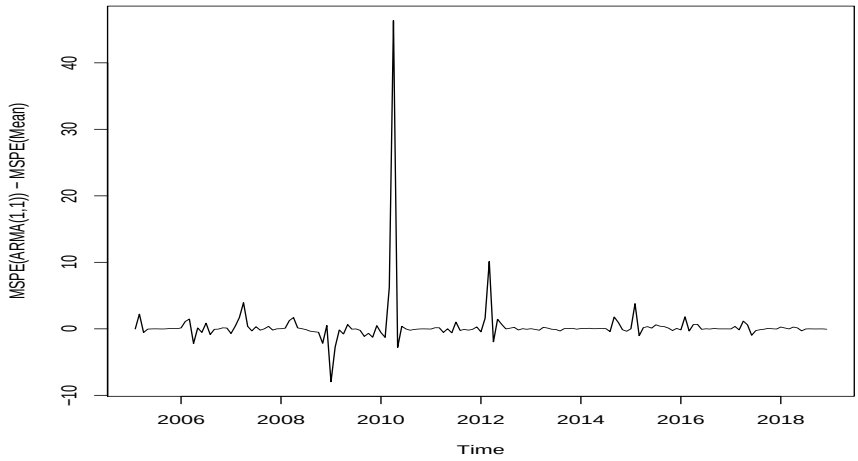


Figure 571: Mean squared forecasting errors of 1-step-ahead ARMA(p,q) forecast of IP: Difference from benchmark

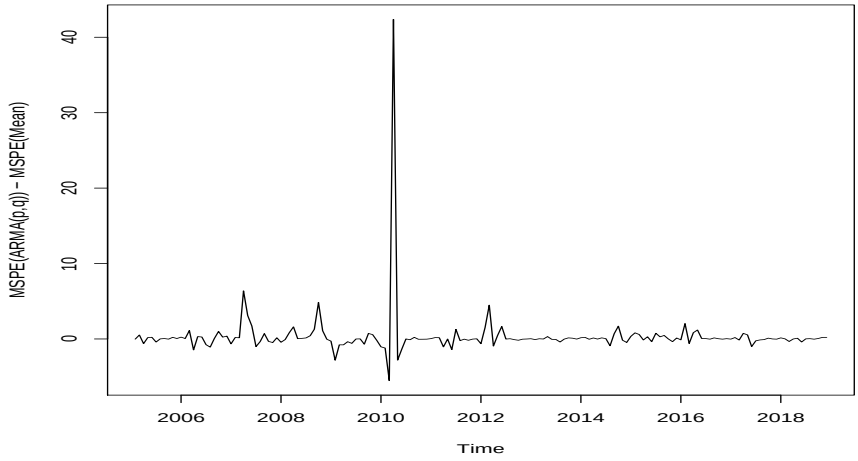


Figure 572: Mean squared forecasting errors of 1-step-ahead VAR(1) forecast of IP: Difference from benchmark

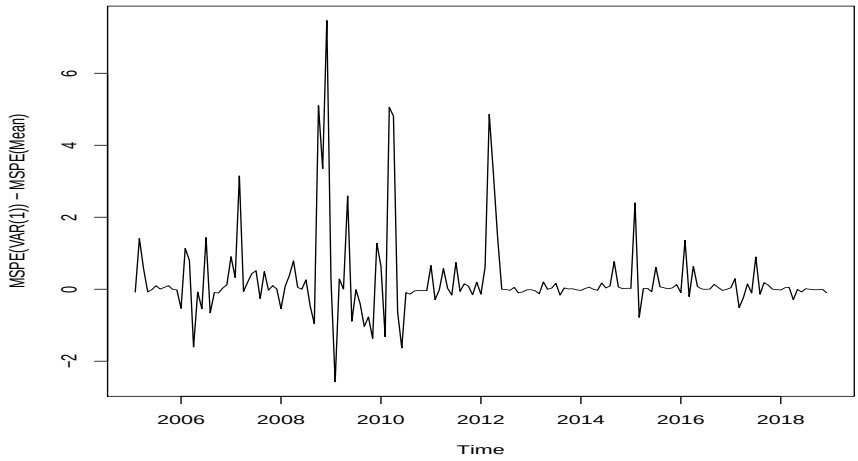


Figure 573: Mean squared forecasting errors of 1-step-ahead VAR(p) forecast of IP: Difference from benchmark

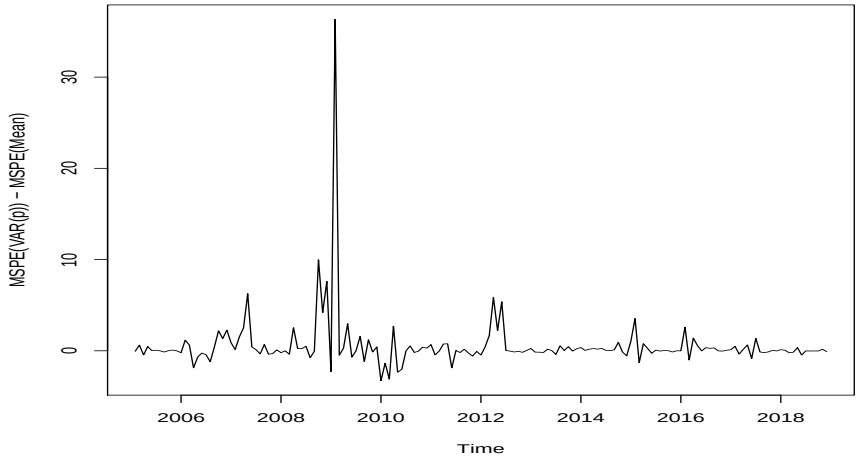


Figure 574: Mean squared forecasting errors of 1-step-ahead BVAR forecast of IP: Difference from benchmark

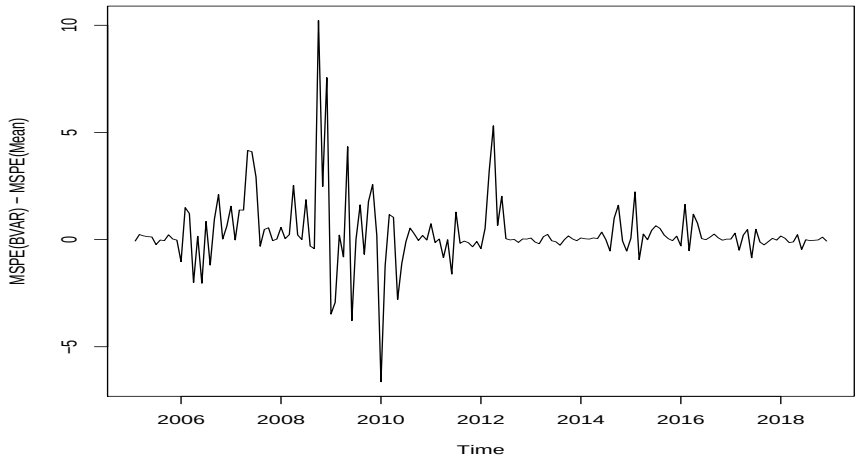


Figure 575: Mean squared forecasting errors of 1-step-ahead Factor(2) forecast of IP: Difference from benchmark

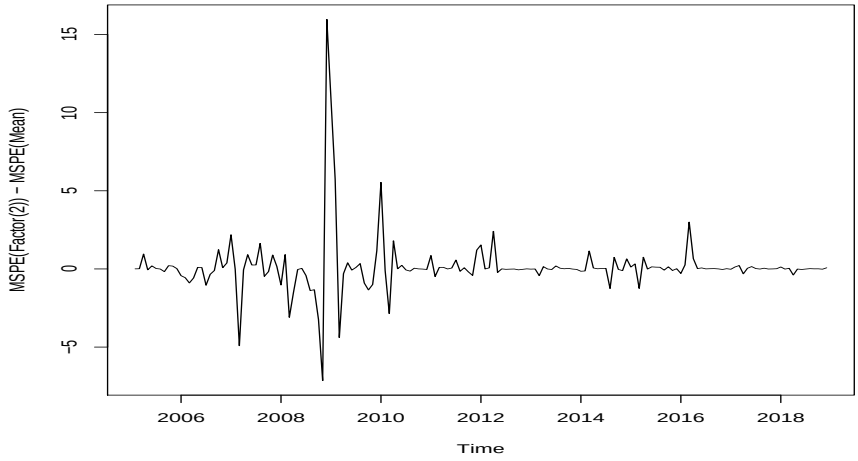


Figure 576: Mean squared forecasting errors of 1-step-ahead Factor(k) forecast of IP: Difference from benchmark

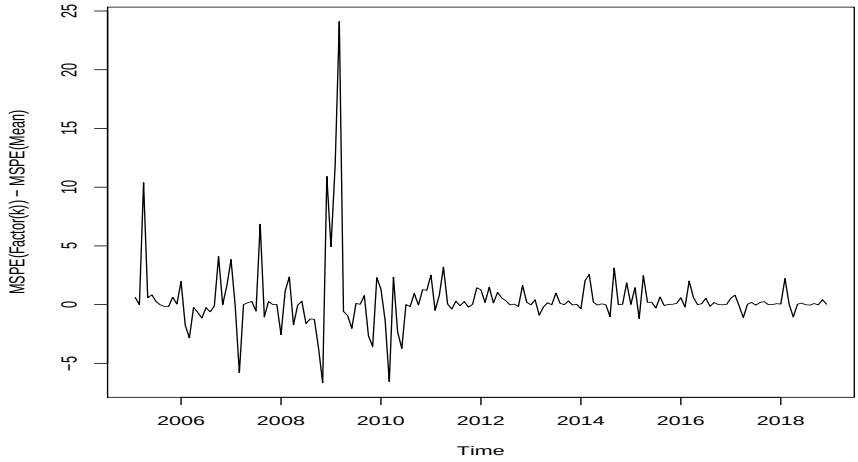


Figure 577: Mean squared forecasting errors of 1-step-ahead F(2)VAR(1) forecast of IP: Difference from benchmark

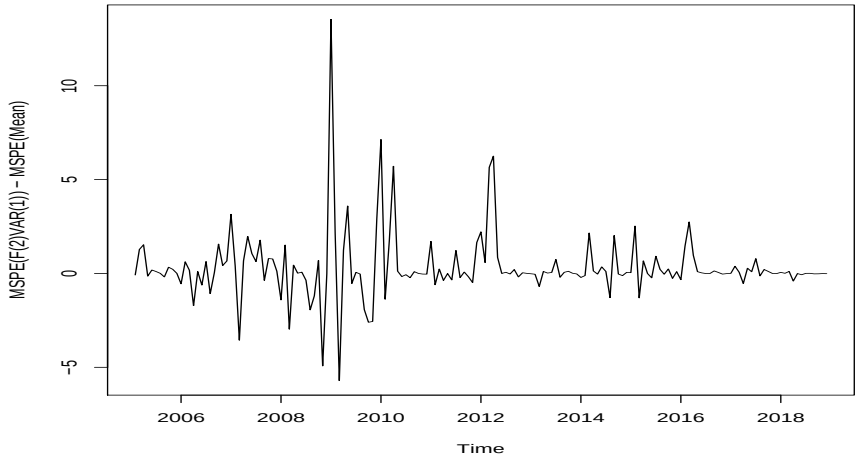
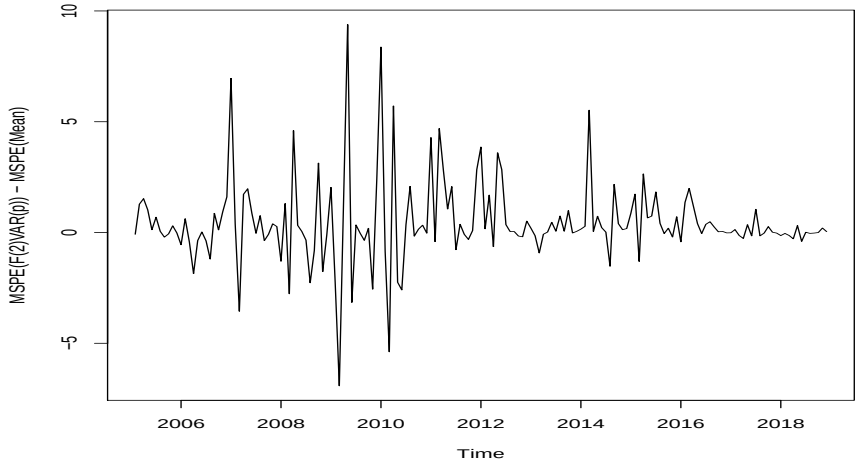


Figure 578: Mean squared forecasting errors of 1-step-ahead F(2)VAR(p) forecast of IP: Difference from benchmark



4.3.2 Forecast Horizon = 3

Figure 579: Mean squared forecasting errors of 3-step-ahead Naive forecast of IP: Difference from benchmark

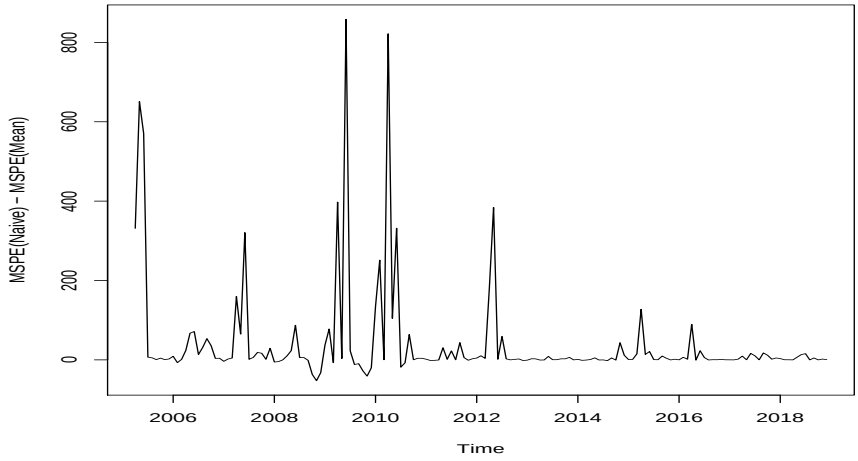


Figure 580: Mean squared forecasting errors of 3-step-ahead MA forecast of IP: Difference from benchmark

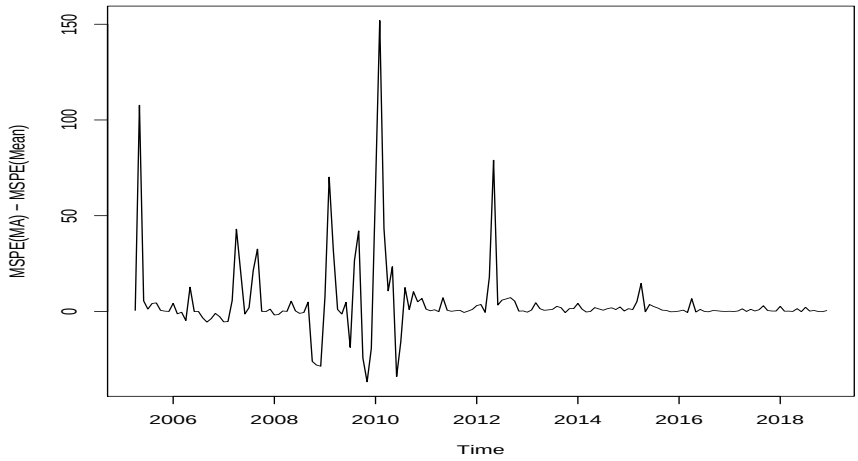


Figure 581: Mean squared forecasting errors of 3-step-ahead MA-opt forecast of IP: Difference from benchmark

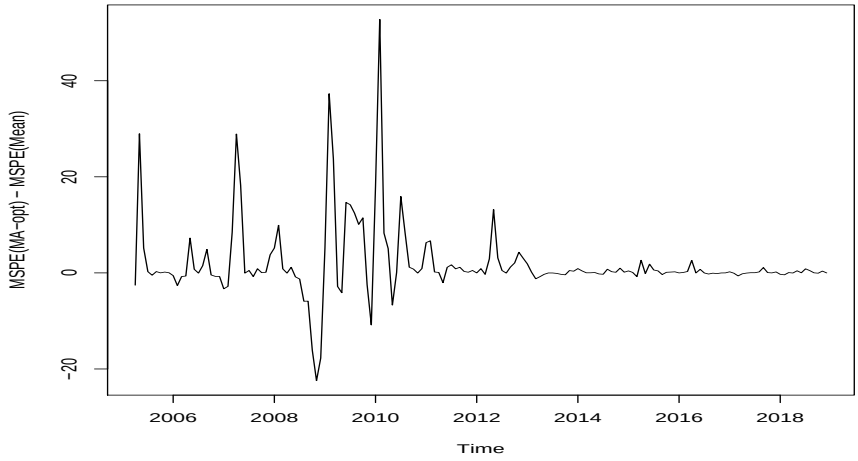


Figure 582: Mean squared forecasting errors of 3-step-ahead SES forecast of IP: Difference from benchmark

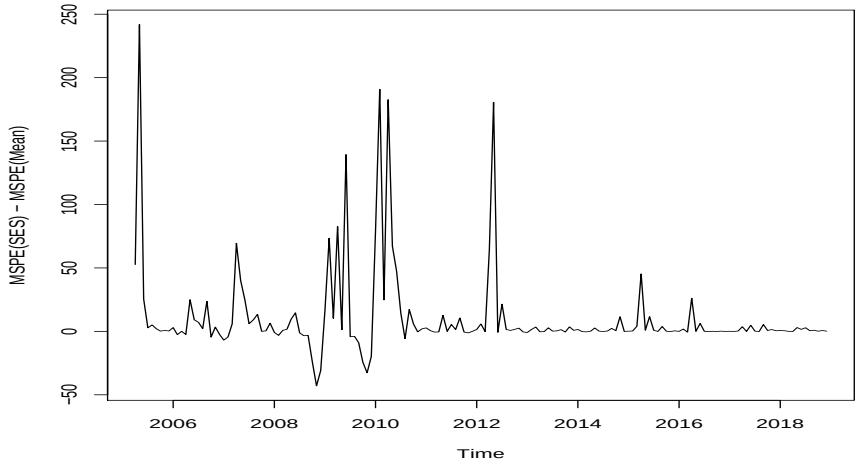


Figure 583: Mean squared forecasting errors of 3-step-ahead SES-opt forecast of IP: Difference from benchmark

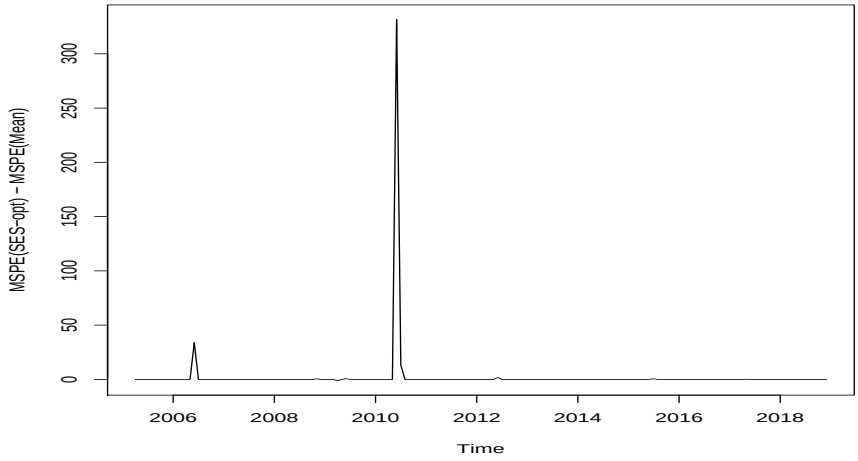


Figure 584: Mean squared forecasting errors of 3-step-ahead AR(1) forecast of IP: Difference from benchmark

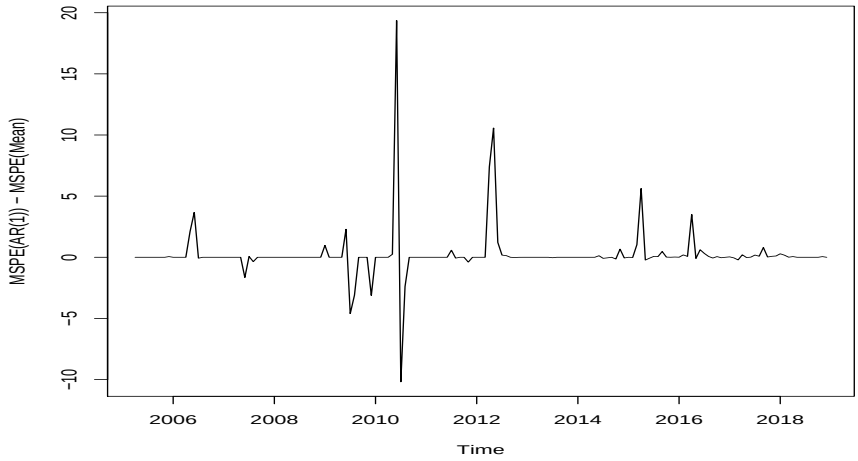


Figure 585: Mean squared forecasting errors of 3-step-ahead AR(p) forecast of IP: Difference from benchmark

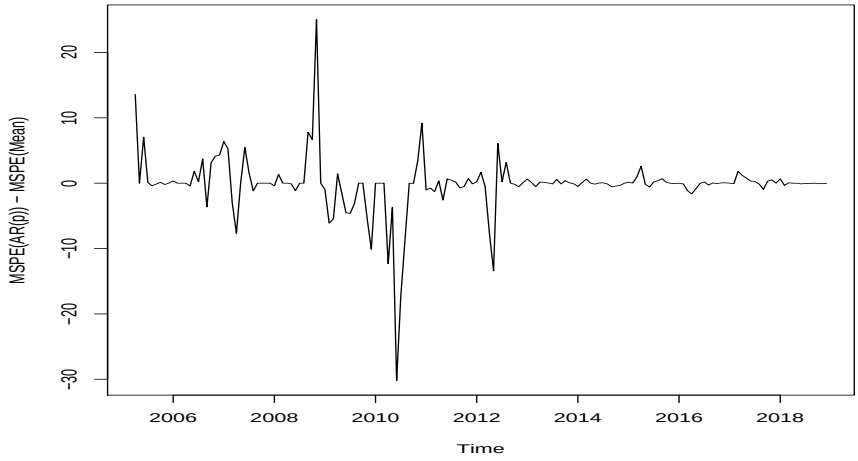


Figure 586: Mean squared forecasting errors of 3-step-ahead ARd(1) forecast of IP: Difference from benchmark

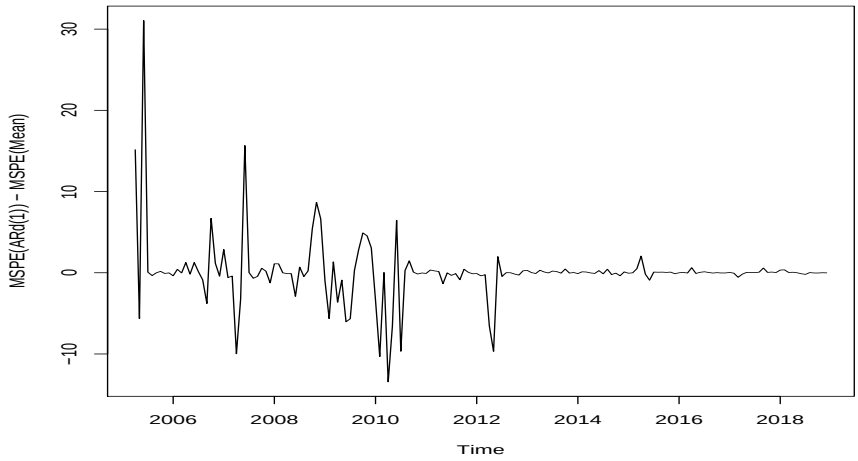


Figure 587: Mean squared forecasting errors of 3-step-ahead ARd(p) forecast of IP: Difference from benchmark

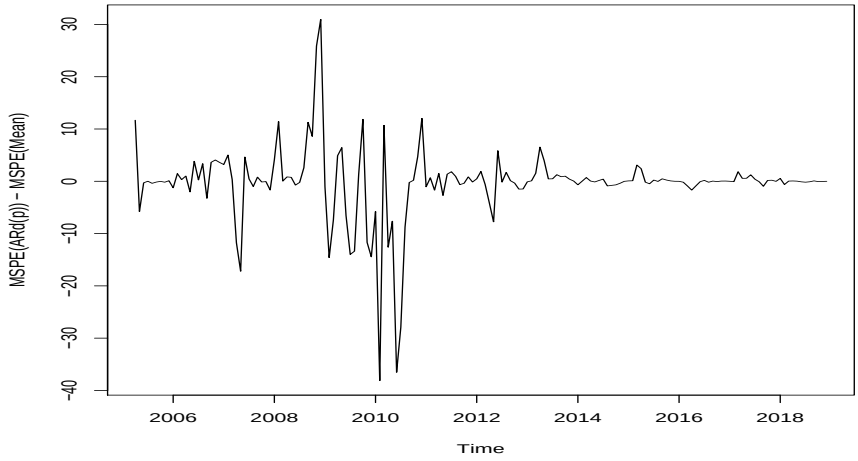


Figure 588: Mean squared forecasting errors of 3-step-ahead ARMA(1,1) forecast of IP: Difference from benchmark

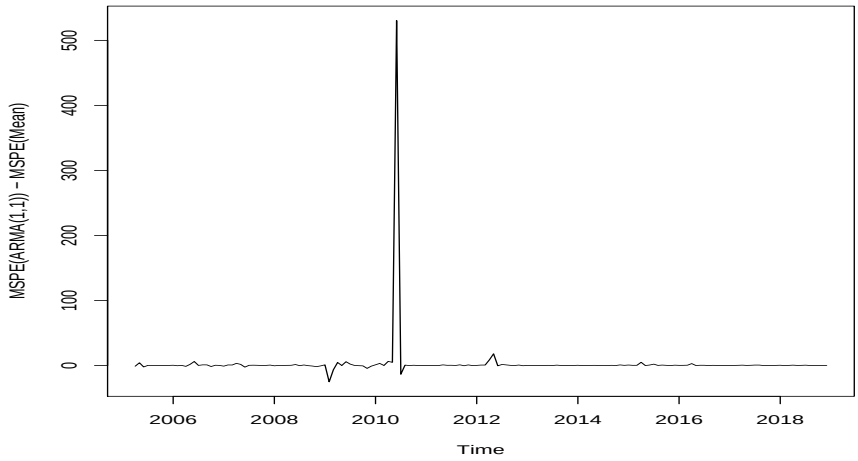


Figure 589: Mean squared forecasting errors of 3-step-ahead ARMA(p,q) forecast of IP: Difference from benchmark

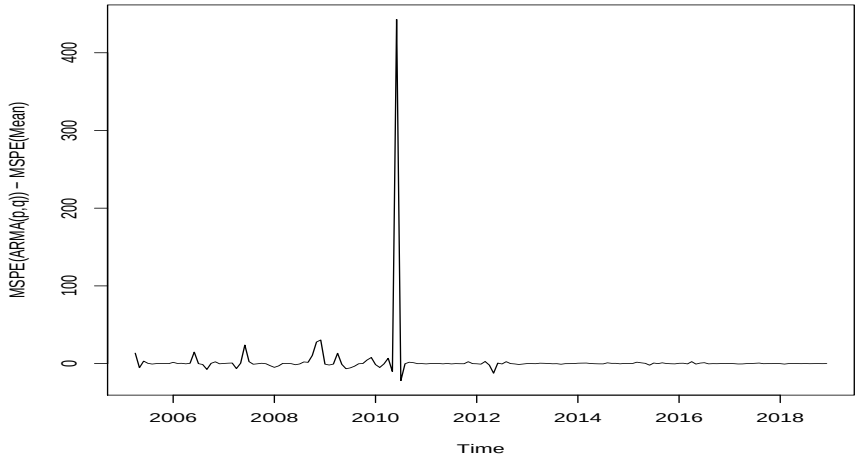


Figure 590: Mean squared forecasting errors of 3-step-ahead VAR(1) forecast of IP: Difference from benchmark

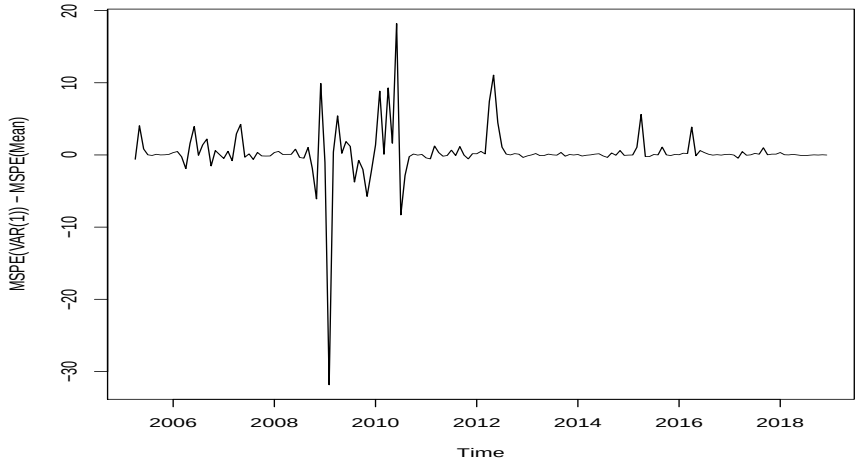


Figure 591: Mean squared forecasting errors of 3-step-ahead VAR(p) forecast of IP: Difference from benchmark

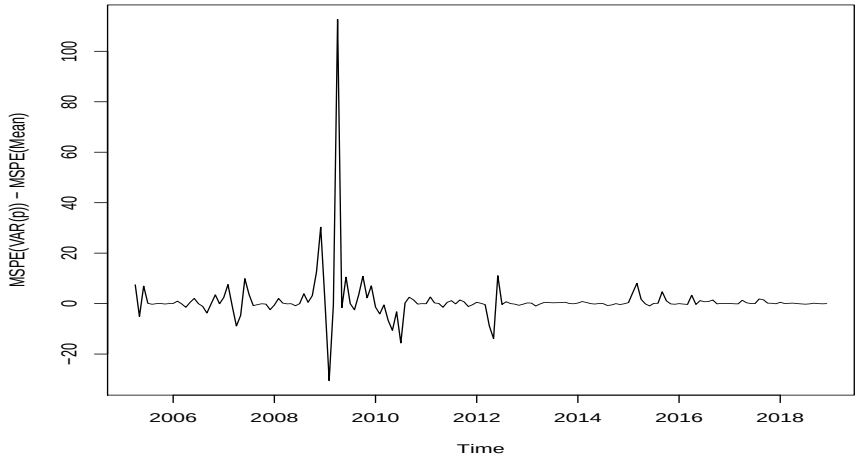


Figure 592: Mean squared forecasting errors of 3-step-ahead BVAR forecast of IP: Difference from benchmark

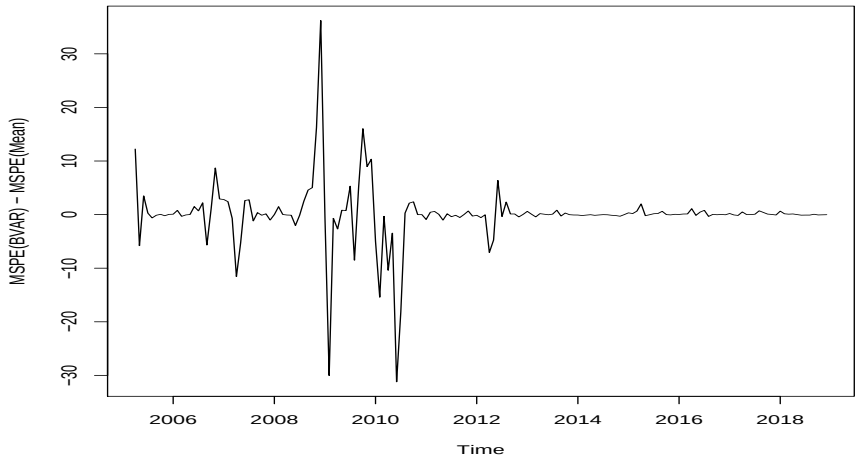


Figure 593: Mean squared forecasting errors of 3-step-ahead Factor(2) forecast of IP: Difference from benchmark

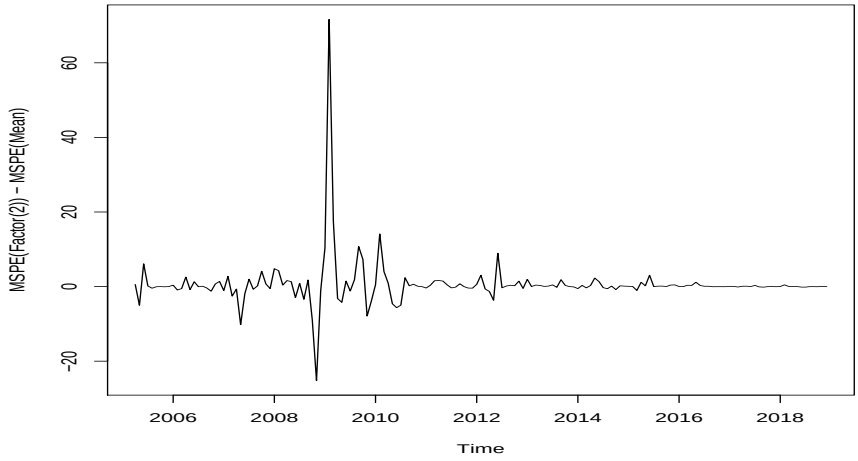


Figure 594: Mean squared forecasting errors of 3-step-ahead Factor(k) forecast of IP: Difference from benchmark

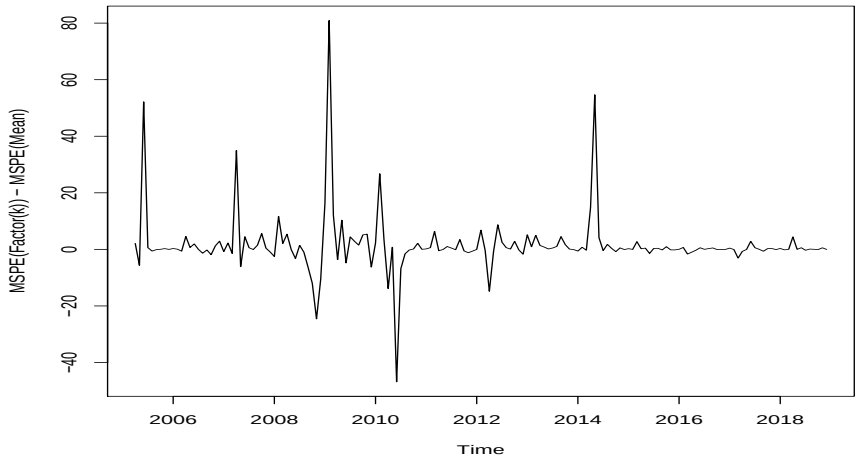


Figure 595: Mean squared forecasting errors of 3-step-ahead F(2)VAR(1) forecast of IP: Difference from benchmark

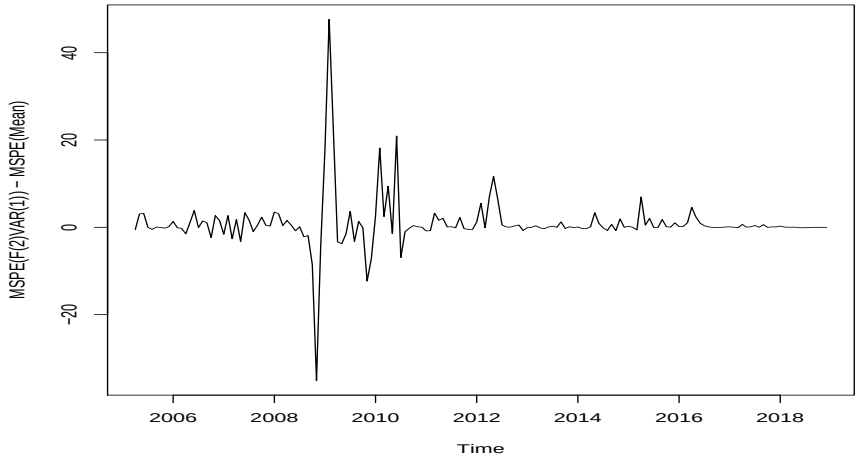
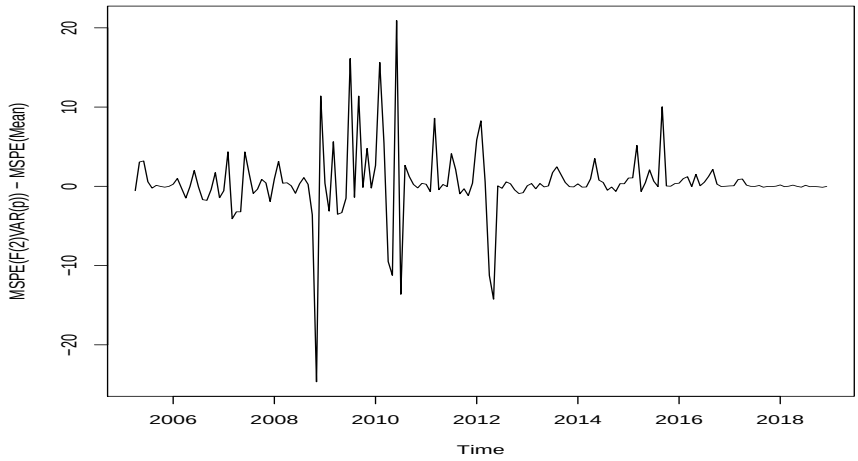


Figure 596: Mean squared forecasting errors of 3-step-ahead F(2)VAR(p) forecast of IP: Difference from benchmark



4.3.3 Forecast Horizon = 6

Figure 597: Mean squared forecasting errors of 6-step-ahead Naive forecast of IP: Difference from benchmark

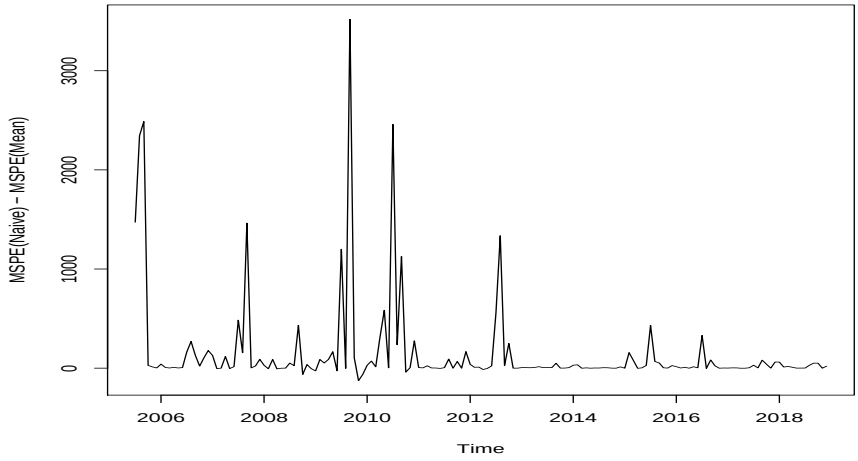


Figure 598: Mean squared forecasting errors of 6-step-ahead MA forecast of IP: Difference from benchmark

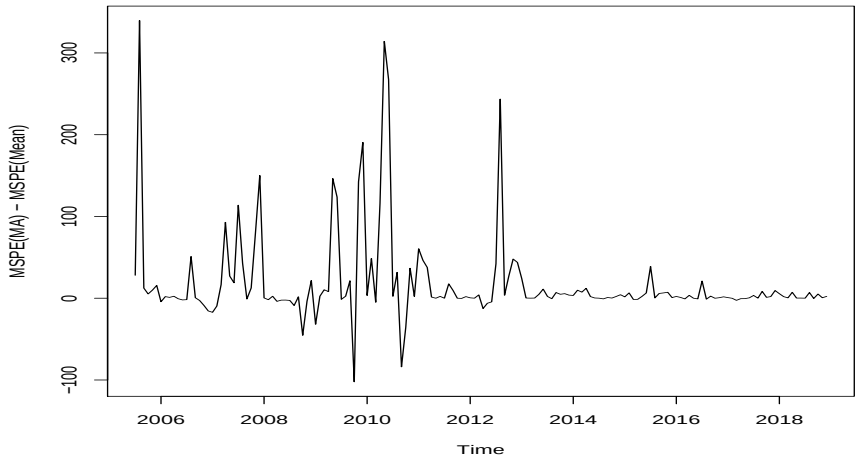


Figure 599: Mean squared forecasting errors of 6-step-ahead MA-opt forecast of IP: Difference from benchmark

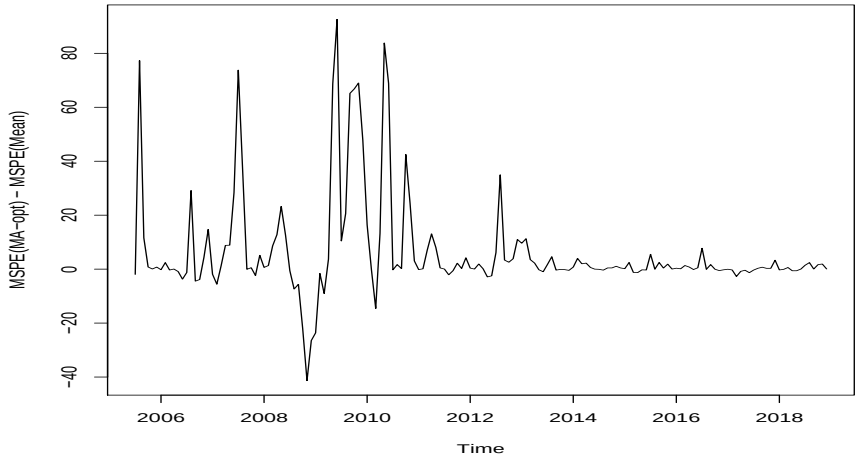


Figure 600: Mean squared forecasting errors of 6-step-ahead SES forecast of IP: Difference from benchmark

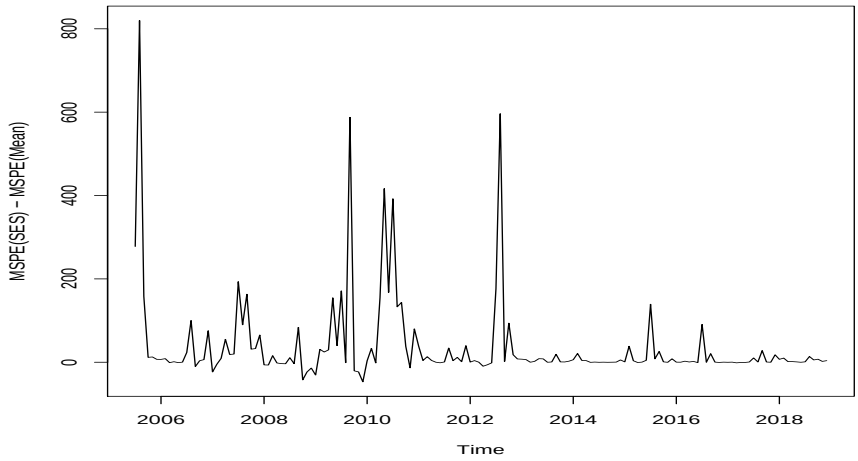


Figure 601: Mean squared forecasting errors of 6-step-ahead SES-opt forecast of IP: Difference from benchmark

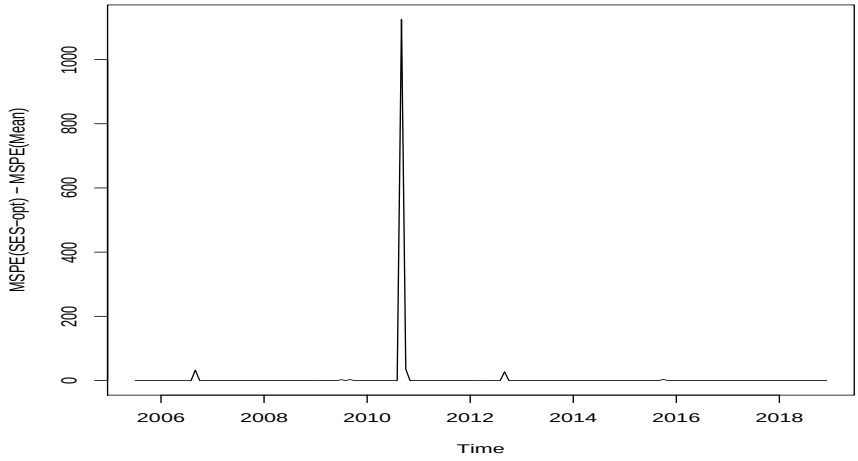


Figure 602: Mean squared forecasting errors of 6-step-ahead AR(1) forecast of IP: Difference from benchmark

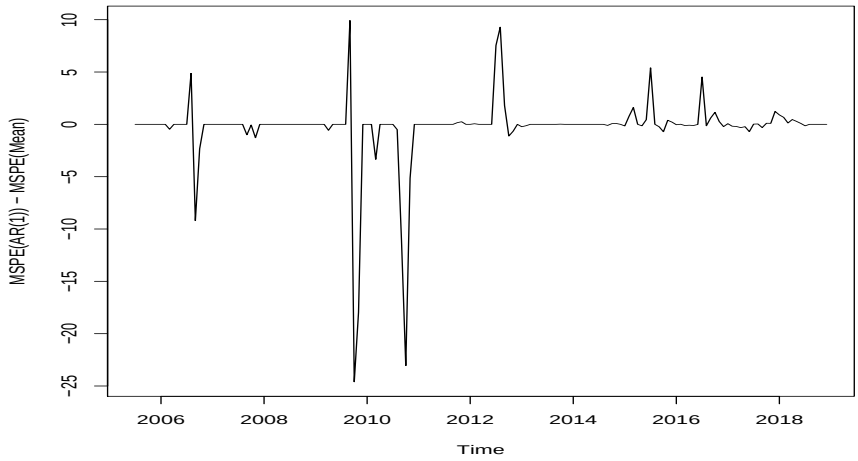


Figure 603: Mean squared forecasting errors of 6-step-ahead AR(p) forecast of IP: Difference from benchmark

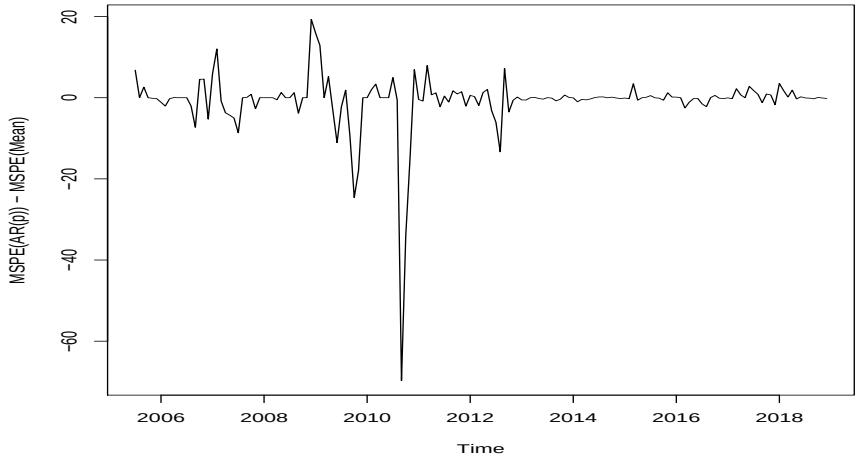


Figure 604: Mean squared forecasting errors of 6-step-ahead ARd(1) forecast of IP: Difference from benchmark

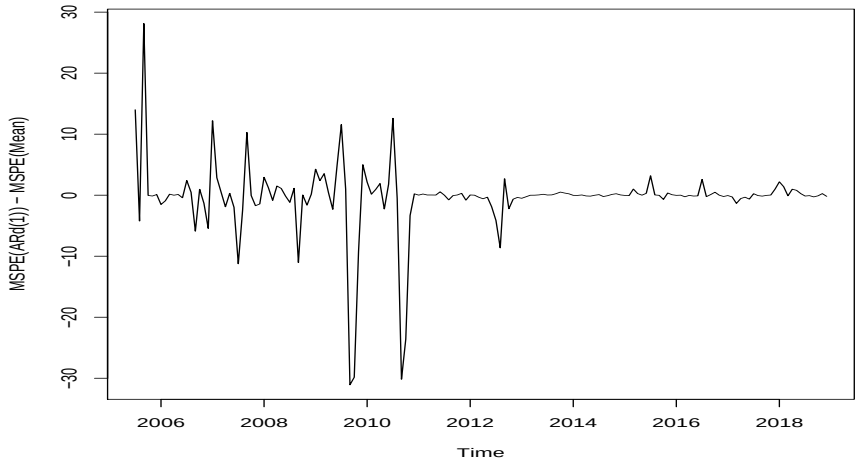


Figure 605: Mean squared forecasting errors of 6-step-ahead ARd(p) forecast of IP: Difference from benchmark

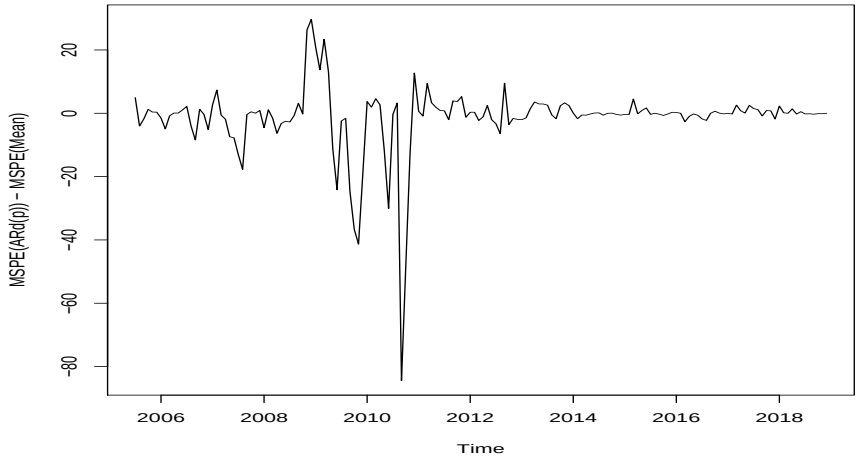


Figure 606: Mean squared forecasting errors of 6-step-ahead ARMA(1,1) forecast of IP: Difference from benchmark

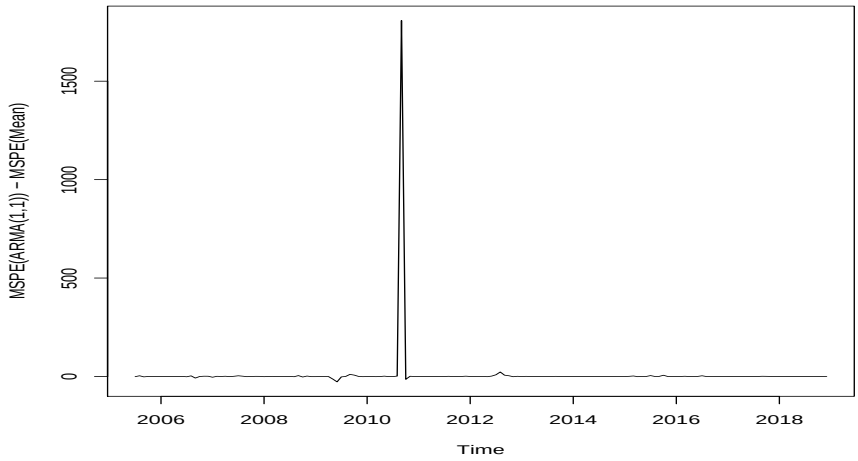


Figure 607: Mean squared forecasting errors of 6-step-ahead ARMA(p,q) forecast of IP: Difference from benchmark

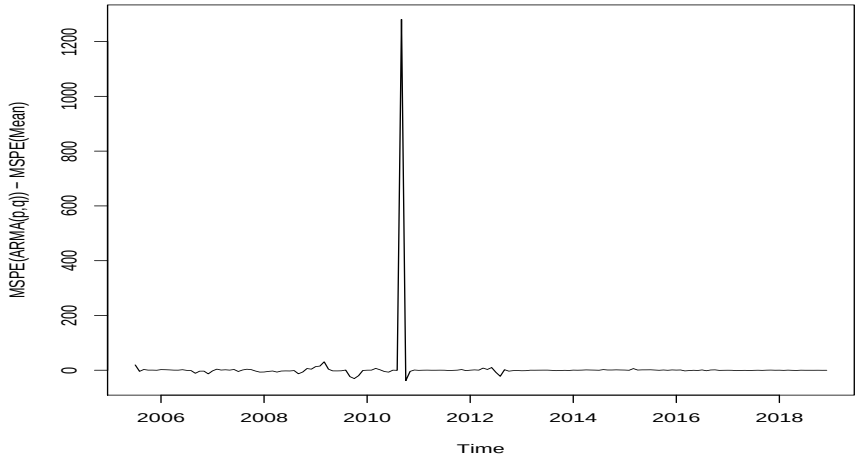


Figure 608: Mean squared forecasting errors of 6-step-ahead VAR(1) forecast of IP: Difference from benchmark

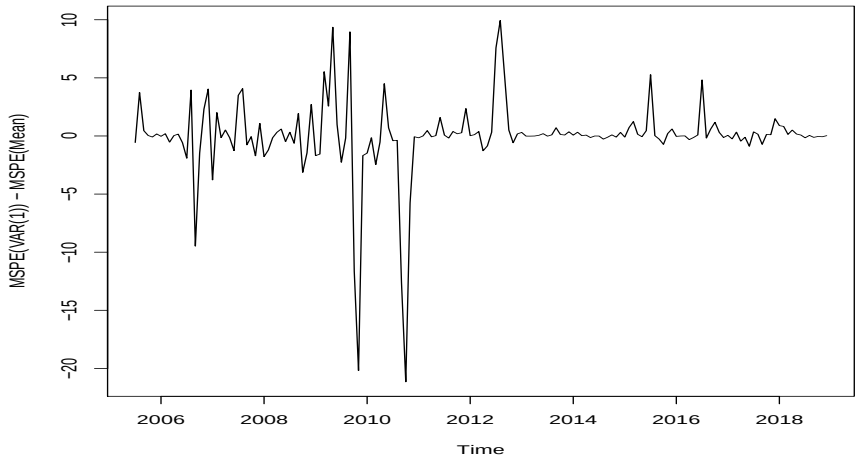


Figure 609: Mean squared forecasting errors of 6-step-ahead VAR(p) forecast of IP: Difference from benchmark

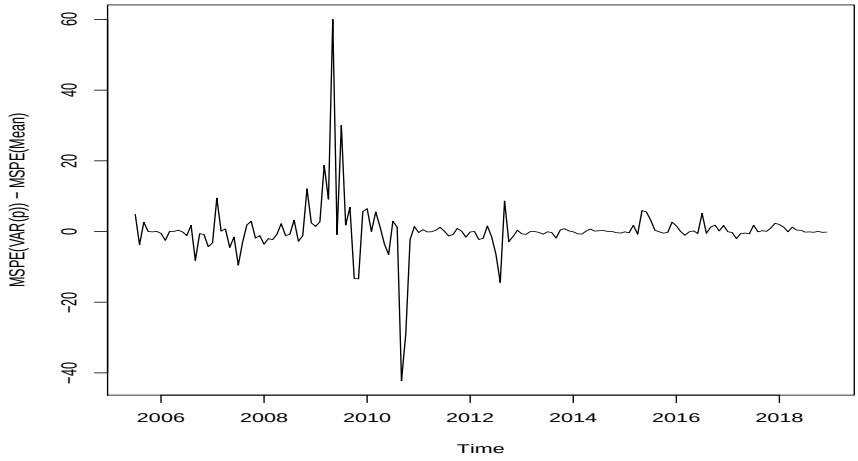


Figure 610: Mean squared forecasting errors of 6-step-ahead BVAR forecast of IP: Difference from benchmark

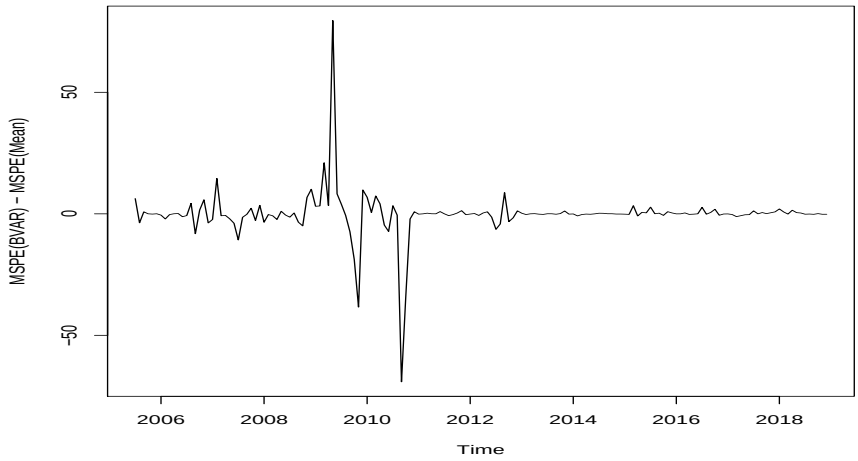


Figure 611: Mean squared forecasting errors of 6-step-ahead Factor(2) forecast of IP: Difference from benchmark

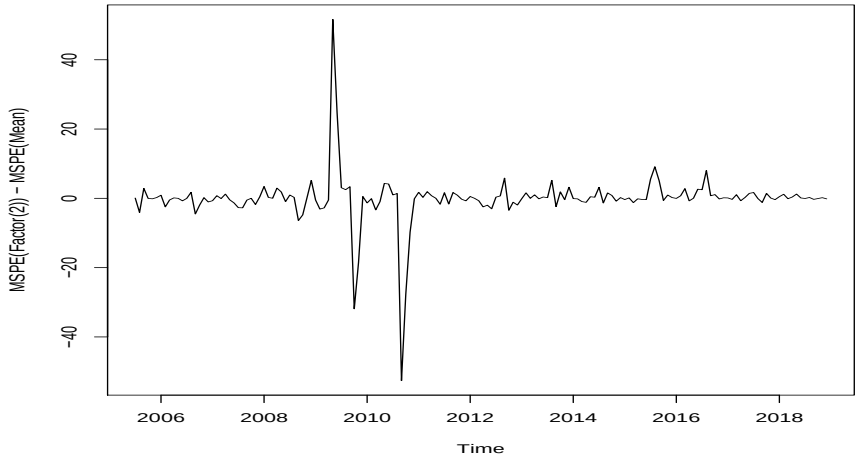


Figure 612: Mean squared forecasting errors of 6-step-ahead Factor(k) forecast of IP: Difference from benchmark

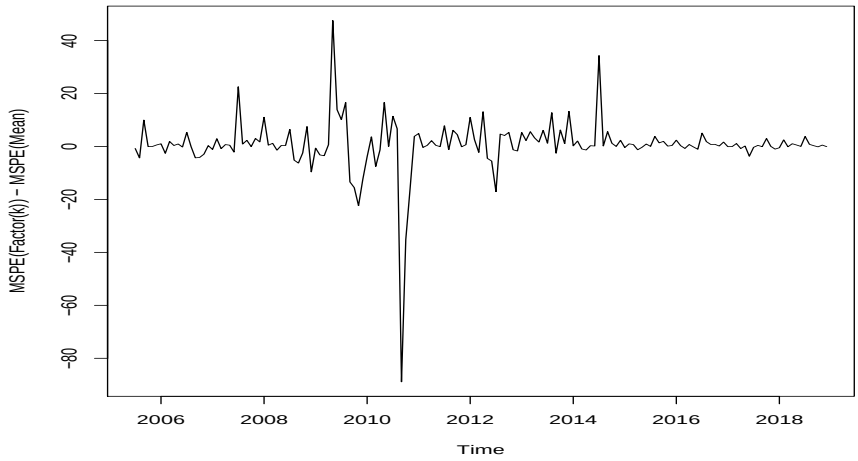


Figure 613: Mean squared forecasting errors of 6-step-ahead F(2)VAR(1) forecast of IP: Difference from benchmark

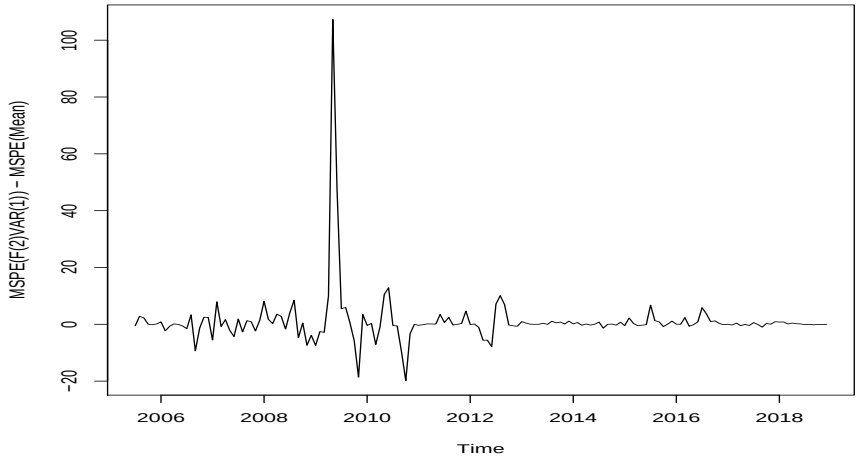
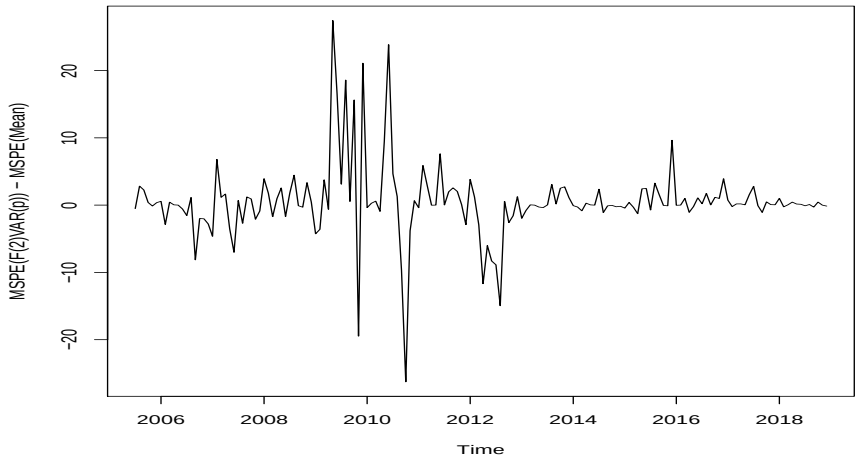


Figure 614: Mean squared forecasting errors of 6-step-ahead F(2)VAR(p) forecast of IP: Difference from benchmark



4.3.4 Forecast Horizon = 9

Figure 615: Mean squared forecasting errors of 9-step-ahead Naive forecast of IP: Difference from benchmark

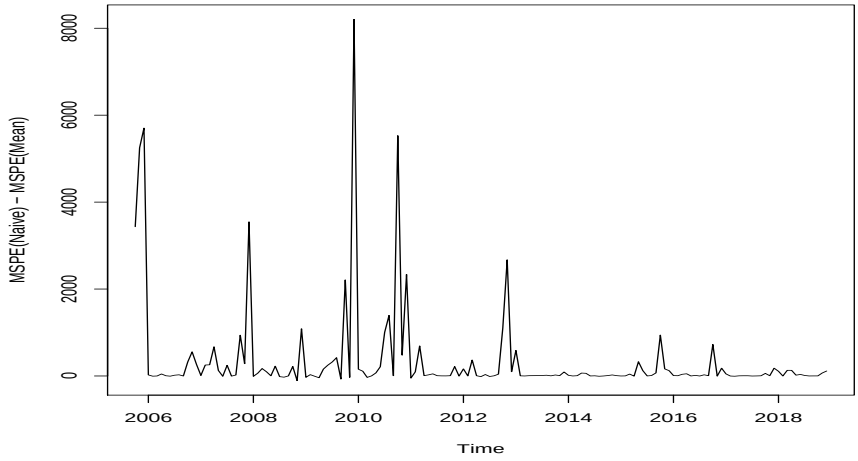


Figure 616: Mean squared forecasting errors of 9-step-ahead MA forecast of IP: Difference from benchmark

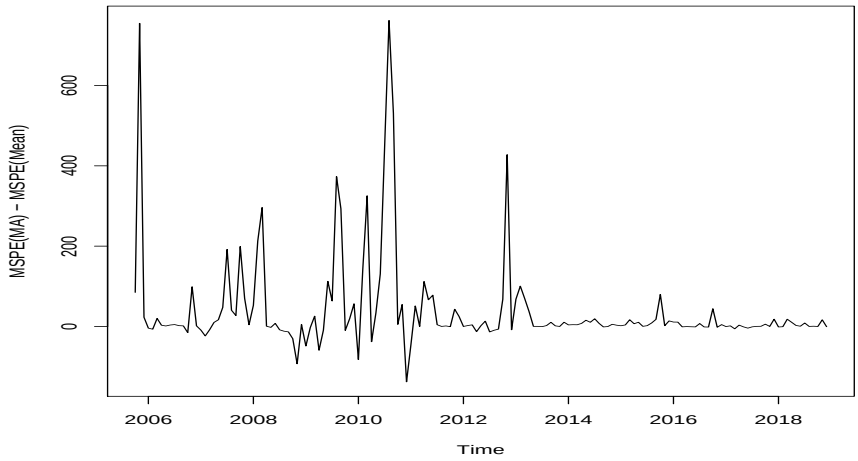


Figure 617: Mean squared forecasting errors of 9-step-ahead MA-opt forecast of IP: Difference from benchmark

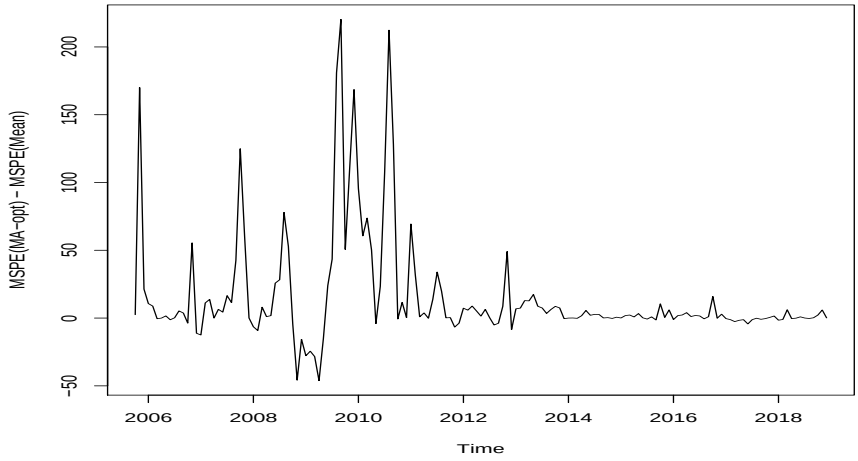


Figure 618: Mean squared forecasting errors of 9-step-ahead SES forecast of IP: Difference from benchmark

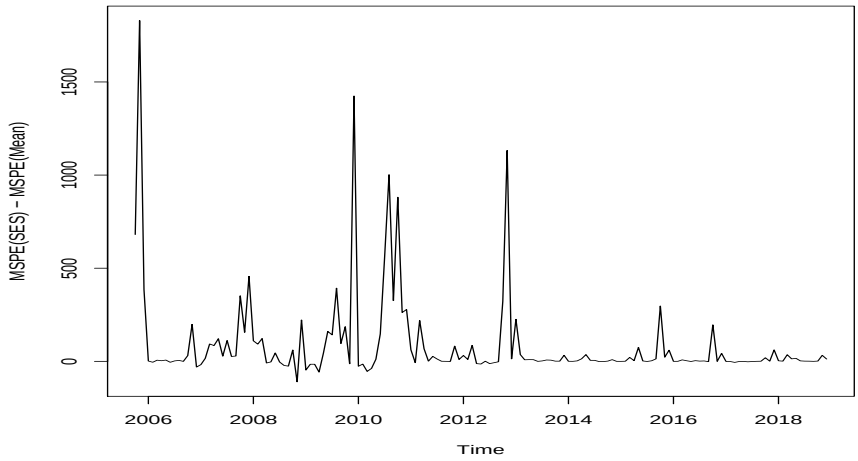


Figure 619: Mean squared forecasting errors of 9-step-ahead SES-opt forecast of IP: Difference from benchmark

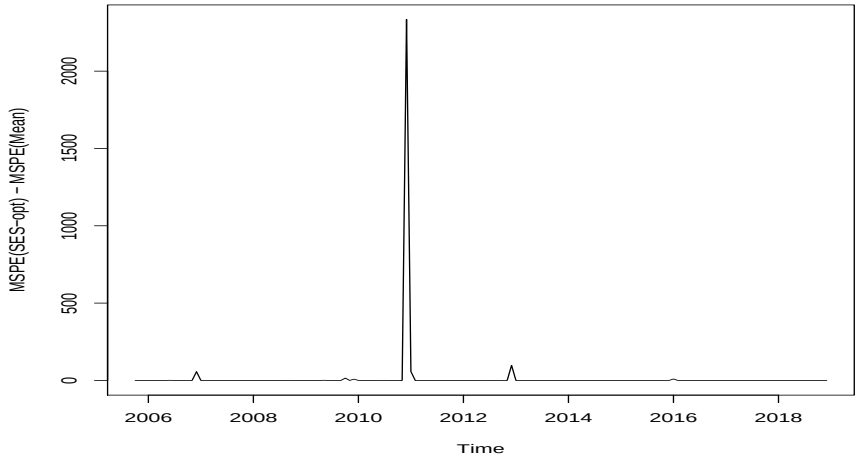


Figure 620: Mean squared forecasting errors of 9-step-ahead AR(1) forecast of IP: Difference from benchmark

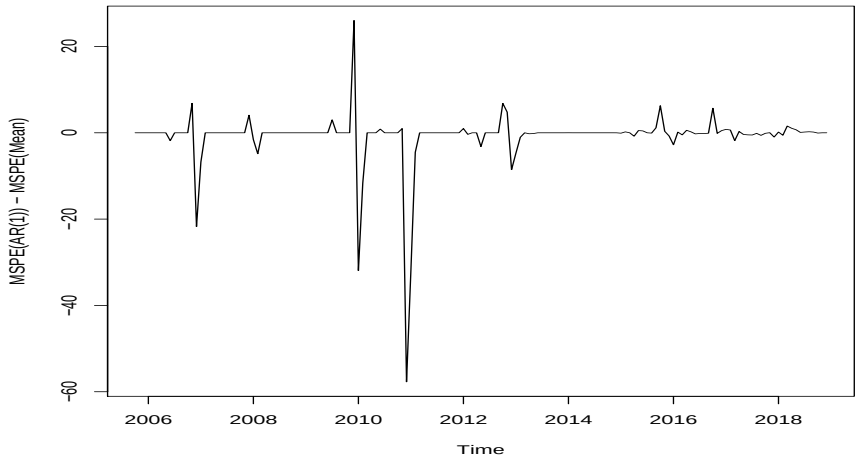


Figure 621: Mean squared forecasting errors of 9-step-ahead AR(p) forecast of IP: Difference from benchmark

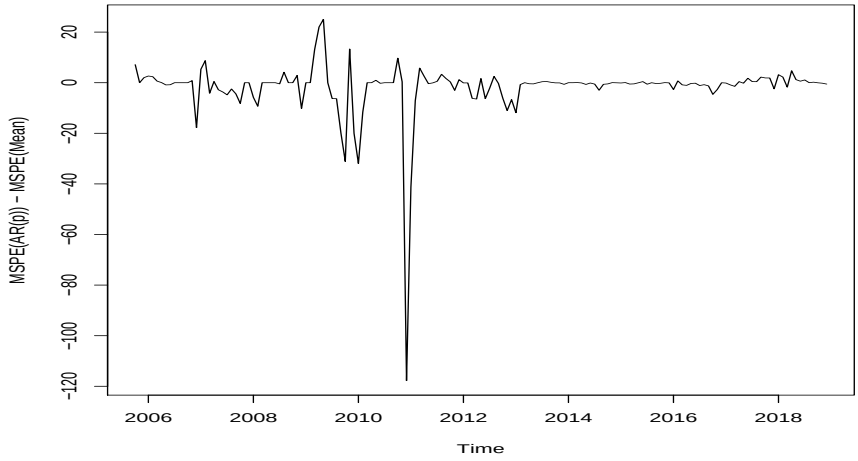


Figure 622: Mean squared forecasting errors of 9-step-ahead ARd(1) forecast of IP: Difference from benchmark

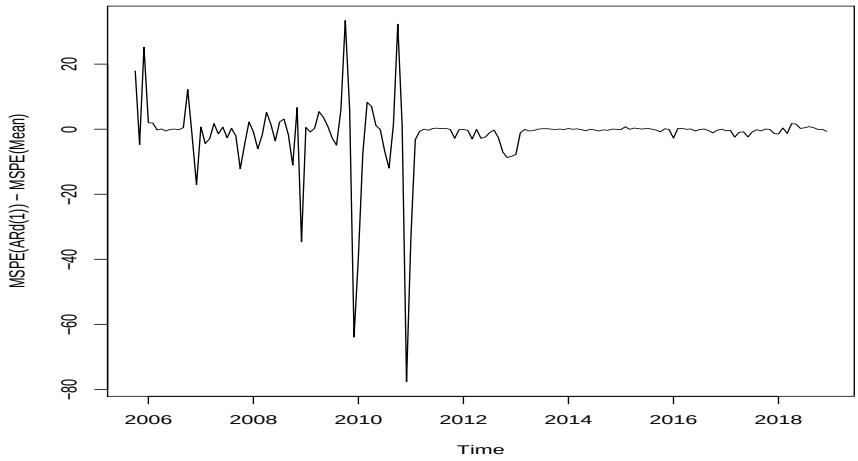


Figure 623: Mean squared forecasting errors of 9-step-ahead ARd(p) forecast of IP: Difference from benchmark

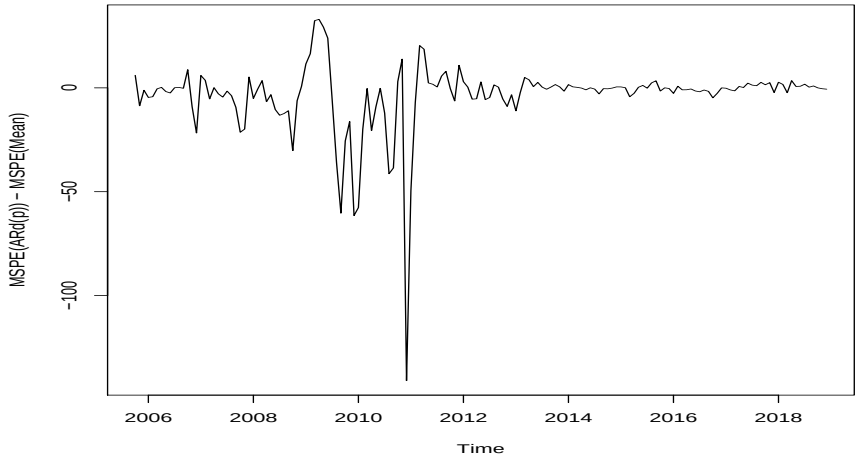


Figure 624: Mean squared forecasting errors of 9-step-ahead ARMA(1,1) forecast of IP: Difference from benchmark

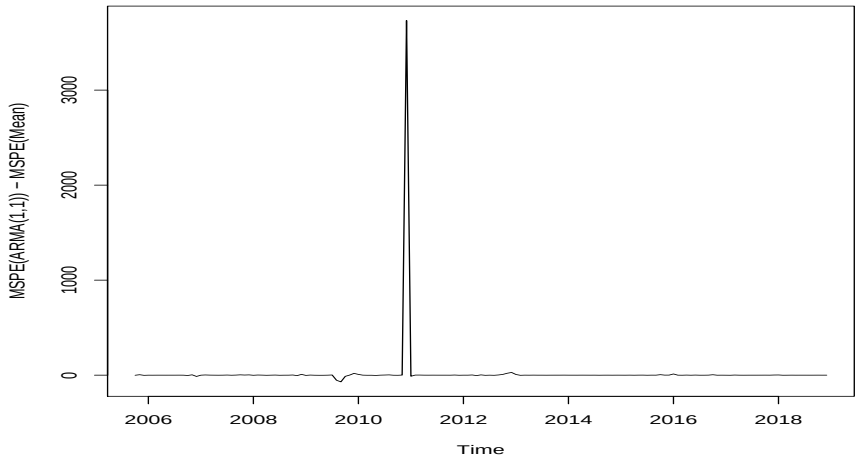


Figure 625: Mean squared forecasting errors of 9-step-ahead ARMA(p,q) forecast of IP: Difference from benchmark

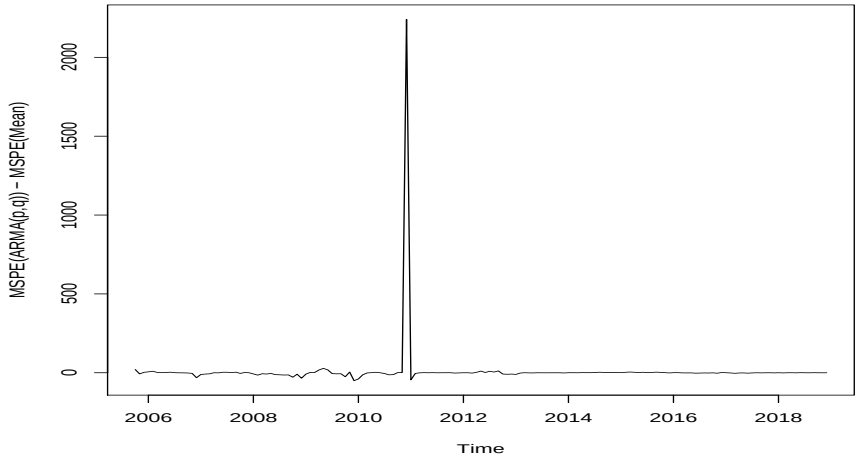


Figure 626: Mean squared forecasting errors of 9-step-ahead VAR(1) forecast of IP: Difference from benchmark

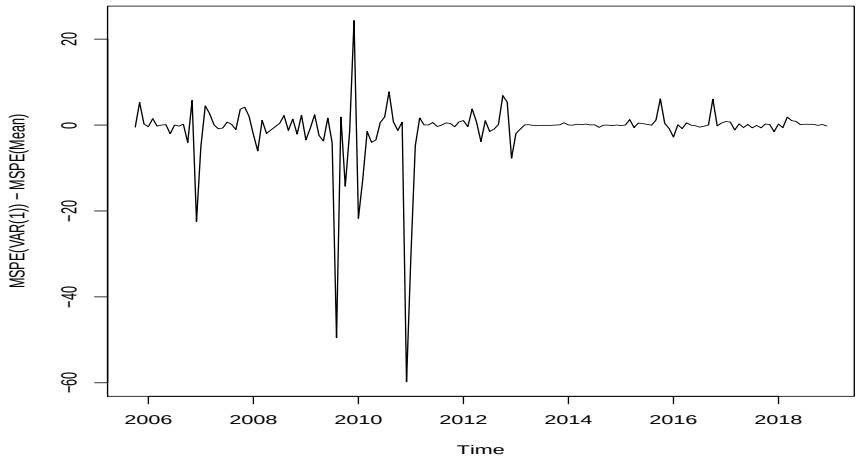


Figure 627: Mean squared forecasting errors of 9-step-ahead VAR(p) forecast of IP: Difference from benchmark

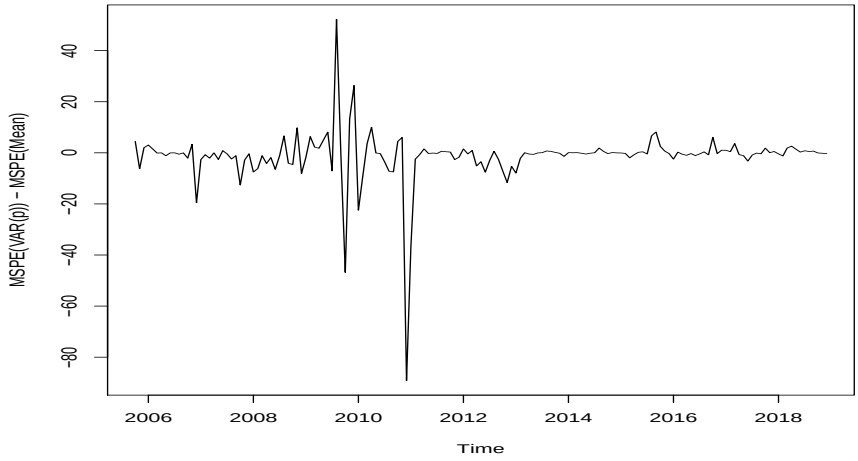


Figure 628: Mean squared forecasting errors of 9-step-ahead BVAR forecast of IP: Difference from benchmark

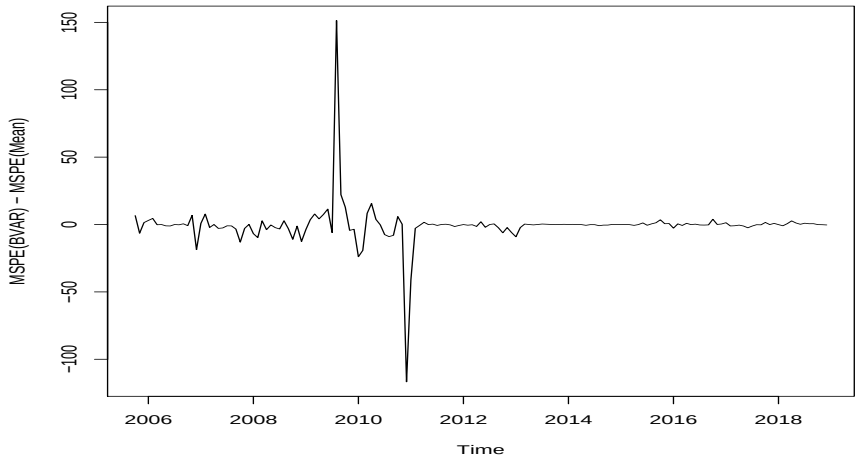


Figure 629: Mean squared forecasting errors of 9-step-ahead Factor(2) forecast of IP: Difference from benchmark

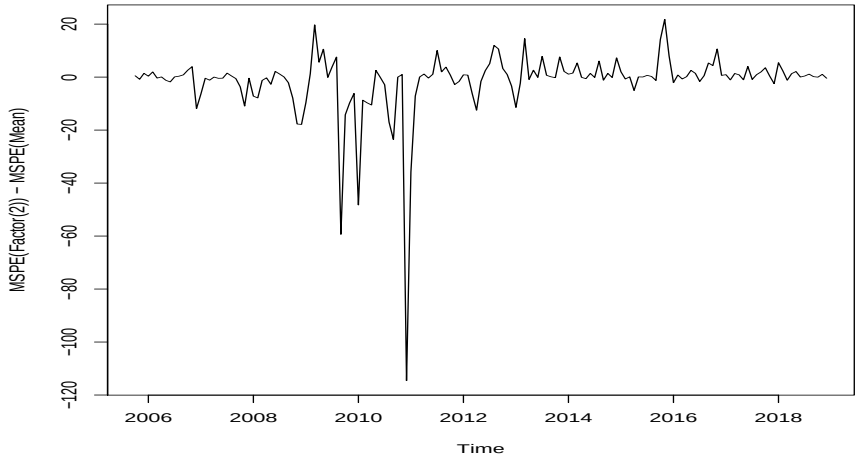


Figure 630: Mean squared forecasting errors of 9-step-ahead Factor(k) forecast of IP: Difference from benchmark

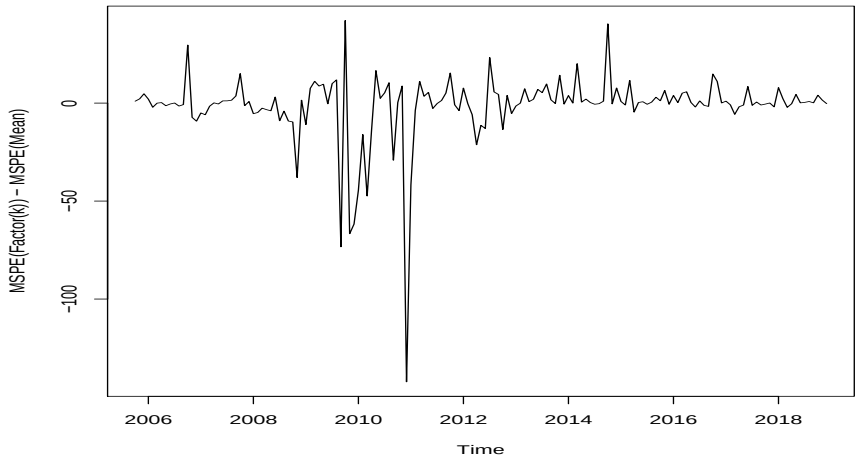


Figure 631: Mean squared forecasting errors of 9-step-ahead F(2)VAR(1) forecast of IP: Difference from benchmark

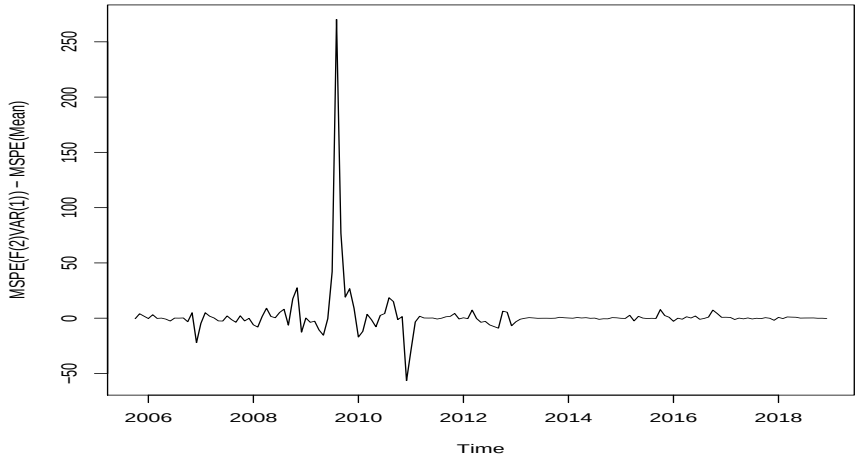
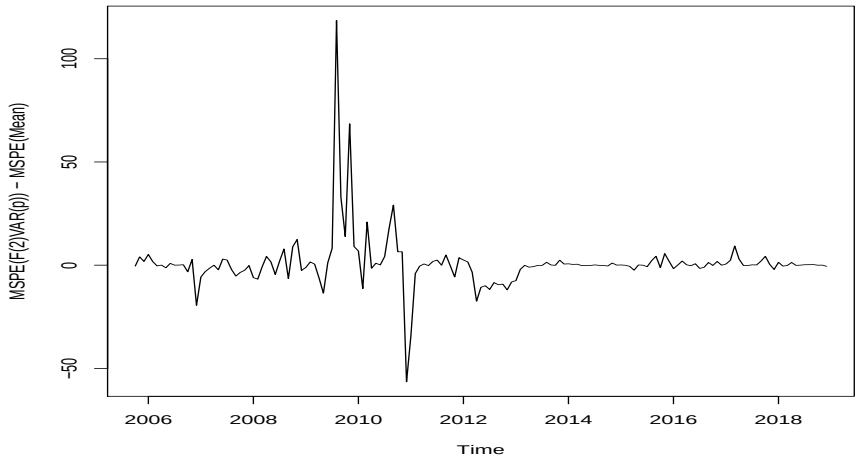


Figure 632: Mean squared forecasting errors of 9-step-ahead F(2)VAR(p) forecast of IP: Difference from benchmark



4.3.5 Forecast Horizon = 12

Figure 633: Mean squared forecasting errors of 12-step-ahead Naive forecast of IP: Difference from benchmark

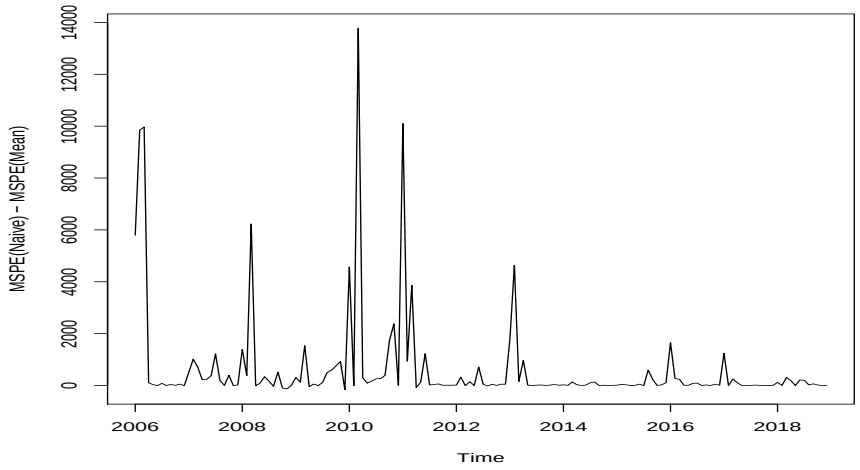


Figure 634: Mean squared forecasting errors of 12-step-ahead MA forecast of IP: Difference from benchmark

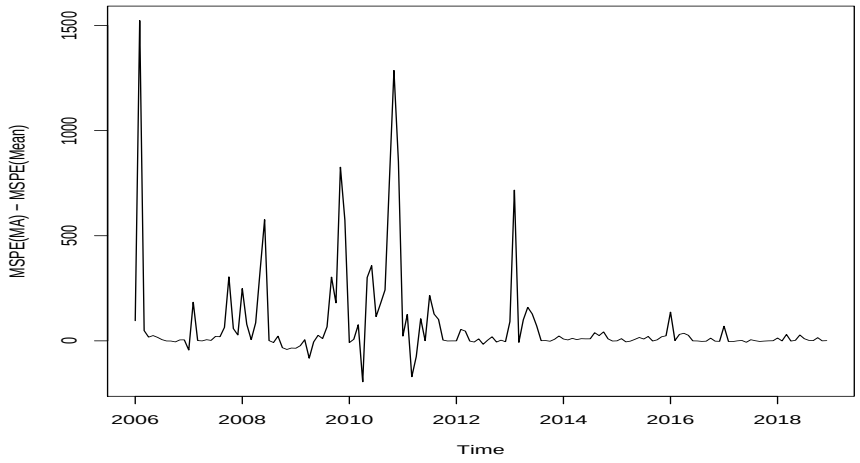


Figure 635: Mean squared forecasting errors of 12-step-ahead MA-opt forecast of IP: Difference from benchmark

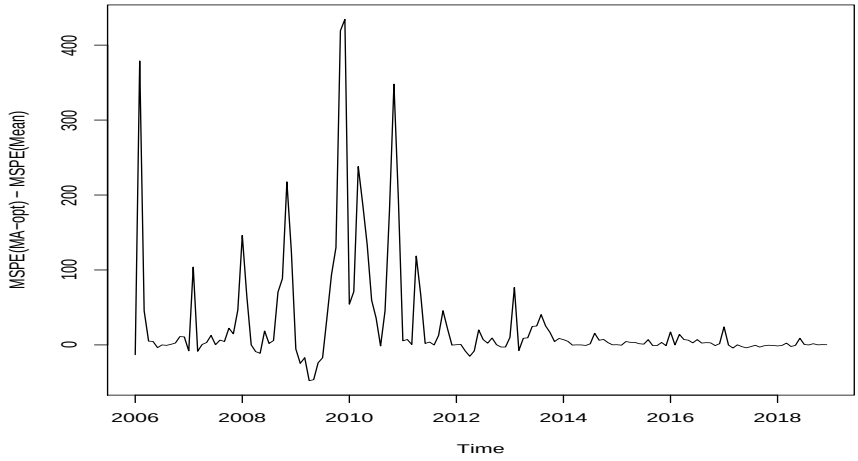


Figure 636: Mean squared forecasting errors of 12-step-ahead SES forecast of IP: Difference from benchmark

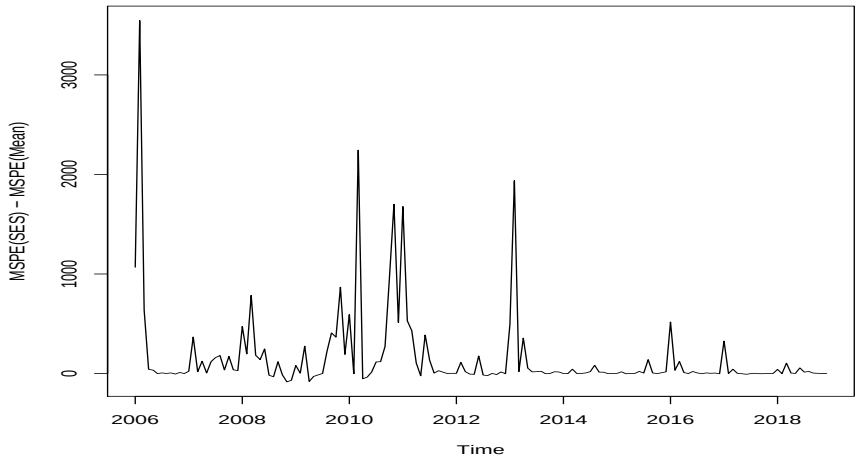


Figure 637: Mean squared forecasting errors of 12-step-ahead SES-opt forecast of IP: Difference from benchmark

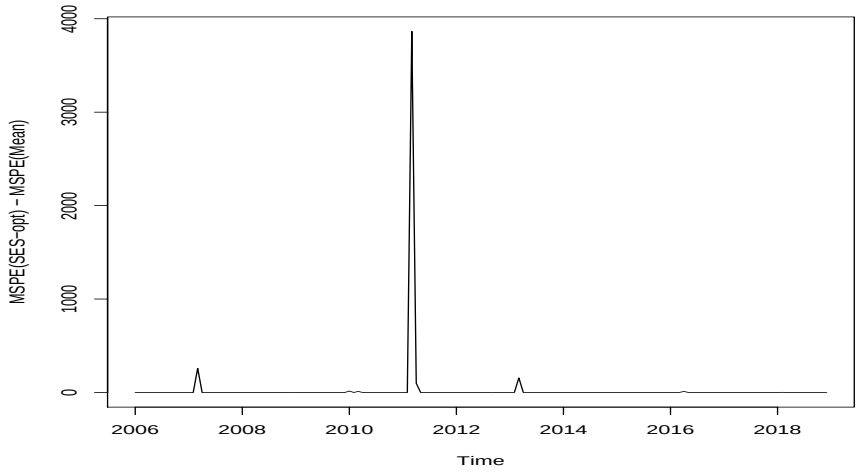


Figure 638: Mean squared forecasting errors of 12-step-ahead AR(1) forecast of IP: Difference from benchmark

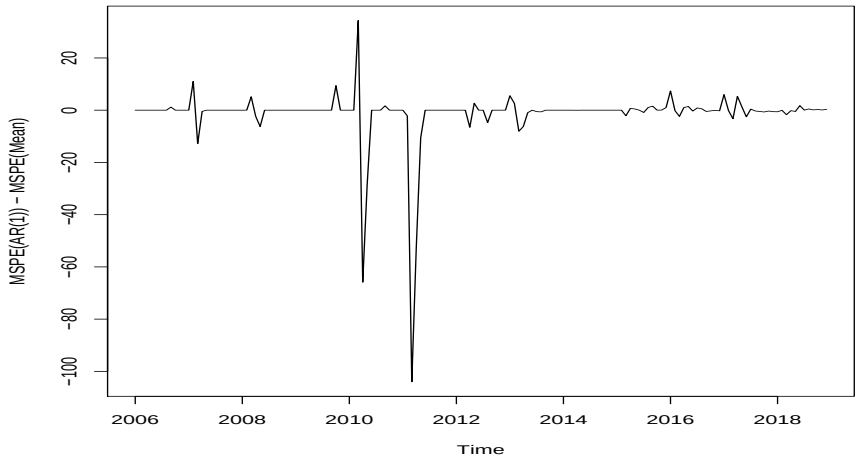


Figure 639: Mean squared forecasting errors of 12-step-ahead AR(p) forecast of IP: Difference from benchmark

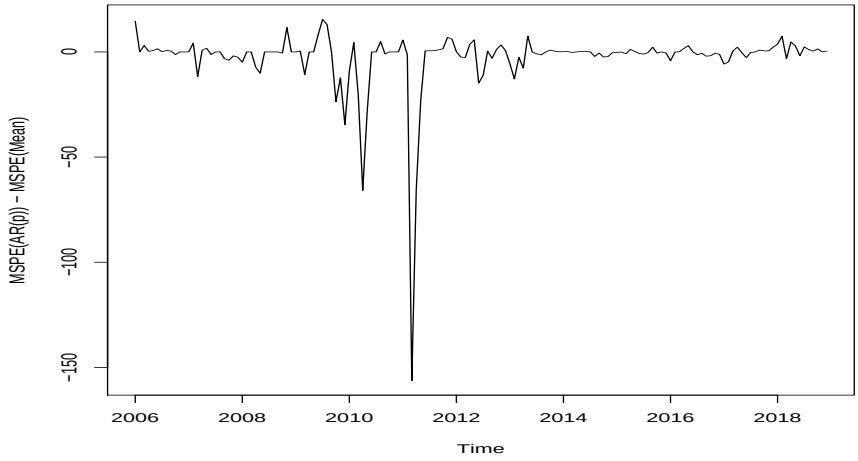


Figure 640: Mean squared forecasting errors of 12-step-ahead ARd(1) forecast of IP: Difference from benchmark

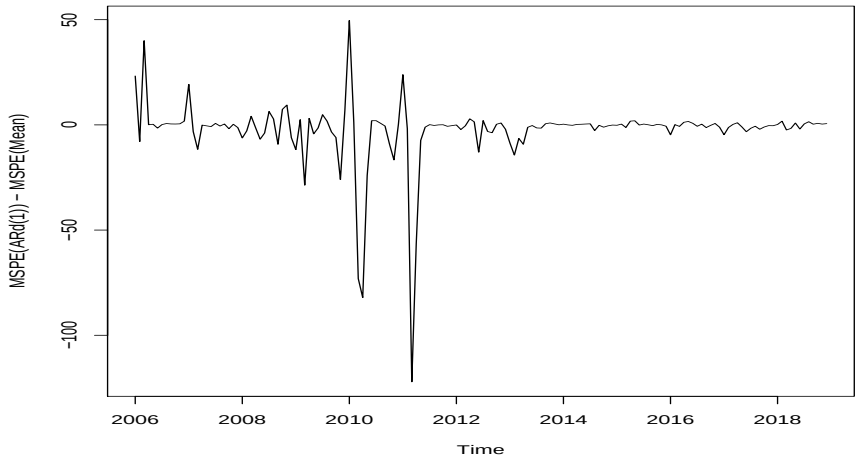


Figure 641: Mean squared forecasting errors of 12-step-ahead ARd(p) forecast of IP: Difference from benchmark

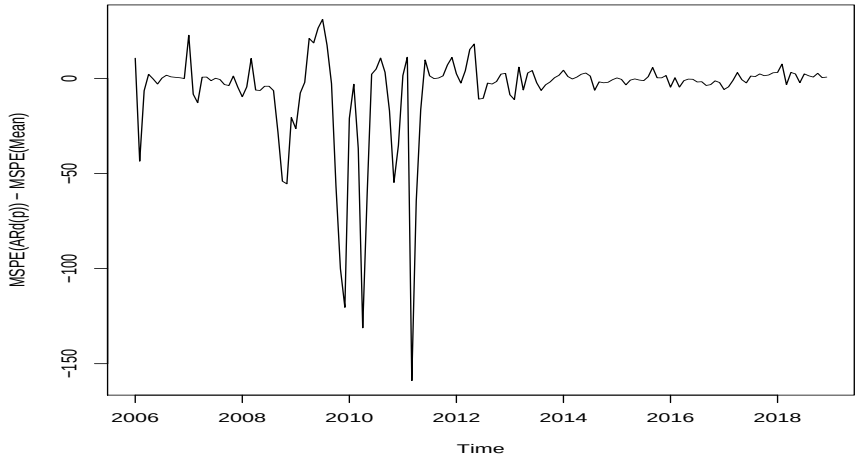


Figure 642: Mean squared forecasting errors of 12-step-ahead ARMA(1,1) forecast of IP: Difference from benchmark

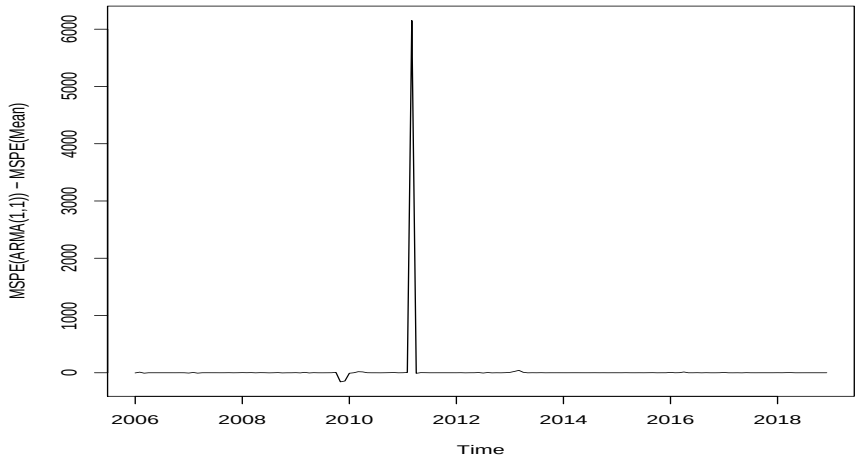


Figure 643: Mean squared forecasting errors of 12-step-ahead ARMA(p,q) forecast of IP: Difference from benchmark

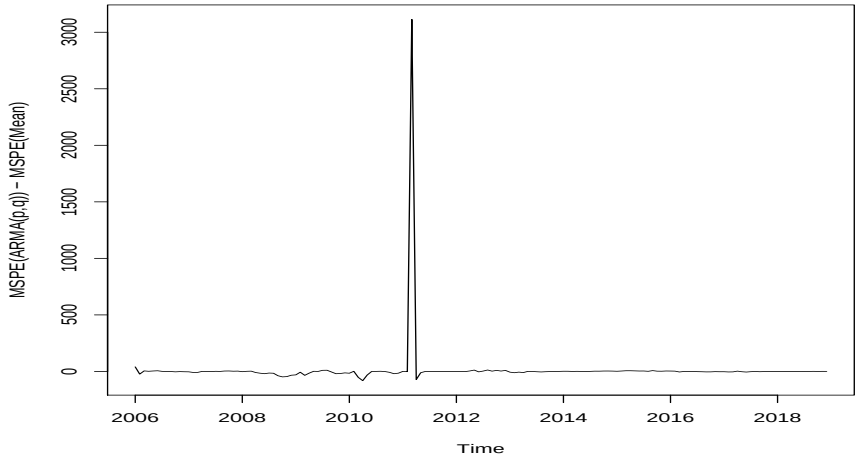


Figure 644: Mean squared forecasting errors of 12-step-ahead VAR(1) forecast of IP: Difference from benchmark

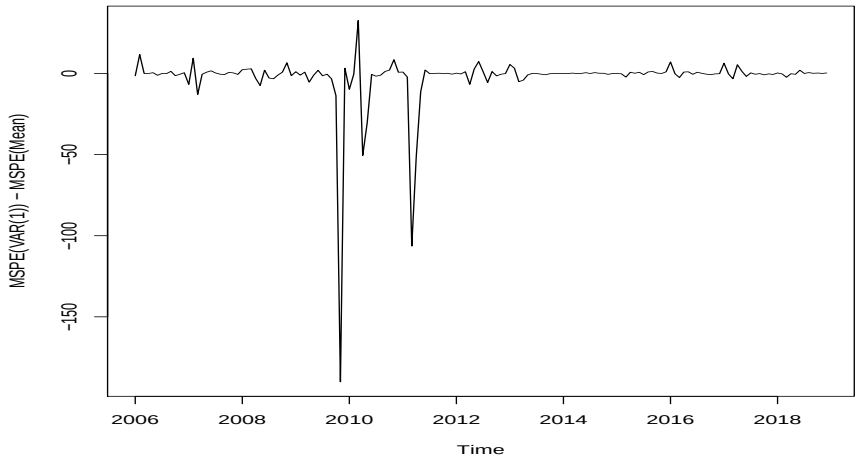


Figure 645: Mean squared forecasting errors of 12-step-ahead VAR(p) forecast of IP: Difference from benchmark

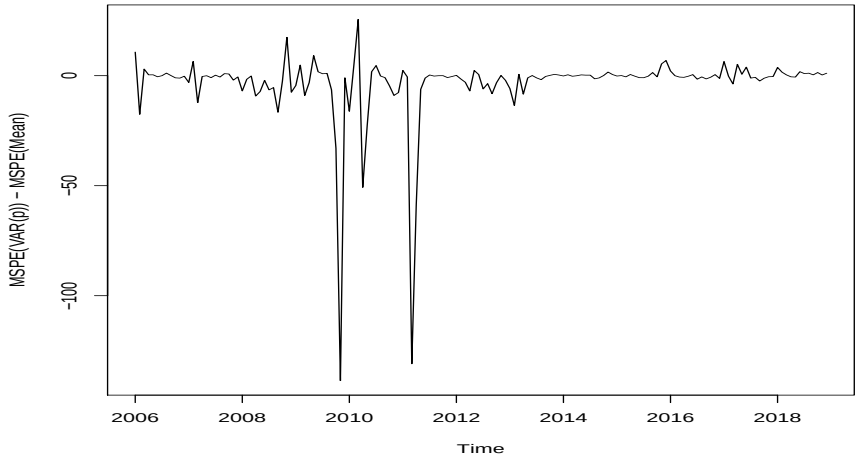


Figure 646: Mean squared forecasting errors of 12-step-ahead BVAR forecast of IP: Difference from benchmark

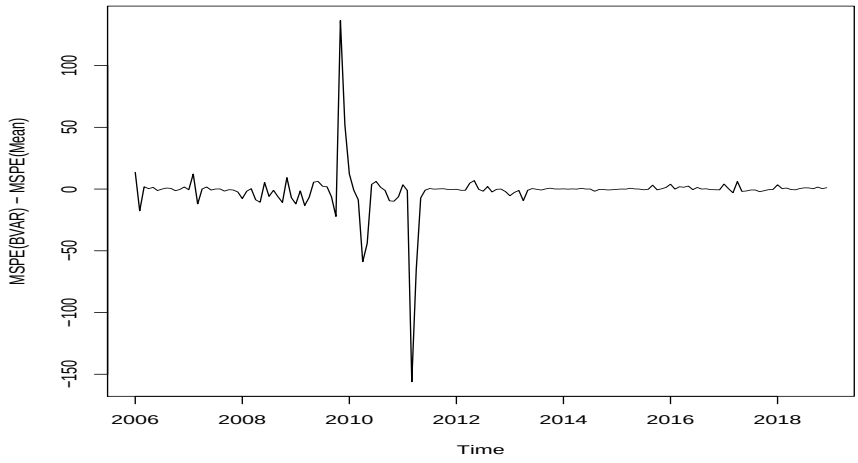


Figure 647: Mean squared forecasting errors of 12-step-ahead Factor(2) forecast of IP: Difference from benchmark

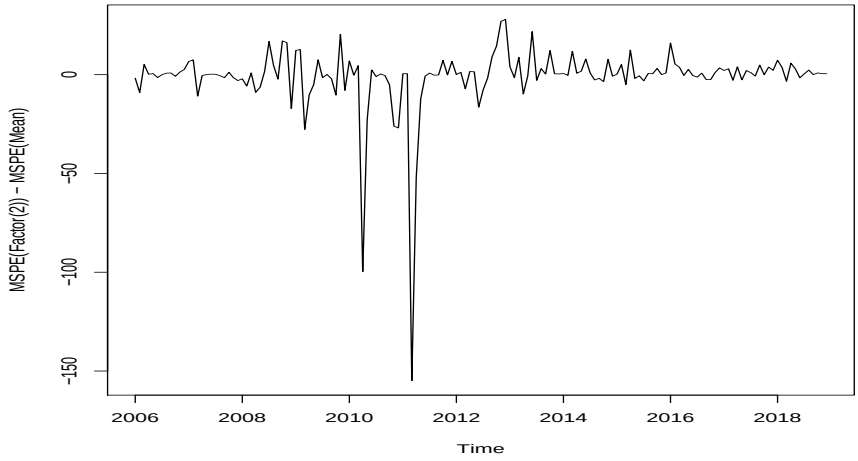


Figure 648: Mean squared forecasting errors of 12-step-ahead Factor(k) forecast of IP: Difference from benchmark

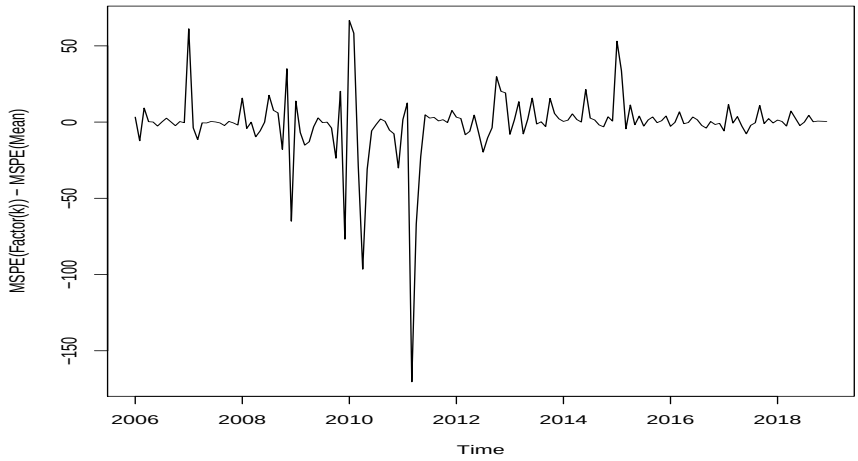


Figure 649: Mean squared forecasting errors of 12-step-ahead F(2)VAR(1) forecast of IP: Difference from benchmark

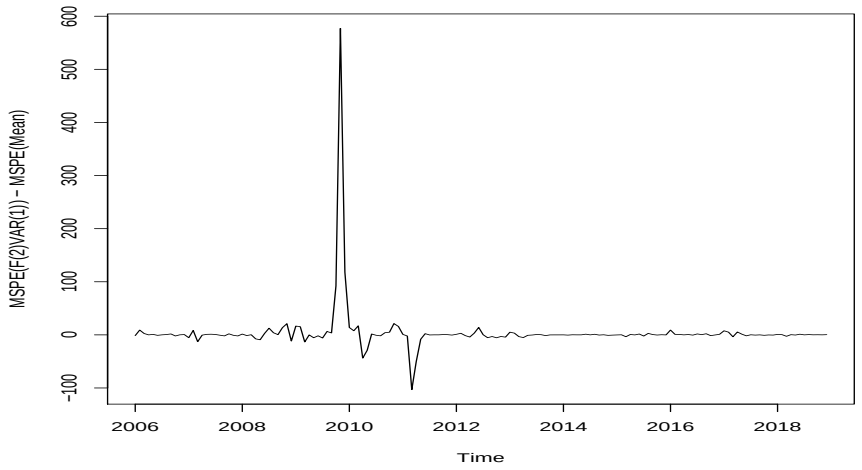
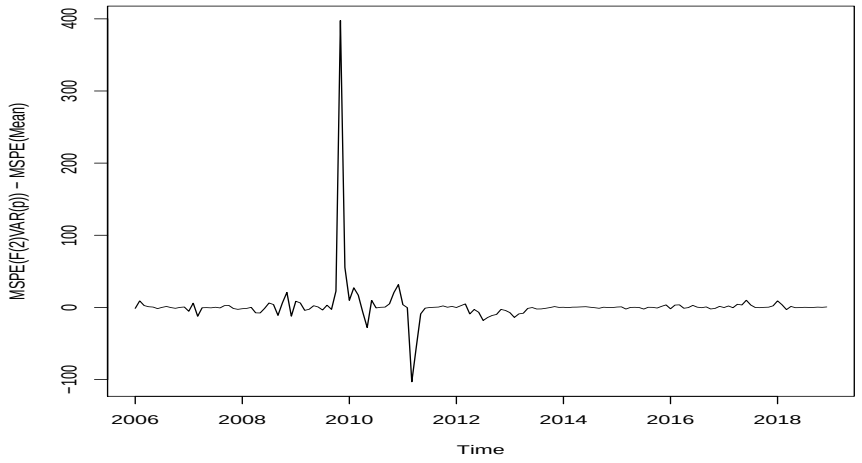


Figure 650: Mean squared forecasting errors of 12-step-ahead F(2)VAR(p) forecast of IP: Difference from benchmark



4.4 EP

4.4.1 Forecast Horizon = 1

Figure 651: Mean squared forecasting errors of 1-step-ahead Naive forecast of EP: Difference from benchmark

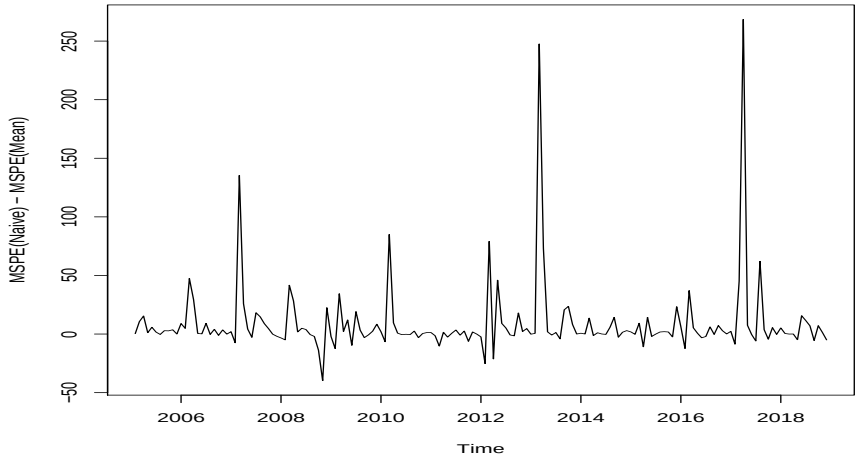


Figure 652: Mean squared forecasting errors of 1-step-ahead MA forecast of EP: Difference from benchmark

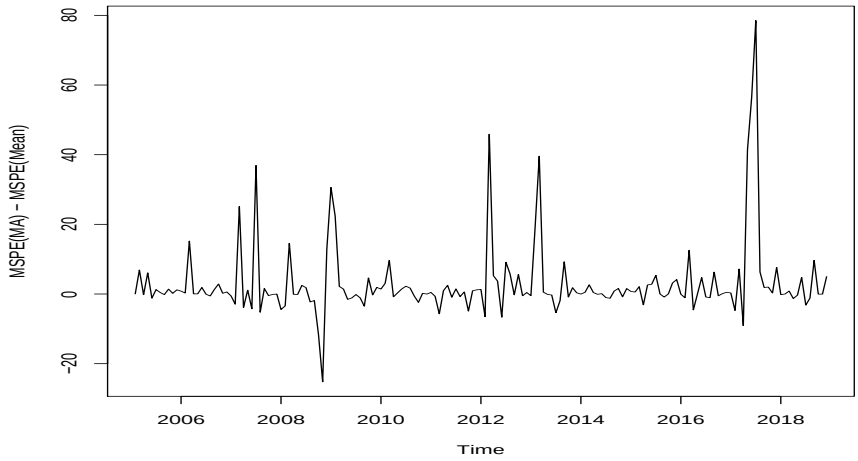


Figure 653: Mean squared forecasting errors of 1-step-ahead MA-opt forecast of EP: Difference from benchmark

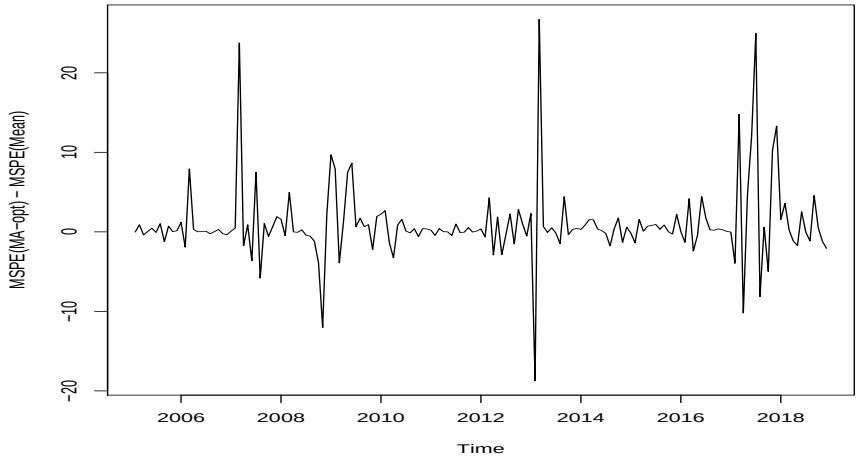


Figure 654: Mean squared forecasting errors of 1-step-ahead SES forecast of EP: Difference from benchmark

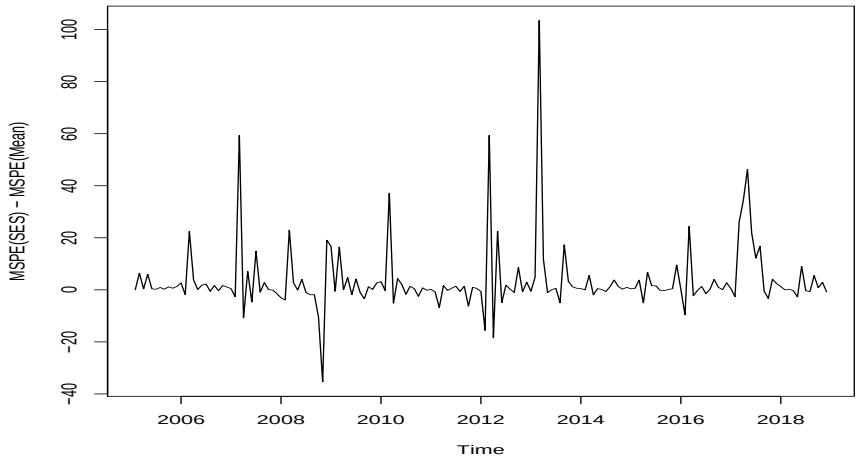


Figure 655: Mean squared forecasting errors of 1-step-ahead SES-opt forecast of EP: Difference from benchmark

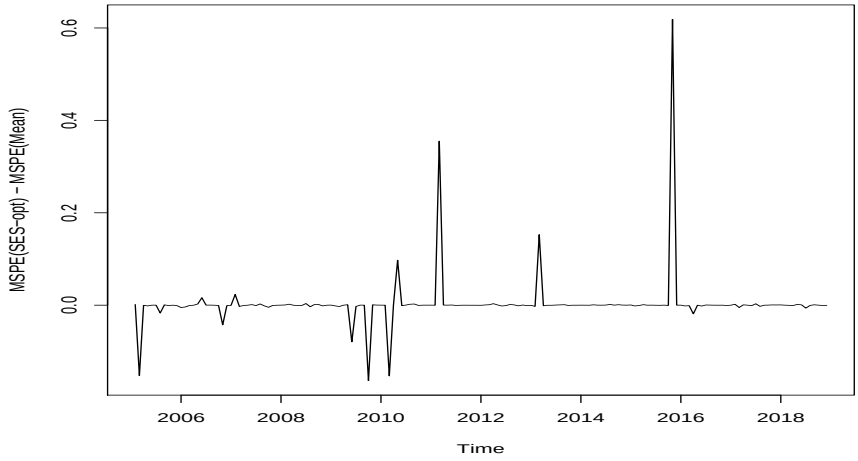


Figure 656: Mean squared forecasting errors of 1-step-ahead AR(1) forecast of EP: Difference from benchmark

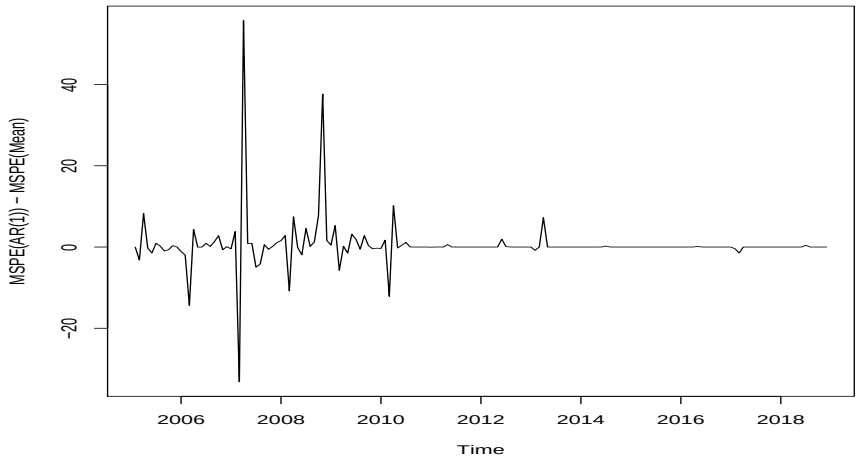


Figure 657: Mean squared forecasting errors of 1-step-ahead AR(p) forecast of EP: Difference from benchmark

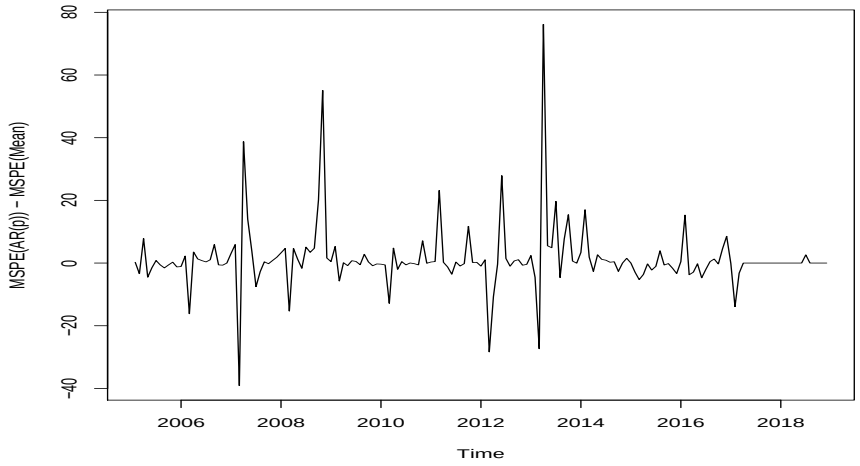


Figure 658: Mean squared forecasting errors of 1-step-ahead ARd(1) forecast of EP: Difference from benchmark

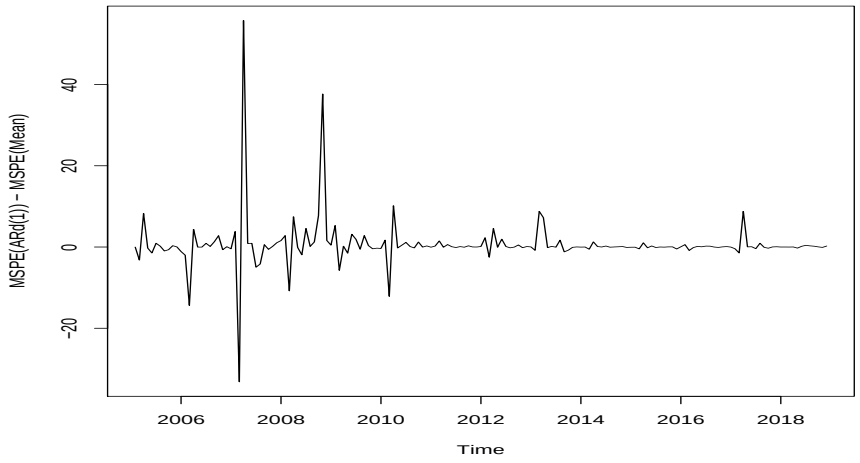


Figure 659: Mean squared forecasting errors of 1-step-ahead ARd(p) forecast of EP: Difference from benchmark

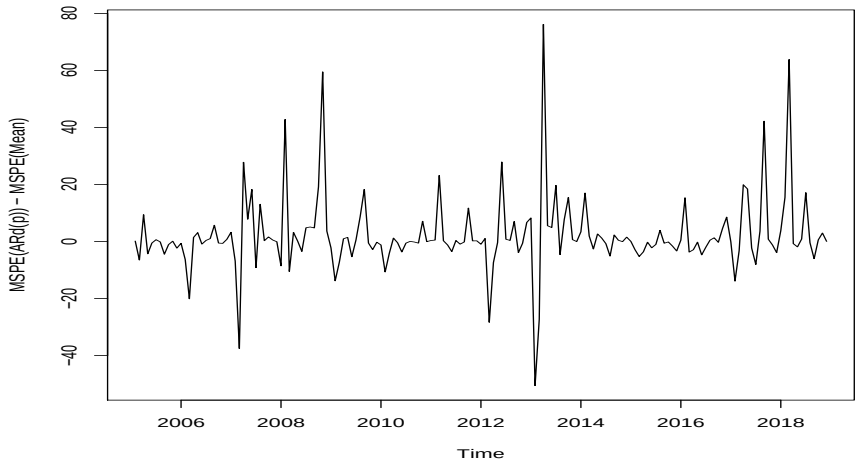


Figure 660: Mean squared forecasting errors of 1-step-ahead ARMA(1,1) forecast of EP: Difference from benchmark

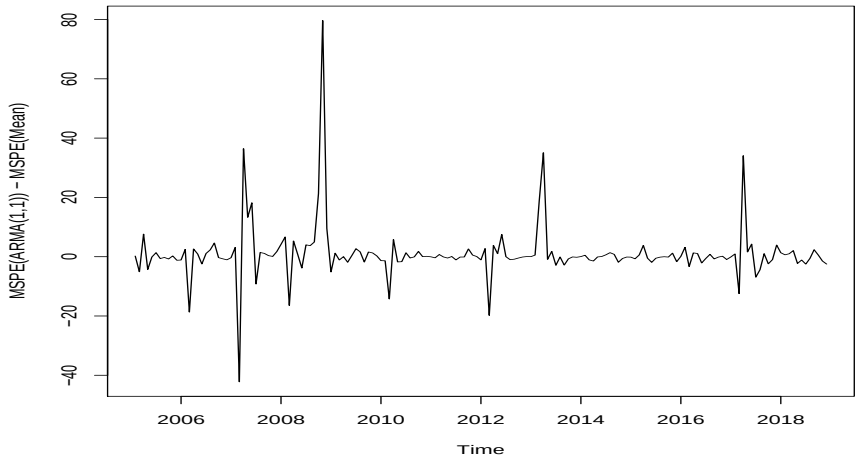


Figure 661: Mean squared forecasting errors of 1-step-ahead ARMA(p,q) forecast of EP: Difference from benchmark

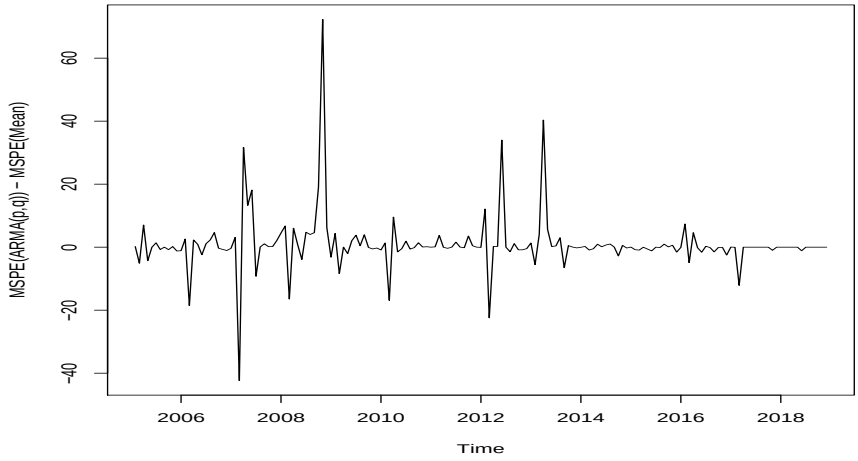


Figure 662: Mean squared forecasting errors of 1-step-ahead VAR(1) forecast of EP: Difference from benchmark

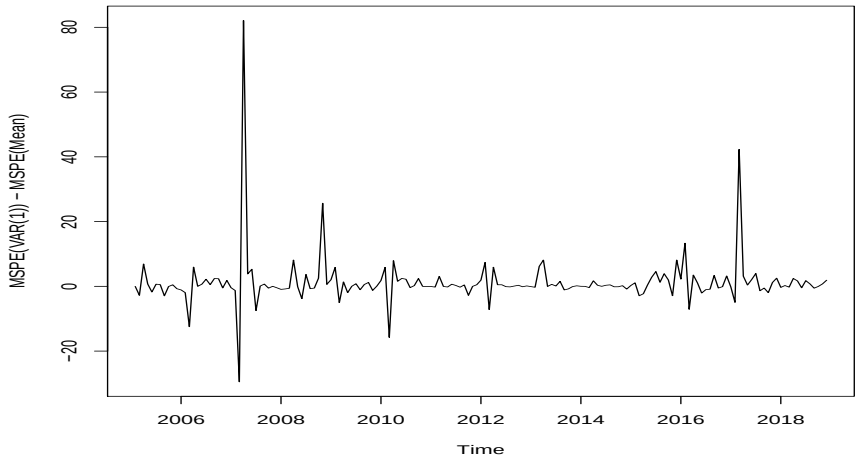


Figure 663: Mean squared forecasting errors of 1-step-ahead VAR(p) forecast of EP: Difference from benchmark

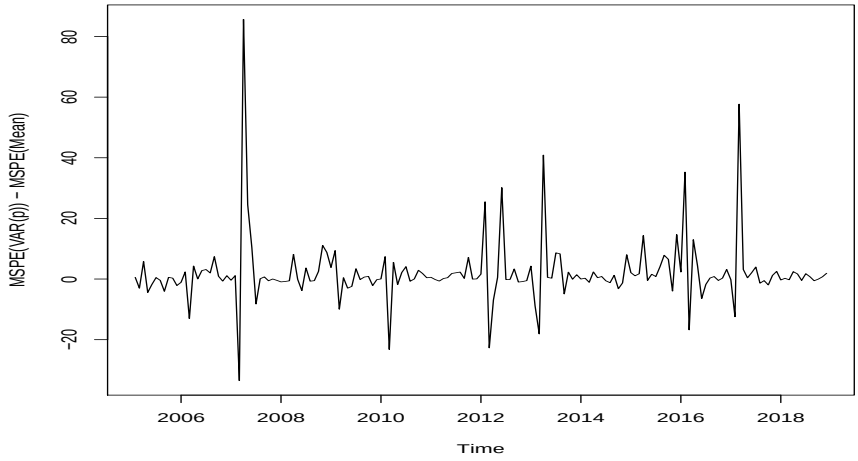


Figure 664: Mean squared forecasting errors of 1-step-ahead BVAR forecast of EP: Difference from benchmark

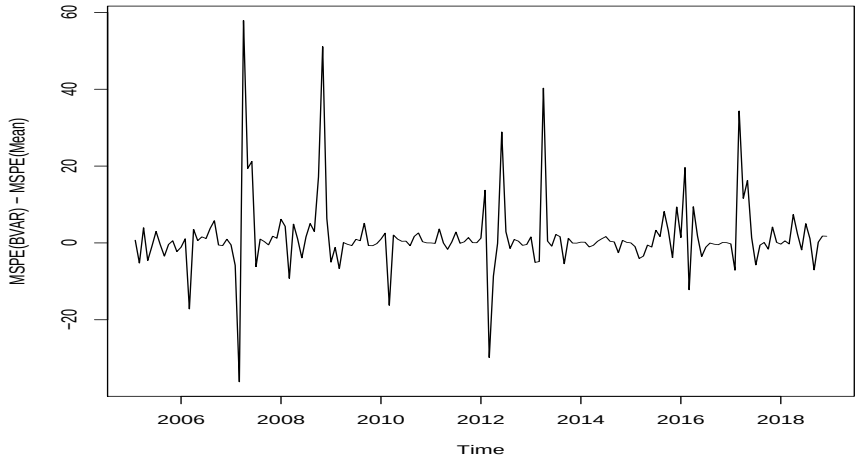


Figure 665: Mean squared forecasting errors of 1-step-ahead Factor(2) forecast of EP: Difference from benchmark

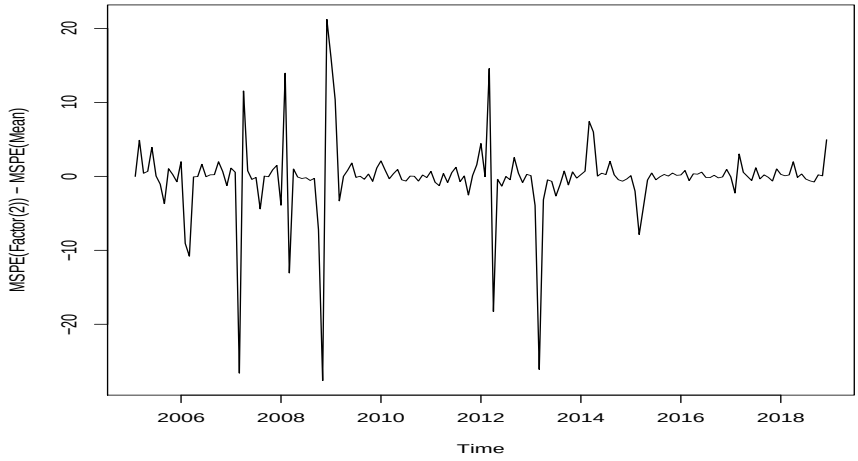


Figure 666: Mean squared forecasting errors of 1-step-ahead Factor(k) forecast of EP: Difference from benchmark

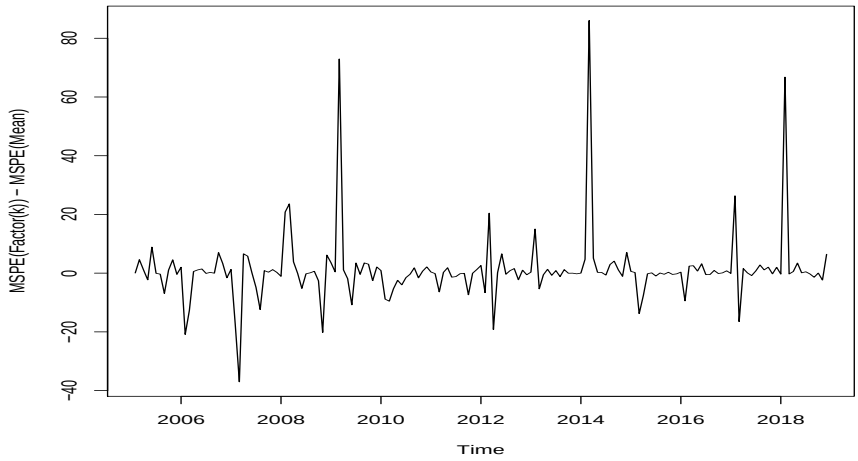


Figure 667: Mean squared forecasting errors of 1-step-ahead F(2)VAR(1) forecast of EP: Difference from benchmark

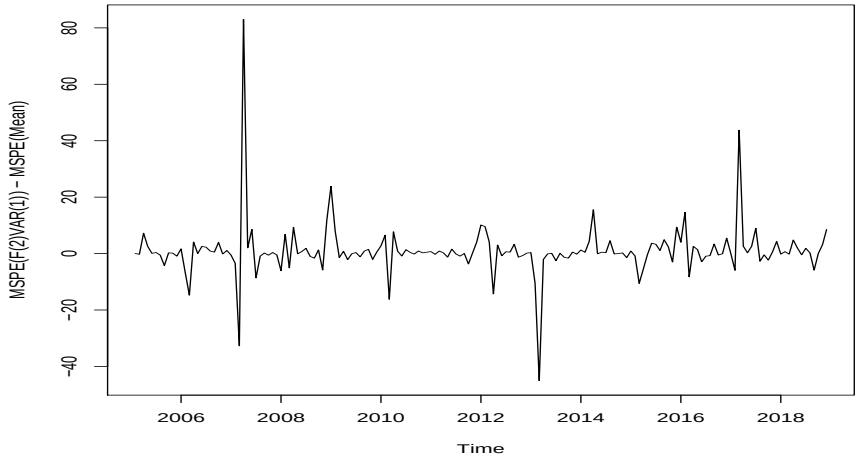
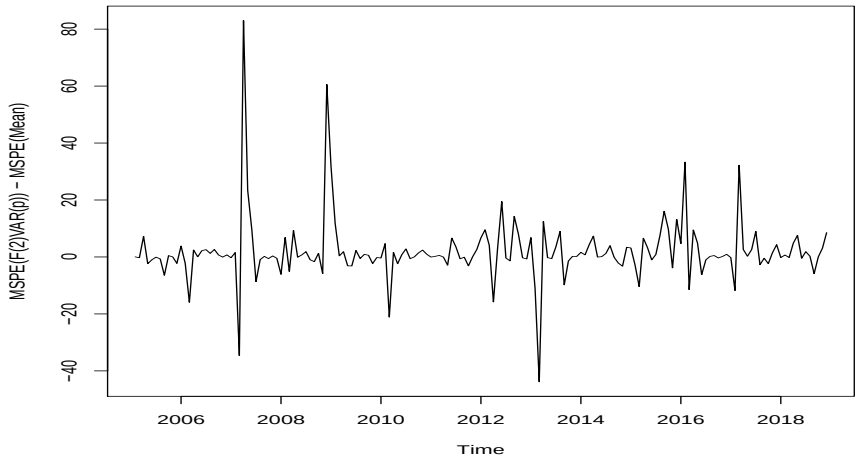


Figure 668: Mean squared forecasting errors of 1-step-ahead F(2)VAR(p) forecast of EP: Difference from benchmark



4.4.2 Forecast Horizon = 3

Figure 669: Mean squared forecasting errors of 3-step-ahead Naive forecast of EP: Difference from benchmark

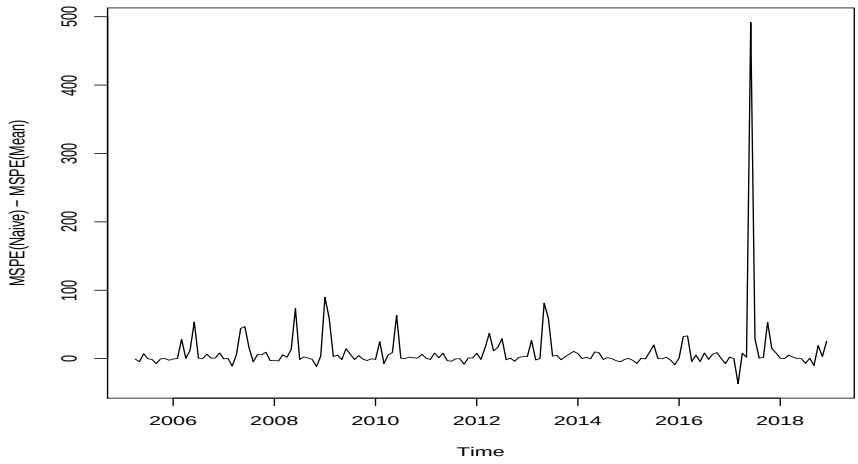


Figure 670: Mean squared forecasting errors of 3-step-ahead MA forecast of EP: Difference from benchmark

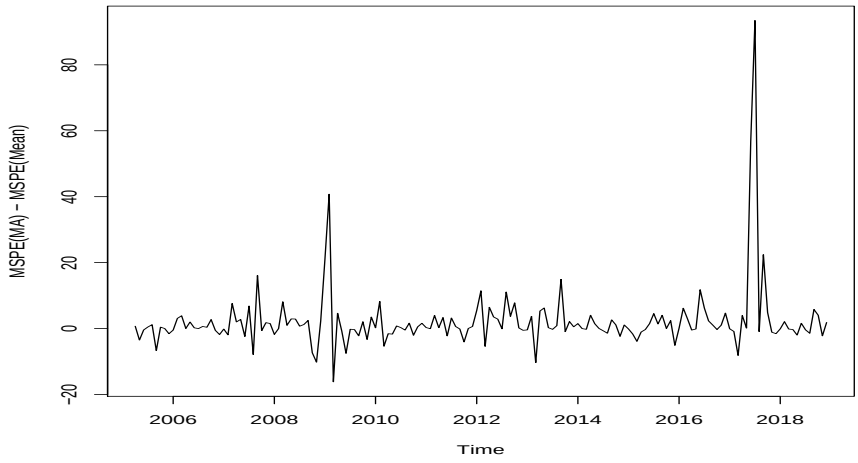


Figure 671: Mean squared forecasting errors of 3-step-ahead MA-opt forecast of EP: Difference from benchmark

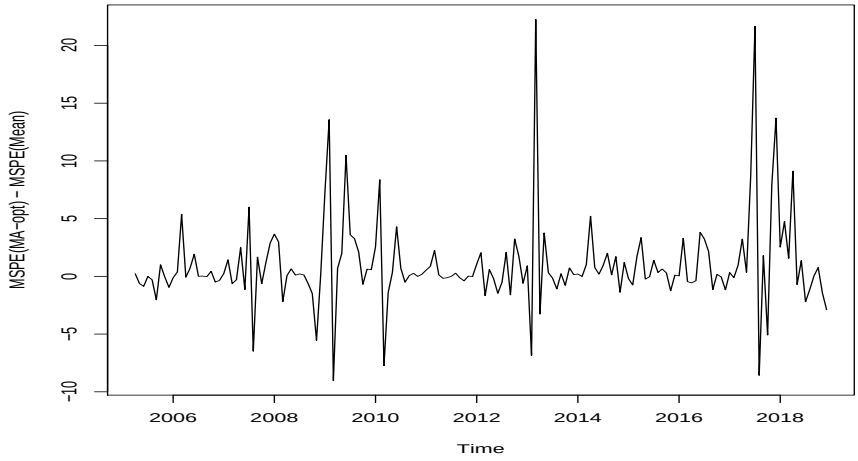


Figure 672: Mean squared forecasting errors of 3-step-ahead SES forecast of EP: Difference from benchmark

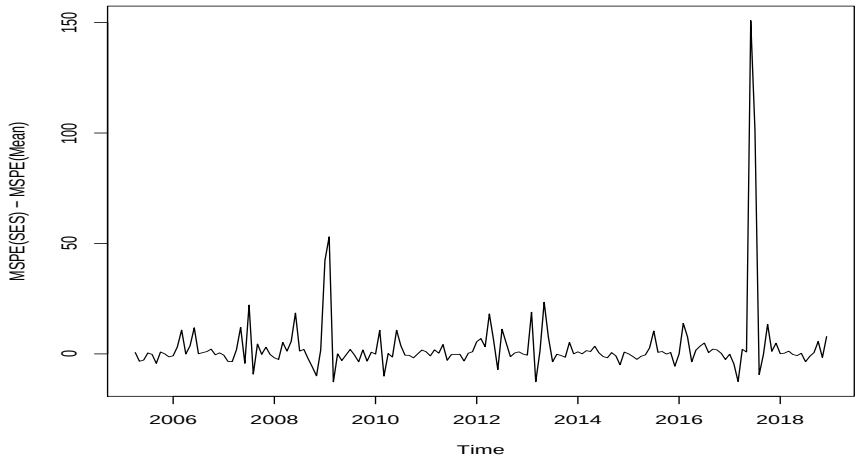


Figure 673: Mean squared forecasting errors of 3-step-ahead SES-opt forecast of EP: Difference from benchmark

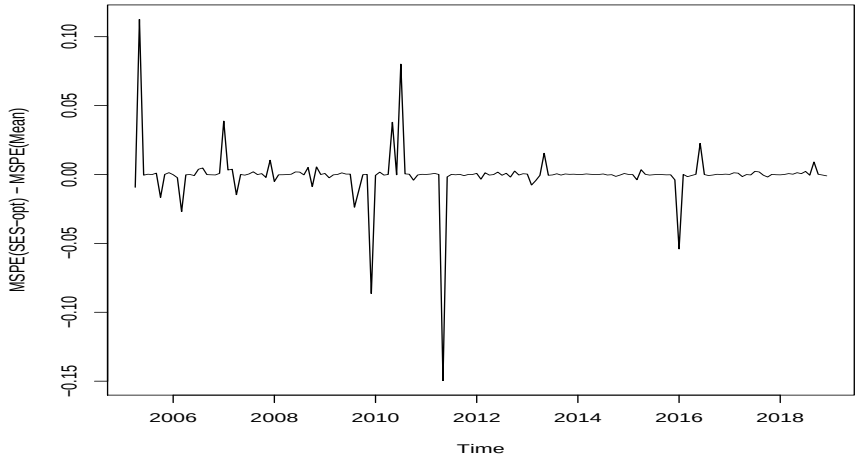


Figure 674: Mean squared forecasting errors of 3-step-ahead AR(1) forecast of EP: Difference from benchmark

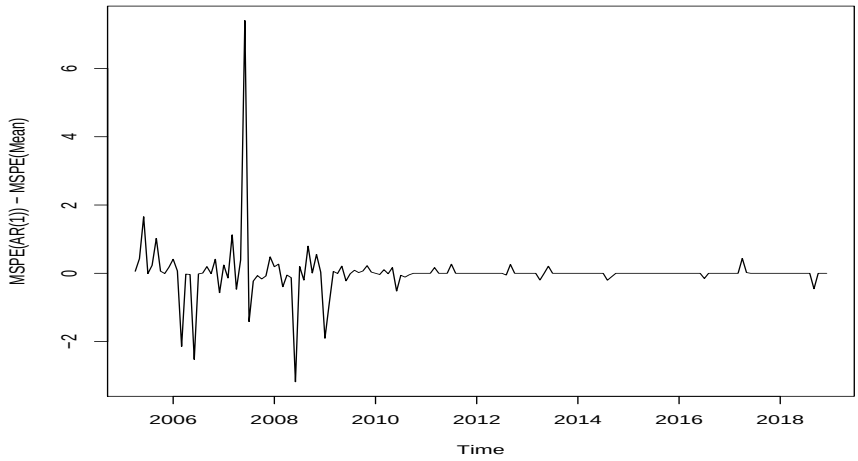


Figure 675: Mean squared forecasting errors of 3-step-ahead AR(p) forecast of EP: Difference from benchmark

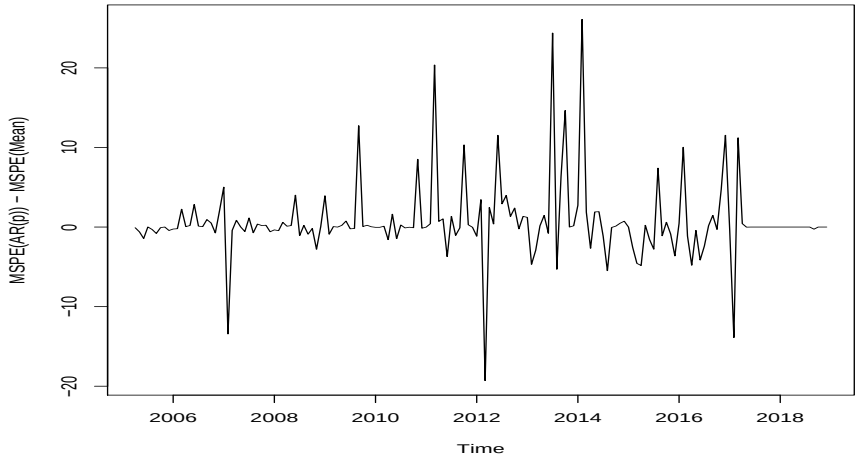


Figure 676: Mean squared forecasting errors of 3-step-ahead ARd(1) forecast of EP: Difference from benchmark

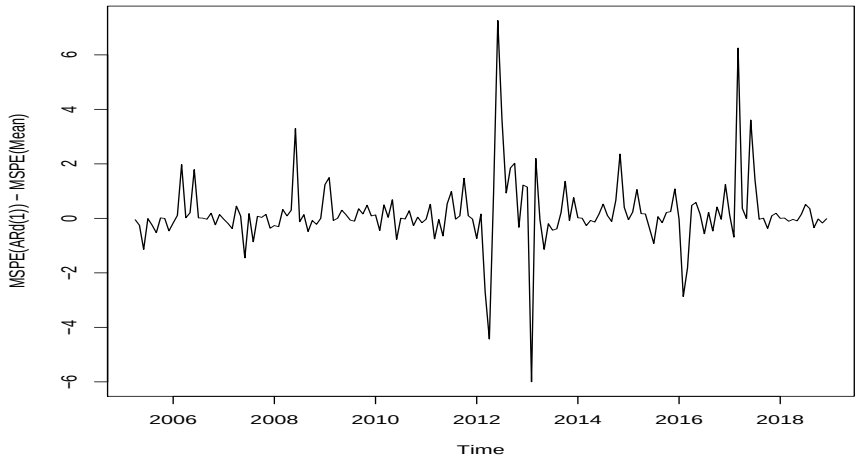


Figure 677: Mean squared forecasting errors of 3-step-ahead ARd(p) forecast of EP: Difference from benchmark

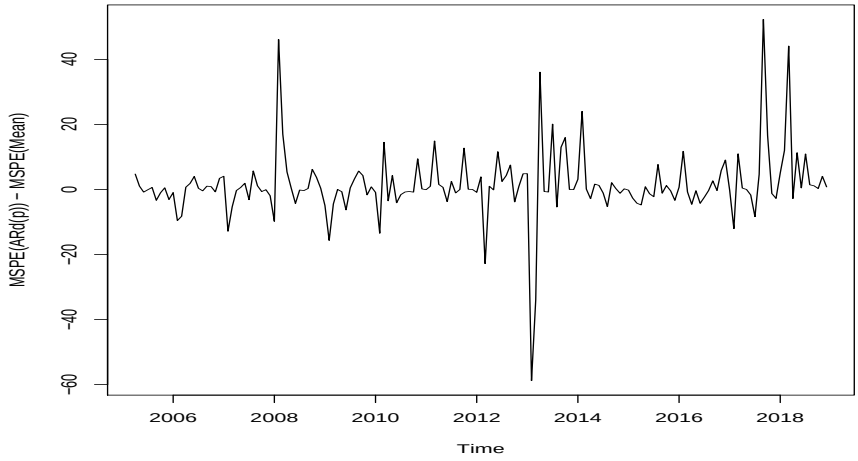


Figure 678: Mean squared forecasting errors of 3-step-ahead ARMA(1,1) forecast of EP: Difference from benchmark

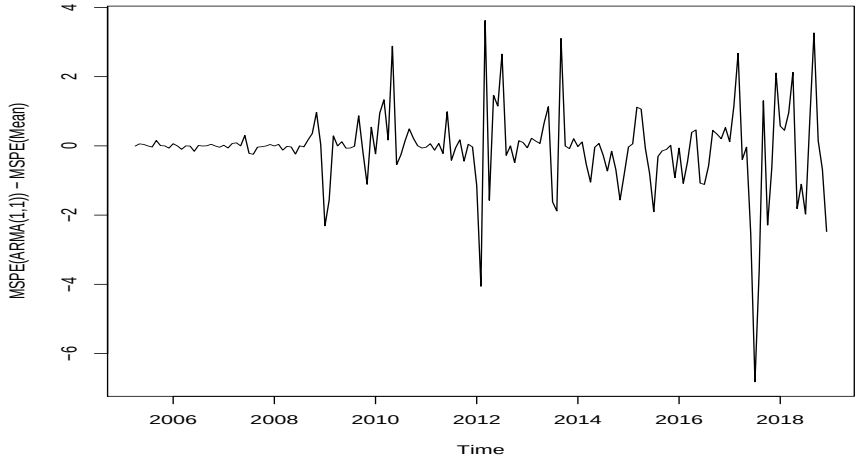


Figure 679: Mean squared forecasting errors of 3-step-ahead ARMA(p,q) forecast of EP: Difference from benchmark

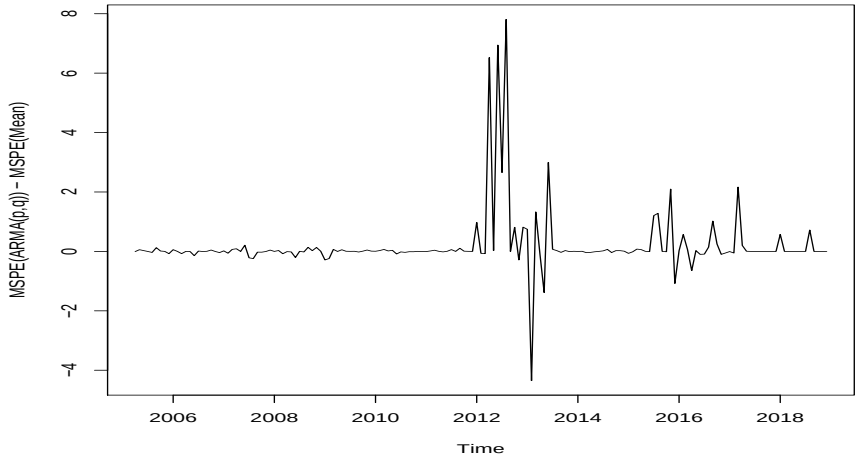


Figure 680: Mean squared forecasting errors of 3-step-ahead VAR(1) forecast of EP: Difference from benchmark

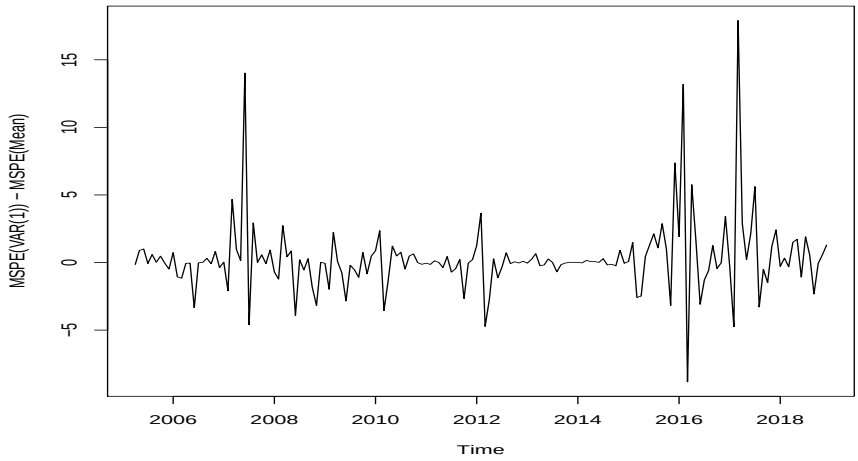


Figure 681: Mean squared forecasting errors of 3-step-ahead VAR(p) forecast of EP: Difference from benchmark

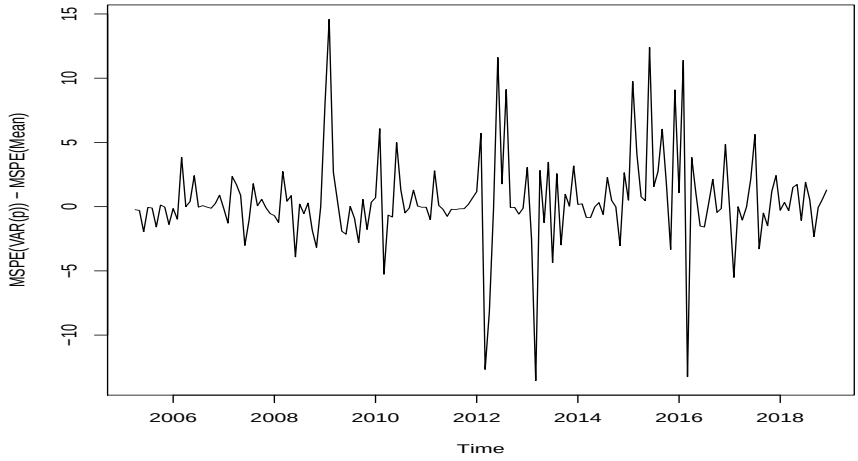


Figure 682: Mean squared forecasting errors of 3-step-ahead BVAR forecast of EP: Difference from benchmark

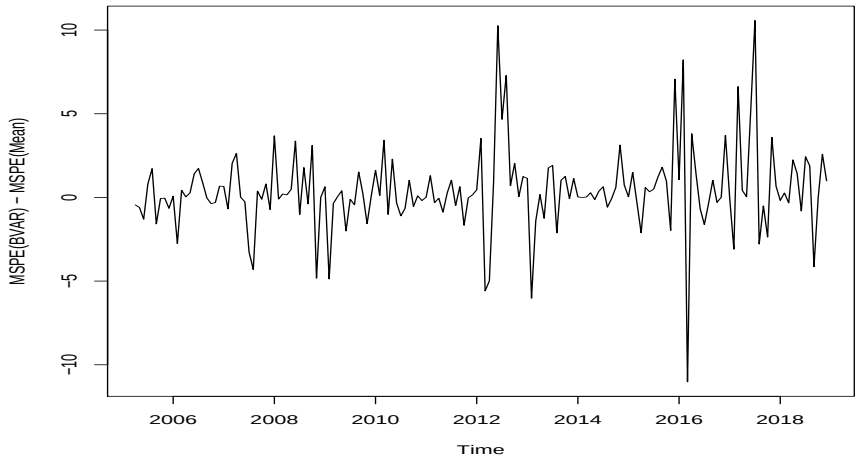


Figure 683: Mean squared forecasting errors of 3-step-ahead Factor(2) forecast of EP: Difference from benchmark

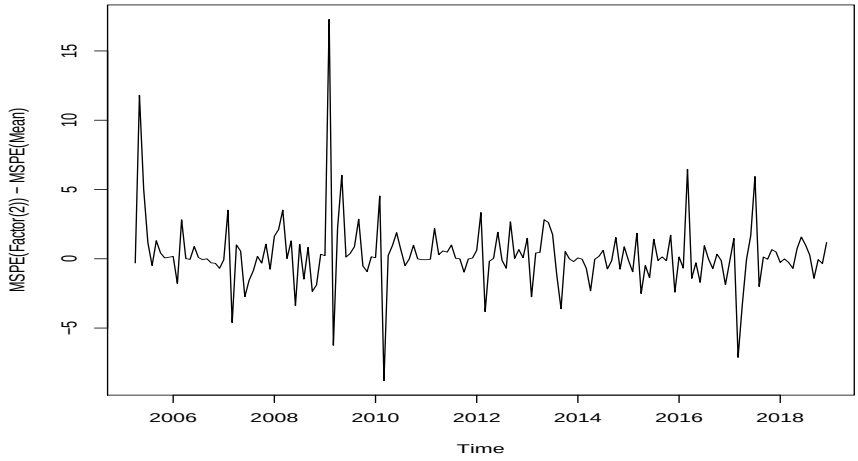


Figure 684: Mean squared forecasting errors of 3-step-ahead Factor(k) forecast of EP: Difference from benchmark

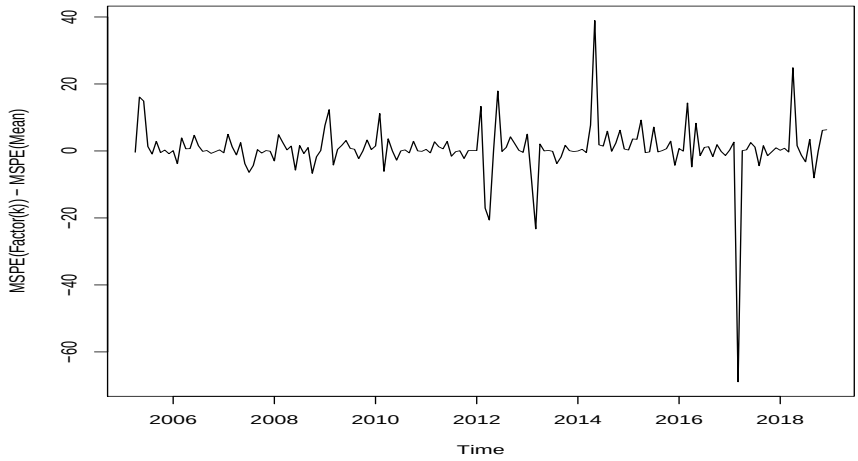


Figure 685: Mean squared forecasting errors of 3-step-ahead F(2)VAR(1) forecast of EP: Difference from benchmark

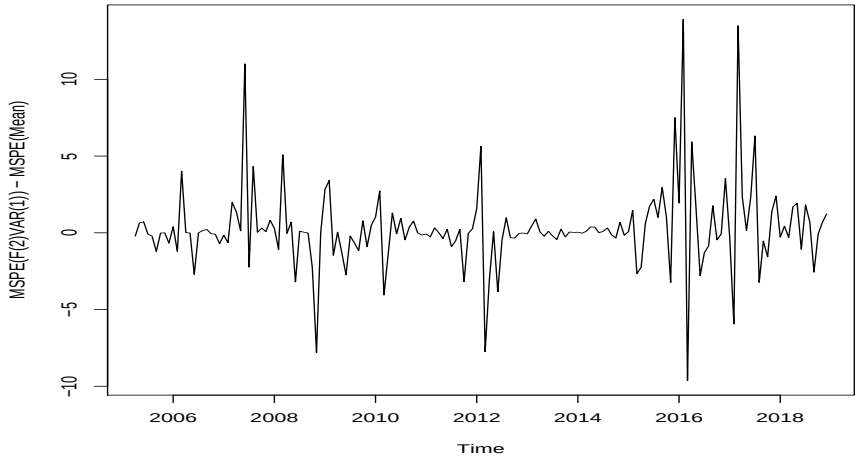
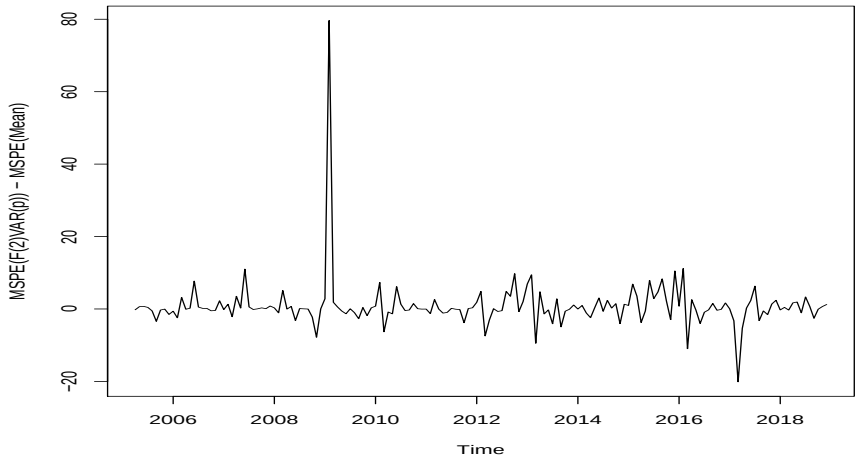


Figure 686: Mean squared forecasting errors of 3-step-ahead F(2)VAR(p) forecast of EP: Difference from benchmark



4.4.3 Forecast Horizon = 6

Figure 687: Mean squared forecasting errors of 6-step-ahead Naive forecast of EP: Difference from benchmark

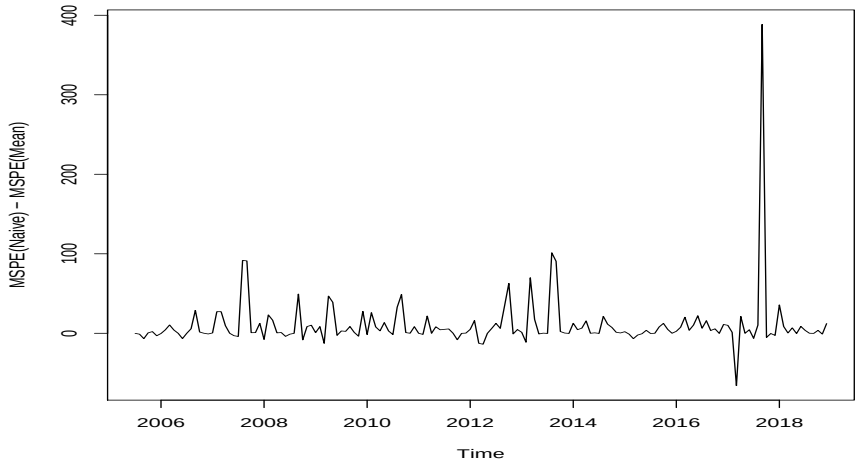


Figure 688: Mean squared forecasting errors of 6-step-ahead MA forecast of EP: Difference from benchmark

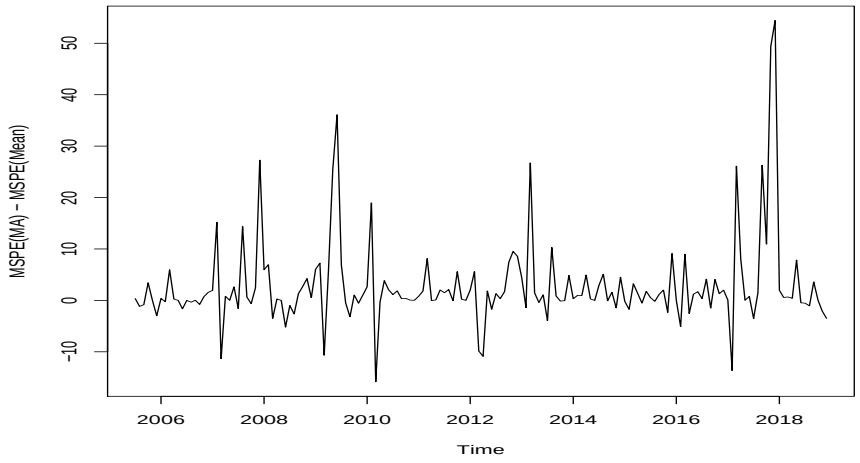


Figure 689: Mean squared forecasting errors of 6-step-ahead MA-opt forecast of EP: Difference from benchmark

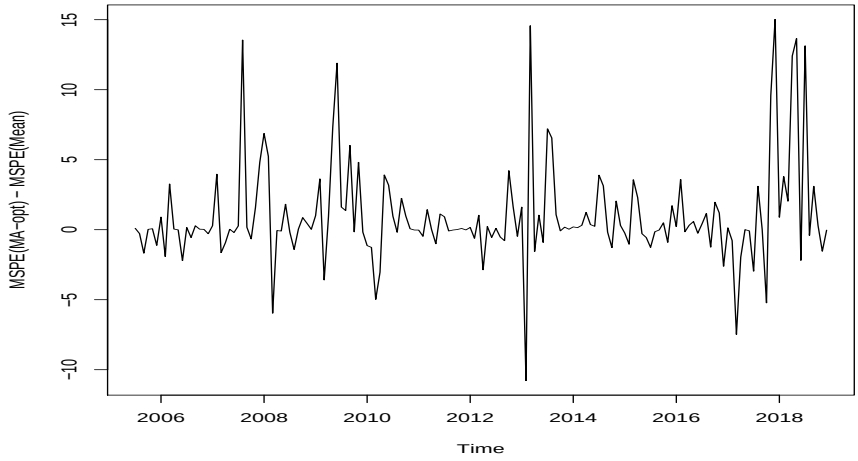


Figure 690: Mean squared forecasting errors of 6-step-ahead SES forecast of EP: Difference from benchmark

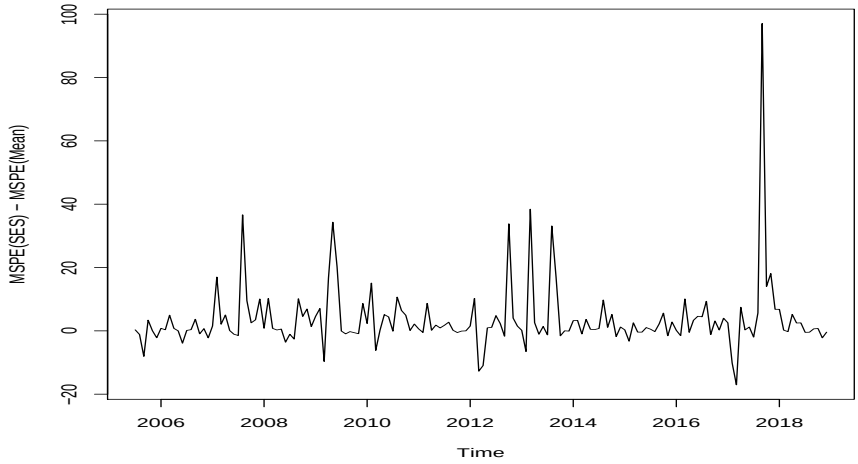


Figure 691: Mean squared forecasting errors of 6-step-ahead SES-opt forecast of EP: Difference from benchmark

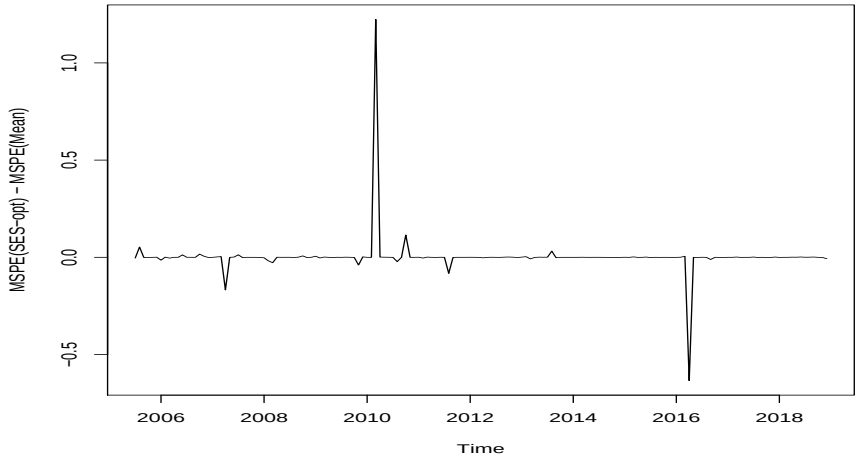


Figure 692: Mean squared forecasting errors of 6-step-ahead AR(1) forecast of EP: Difference from benchmark

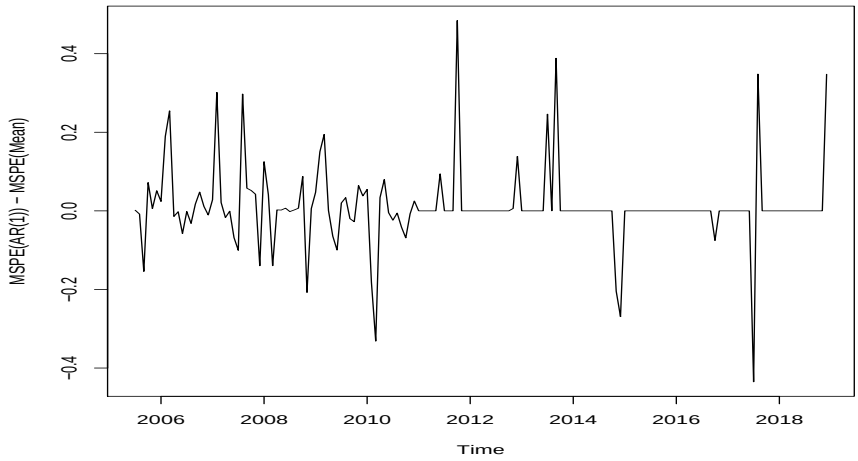


Figure 693: Mean squared forecasting errors of 6-step-ahead AR(p) forecast of EP: Difference from benchmark

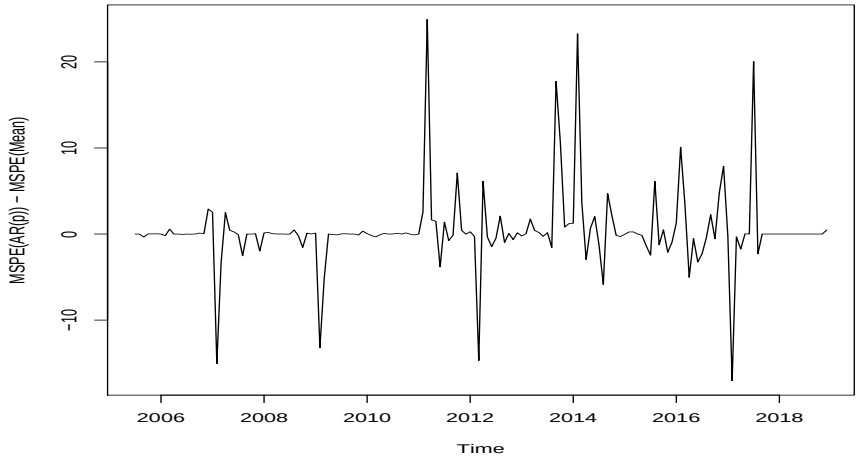


Figure 694: Mean squared forecasting errors of 6-step-ahead ARd(1) forecast of EP: Difference from benchmark

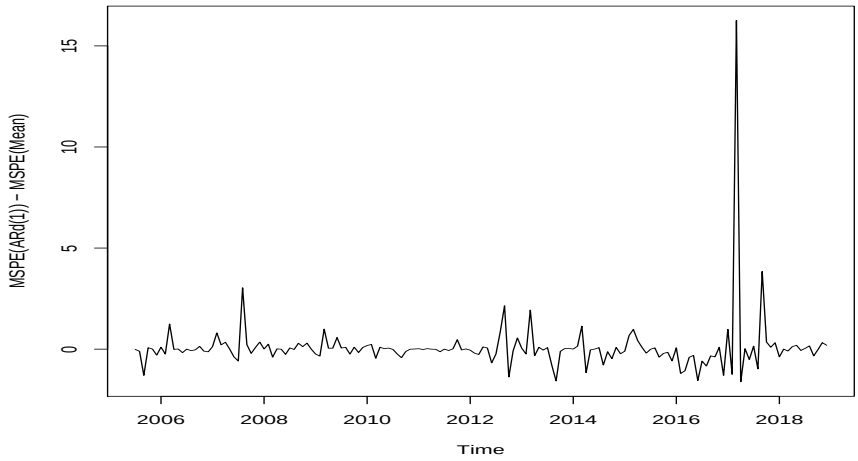


Figure 695: Mean squared forecasting errors of 6-step-ahead ARd(p) forecast of EP: Difference from benchmark

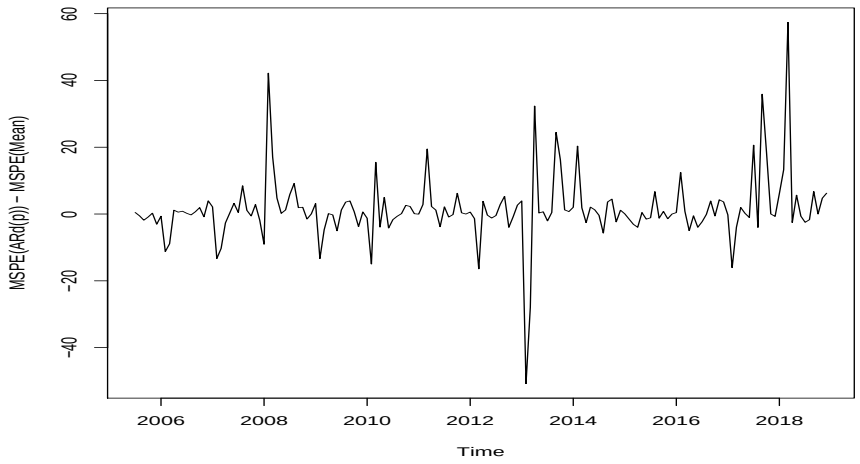


Figure 696: Mean squared forecasting errors of 6-step-ahead ARMA(1,1) forecast of EP: Difference from benchmark

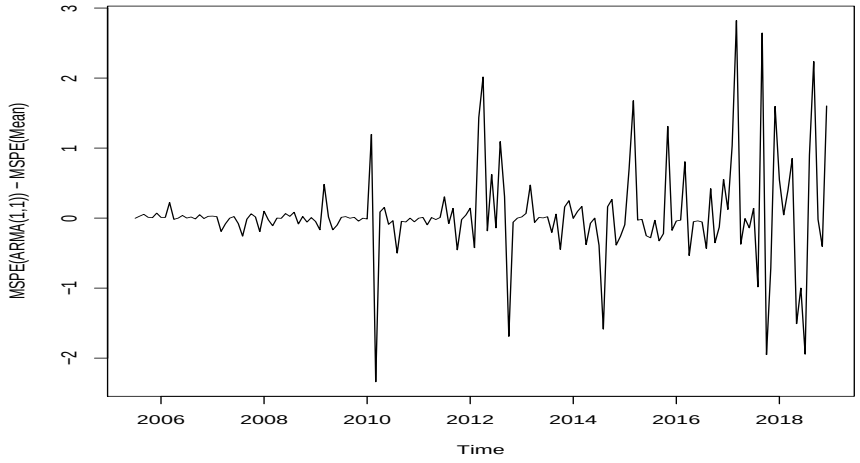


Figure 697: Mean squared forecasting errors of 6-step-ahead ARMA(p,q) forecast of EP: Difference from benchmark

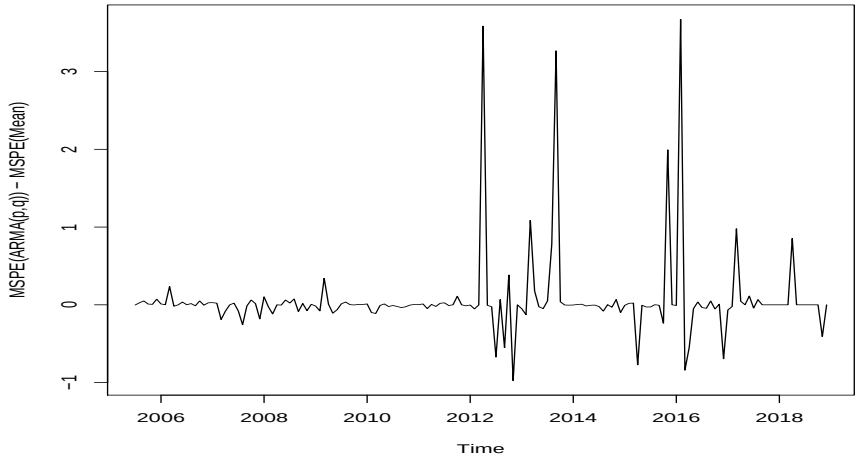


Figure 698: Mean squared forecasting errors of 6-step-ahead VAR(1) forecast of EP: Difference from benchmark

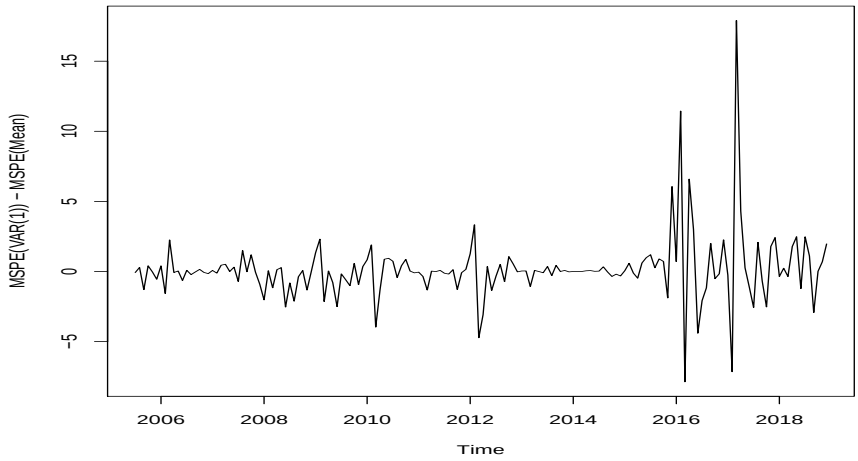


Figure 699: Mean squared forecasting errors of 6-step-ahead VAR(p) forecast of EP: Difference from benchmark

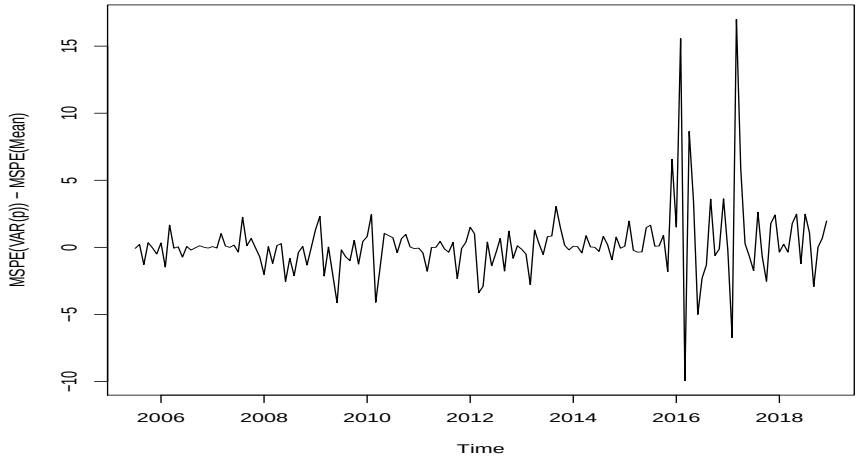


Figure 700: Mean squared forecasting errors of 6-step-ahead BVAR forecast of EP: Difference from benchmark

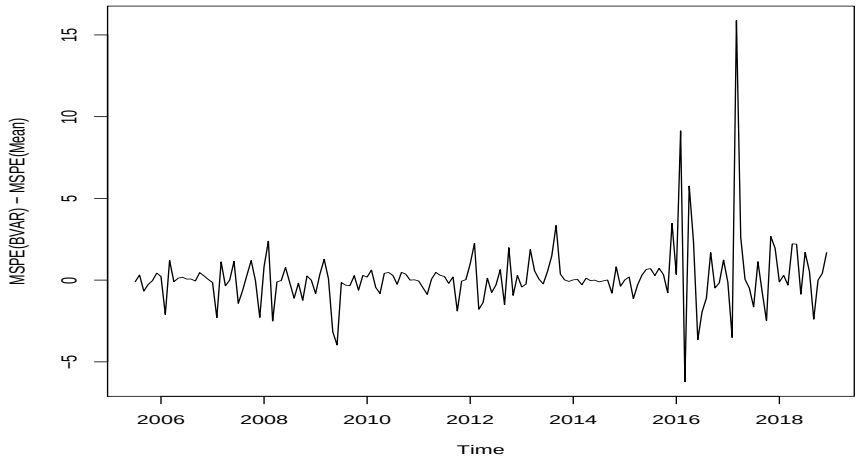


Figure 701: Mean squared forecasting errors of 6-step-ahead Factor(2) forecast of EP: Difference from benchmark

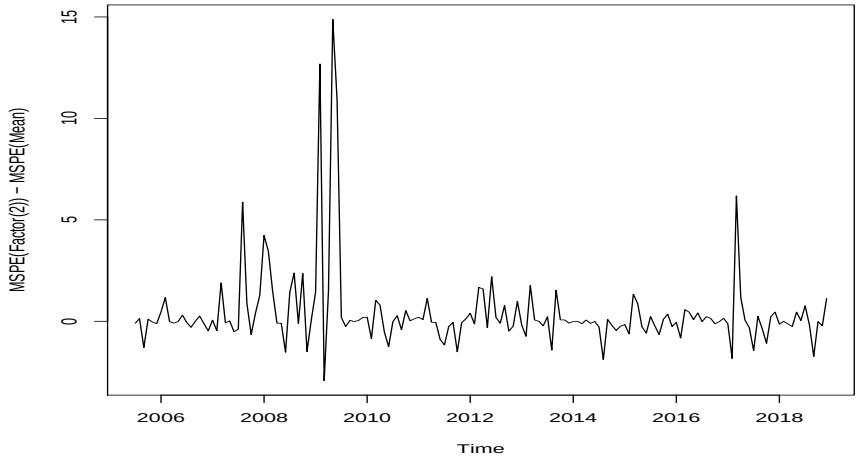


Figure 702: Mean squared forecasting errors of 6-step-ahead Factor(k) forecast of EP: Difference from benchmark

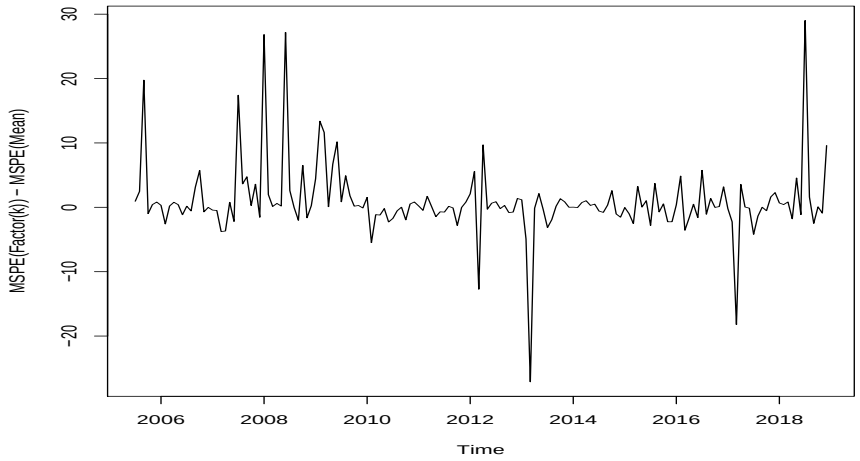


Figure 703: Mean squared forecasting errors of 6-step-ahead F(2)VAR(1) forecast of EP: Difference from benchmark

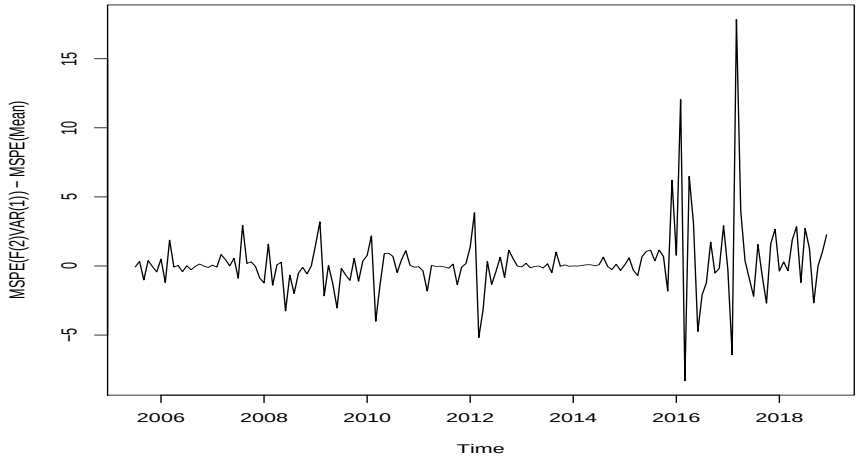
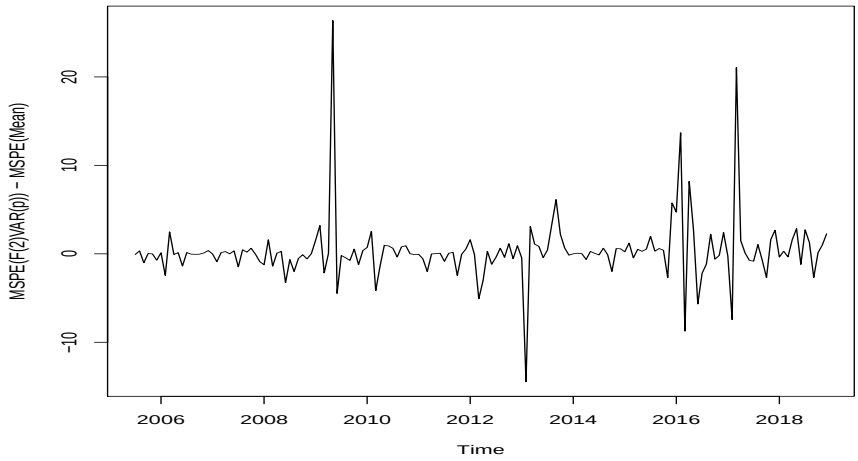


Figure 704: Mean squared forecasting errors of 6-step-ahead F(2)VAR(p) forecast of EP: Difference from benchmark



4.4.4 Forecast Horizon = 9

Figure 705: Mean squared forecasting errors of 9-step-ahead Naive forecast of EP: Difference from benchmark

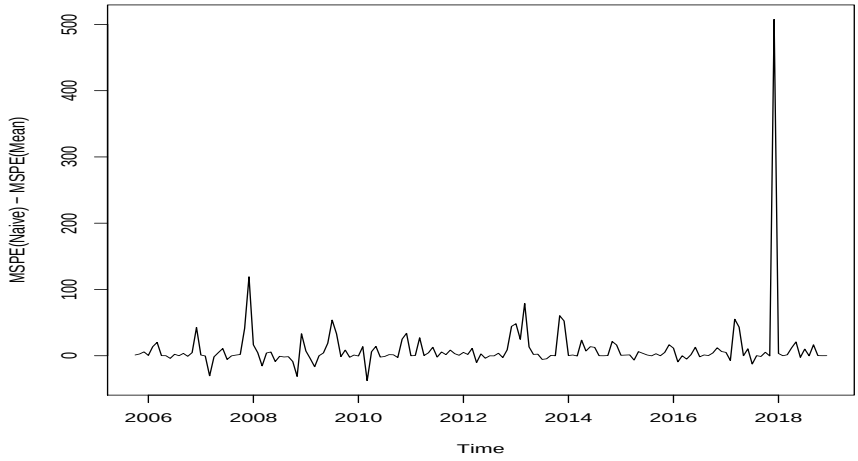


Figure 706: Mean squared forecasting errors of 9-step-ahead MA forecast of EP: Difference from benchmark

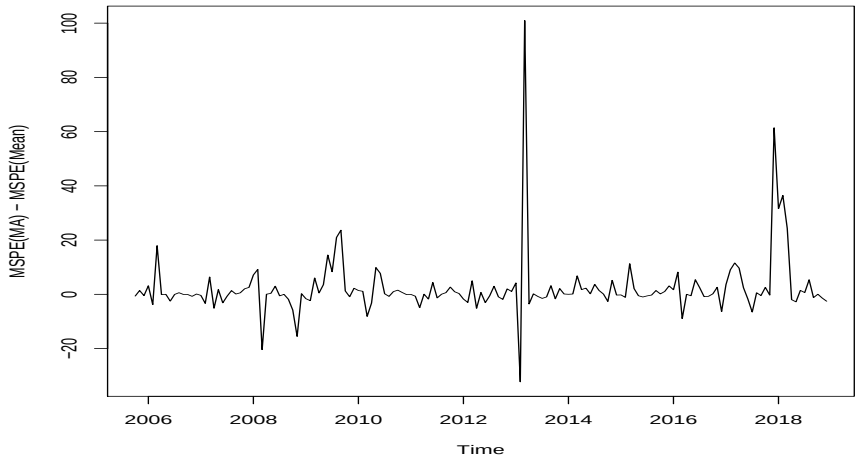


Figure 707: Mean squared forecasting errors of 9-step-ahead MA-opt forecast of EP: Difference from benchmark

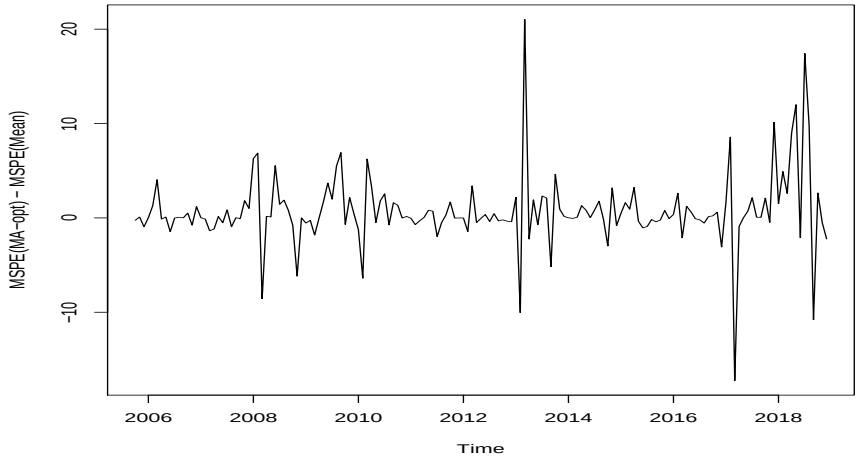


Figure 708: Mean squared forecasting errors of 9-step-ahead SES forecast of EP: Difference from benchmark

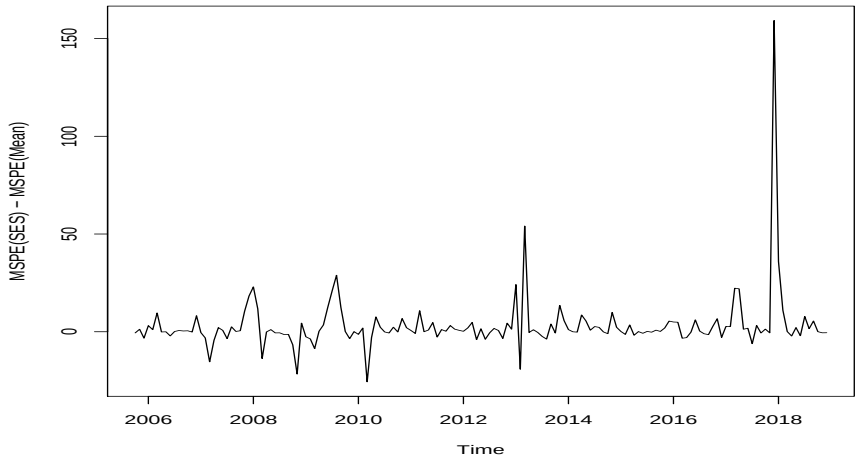


Figure 709: Mean squared forecasting errors of 9-step-ahead SES-opt forecast of EP: Difference from benchmark

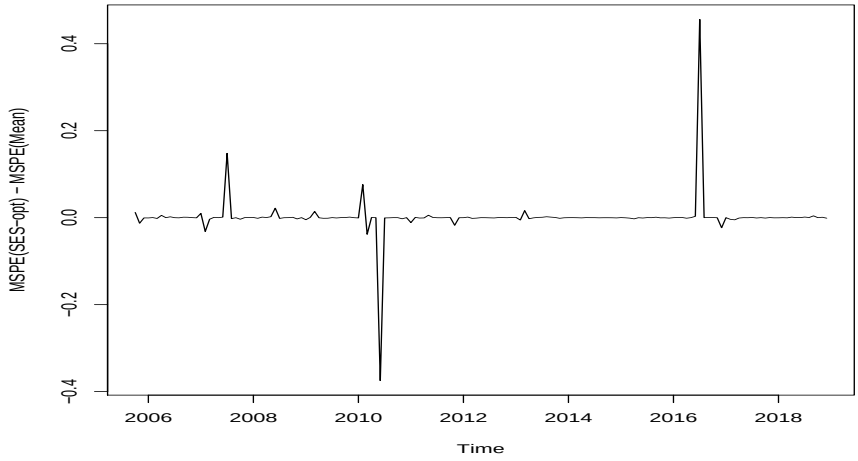


Figure 710: Mean squared forecasting errors of 9-step-ahead AR(1) forecast of EP: Difference from benchmark

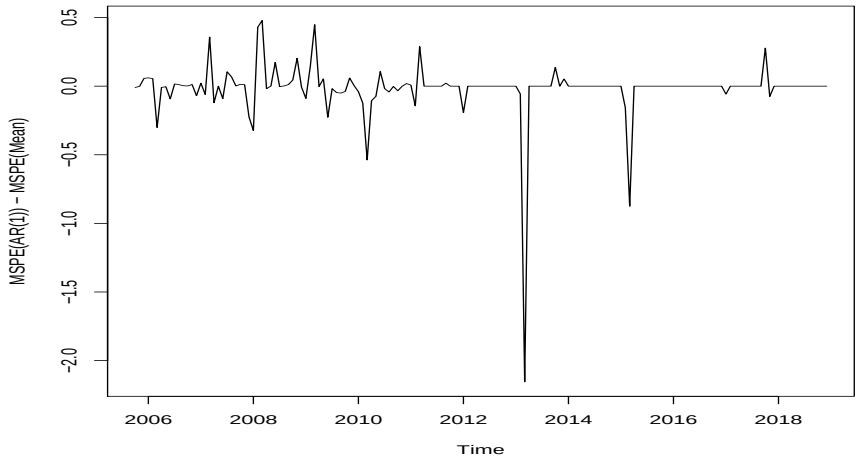


Figure 711: Mean squared forecasting errors of 9-step-ahead AR(p) forecast of EP: Difference from benchmark

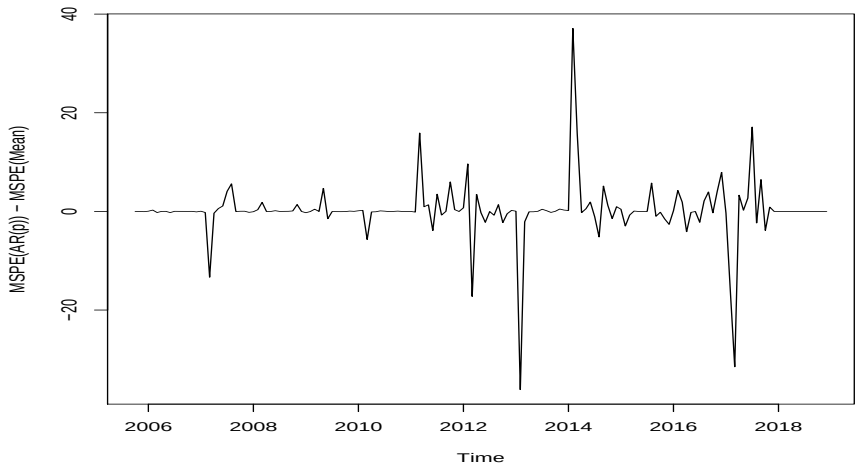


Figure 712: Mean squared forecasting errors of 9-step-ahead ARd(1) forecast of EP: Difference from benchmark

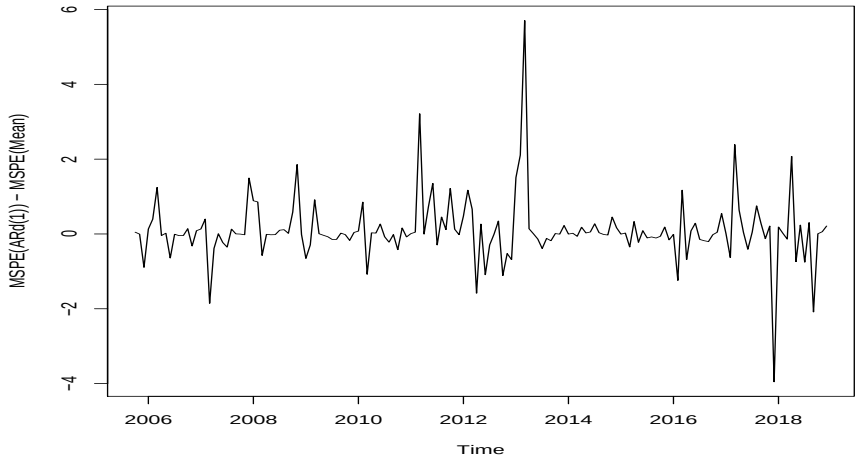


Figure 713: Mean squared forecasting errors of 9-step-ahead ARd(p) forecast of EP: Difference from benchmark

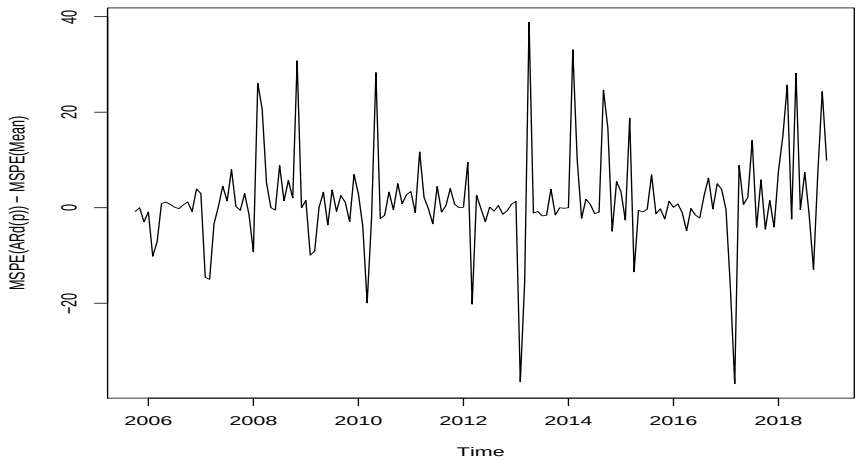


Figure 714: Mean squared forecasting errors of 9-step-ahead ARMA(1,1) forecast of EP: Difference from benchmark

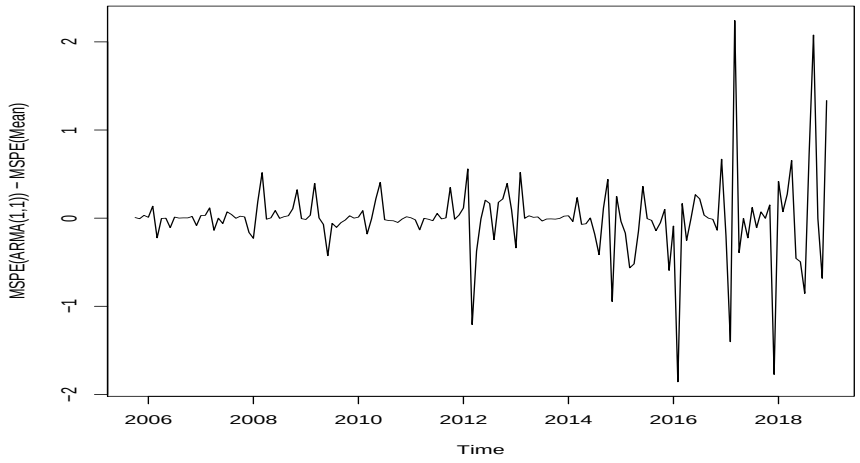


Figure 715: Mean squared forecasting errors of 9-step-ahead ARMA(p,q) forecast of EP: Difference from benchmark

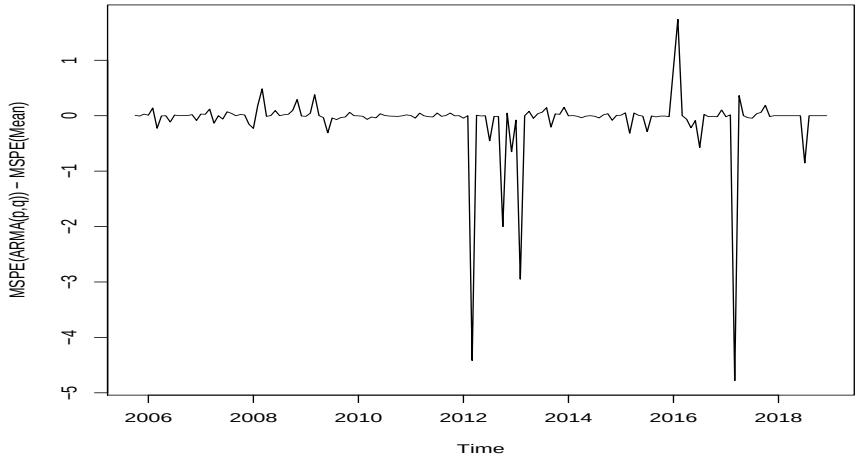


Figure 716: Mean squared forecasting errors of 9-step-ahead VAR(1) forecast of EP: Difference from benchmark

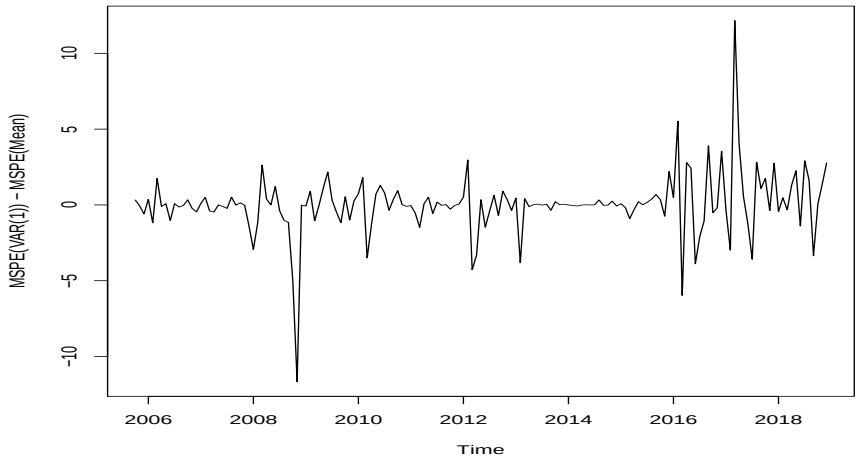


Figure 717: Mean squared forecasting errors of 9-step-ahead VAR(p) forecast of EP: Difference from benchmark

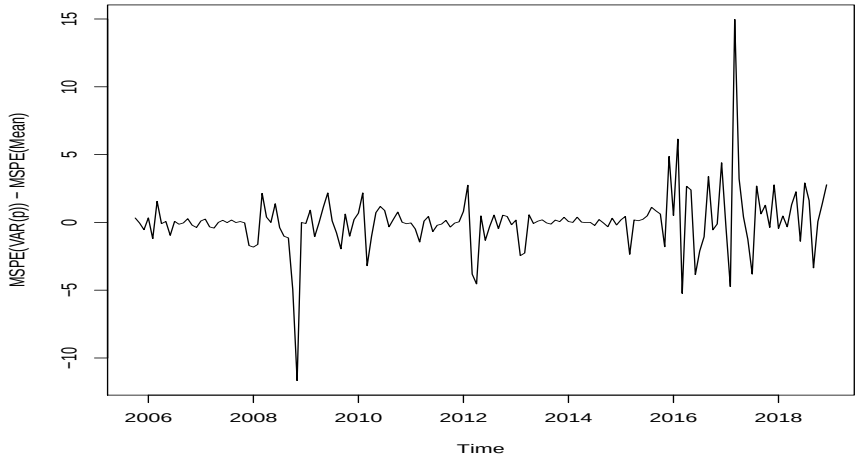


Figure 718: Mean squared forecasting errors of 9-step-ahead BVAR forecast of EP: Difference from benchmark

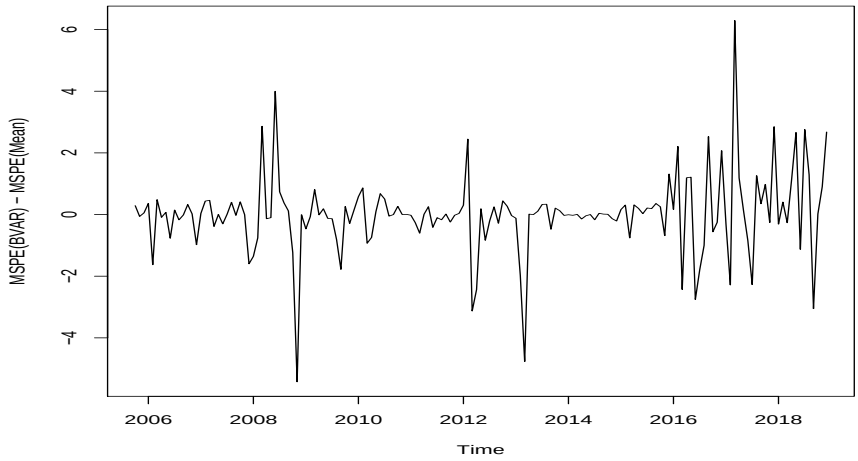


Figure 719: Mean squared forecasting errors of 9-step-ahead Factor(2) forecast of EP: Difference from benchmark

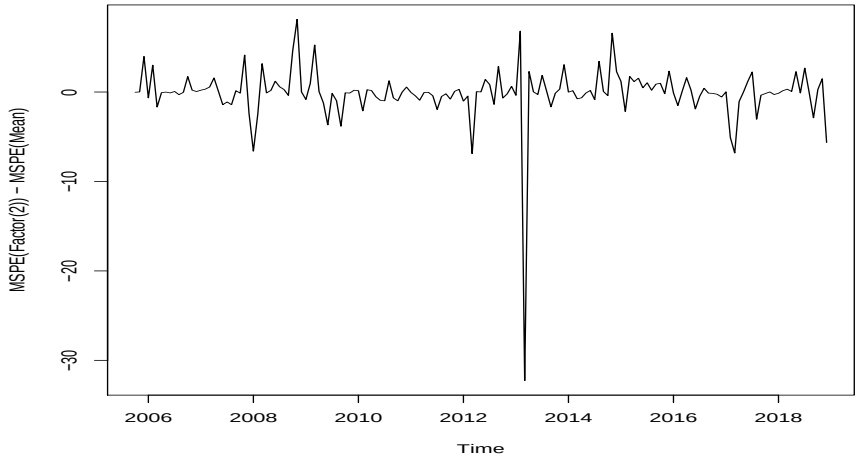


Figure 720: Mean squared forecasting errors of 9-step-ahead Factor(k) forecast of EP: Difference from benchmark

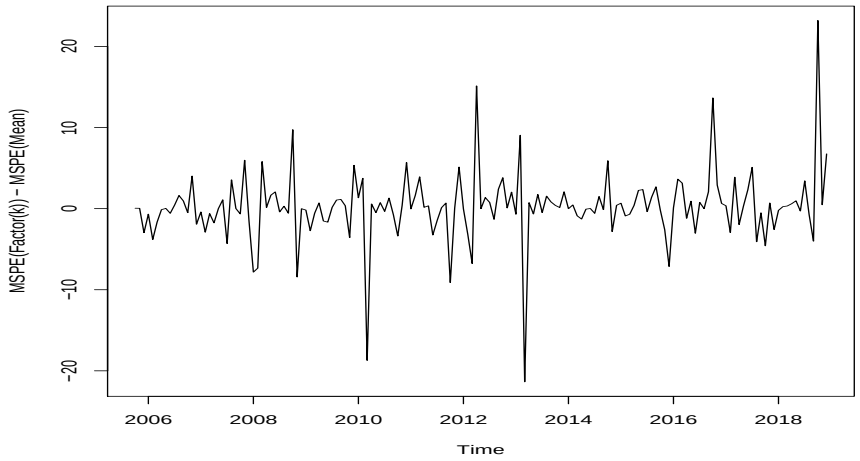


Figure 721: Mean squared forecasting errors of 9-step-ahead F(2)VAR(1) forecast of EP: Difference from benchmark

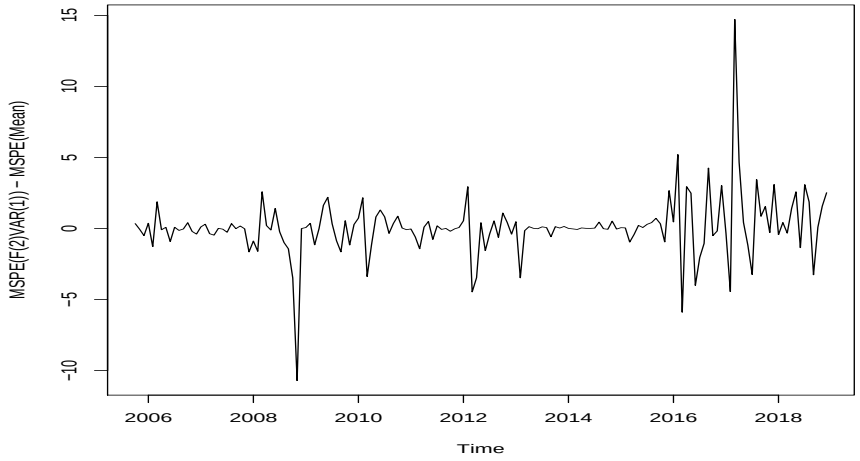
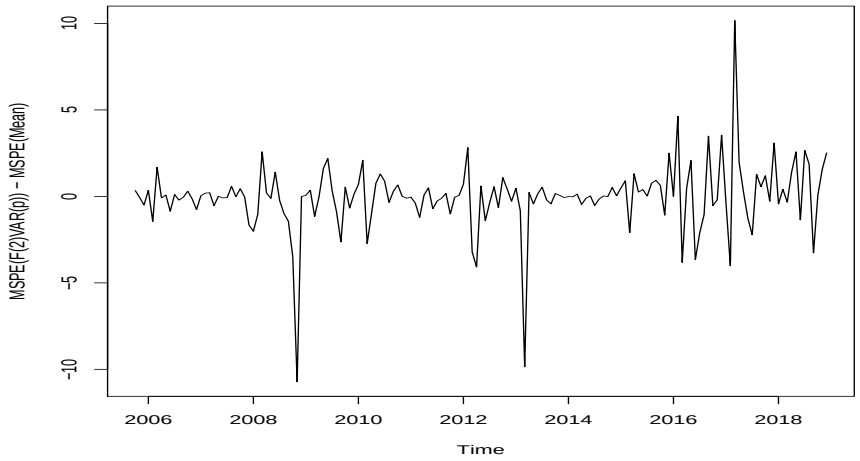


Figure 722: Mean squared forecasting errors of 9-step-ahead F(2)VAR(p) forecast of EP: Difference from benchmark



4.4.5 Forecast Horizon = 12

Figure 723: Mean squared forecasting errors of 12-step-ahead Naive forecast of EP: Difference from benchmark

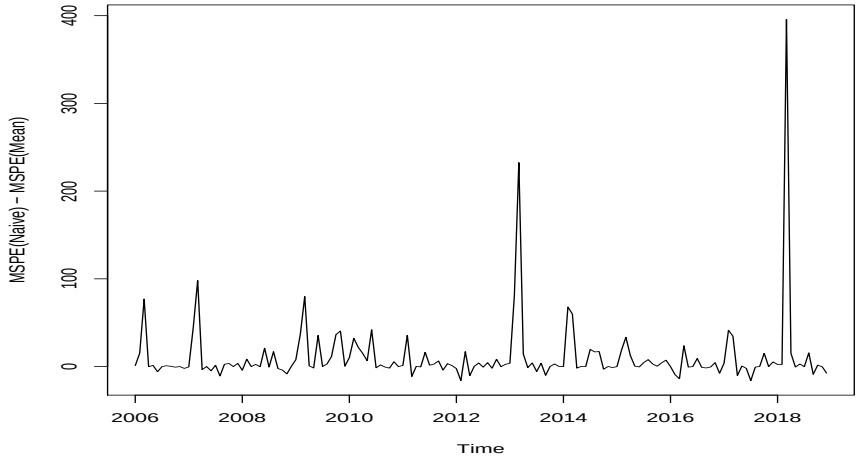


Figure 724: Mean squared forecasting errors of 12-step-ahead MA forecast of EP: Difference from benchmark

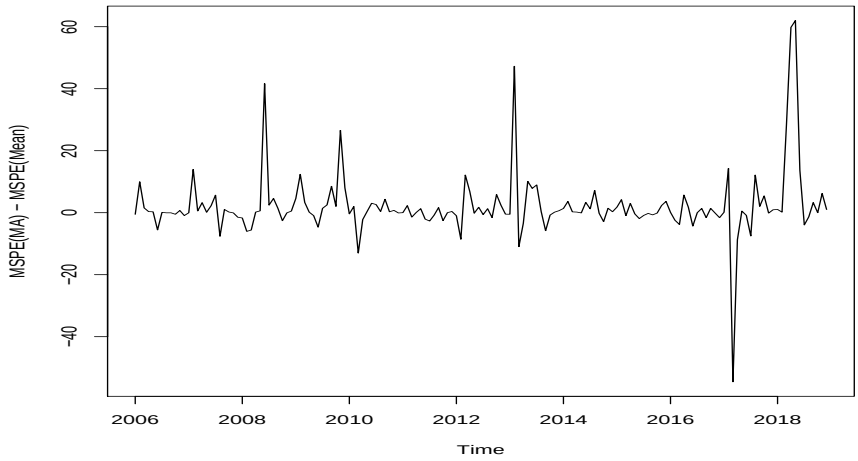


Figure 725: Mean squared forecasting errors of 12-step-ahead MA-opt forecast of EP: Difference from benchmark

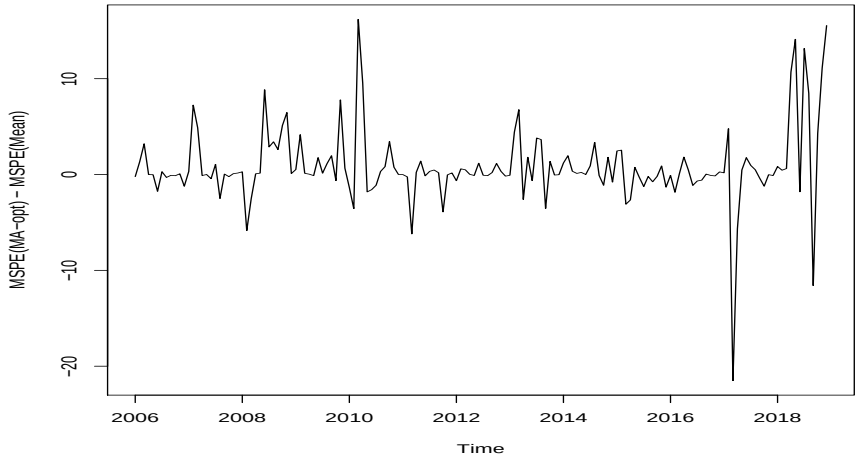


Figure 726: Mean squared forecasting errors of 12-step-ahead SES forecast of EP: Difference from benchmark

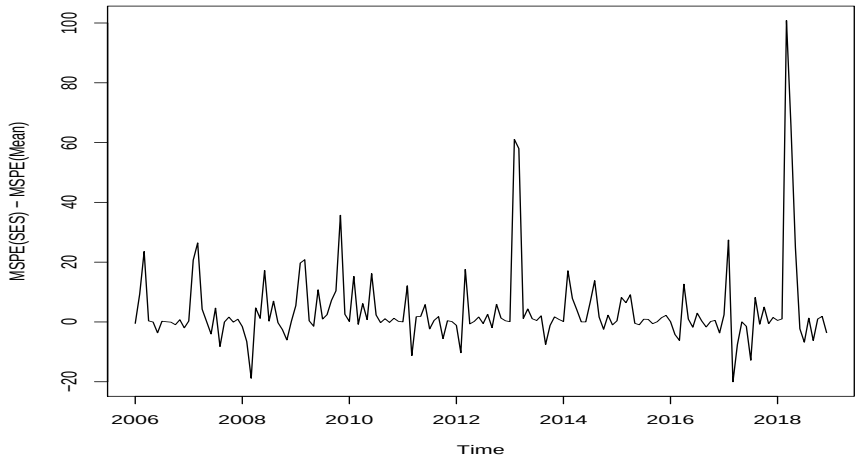


Figure 727: Mean squared forecasting errors of 12-step-ahead SES-opt forecast of EP: Difference from benchmark

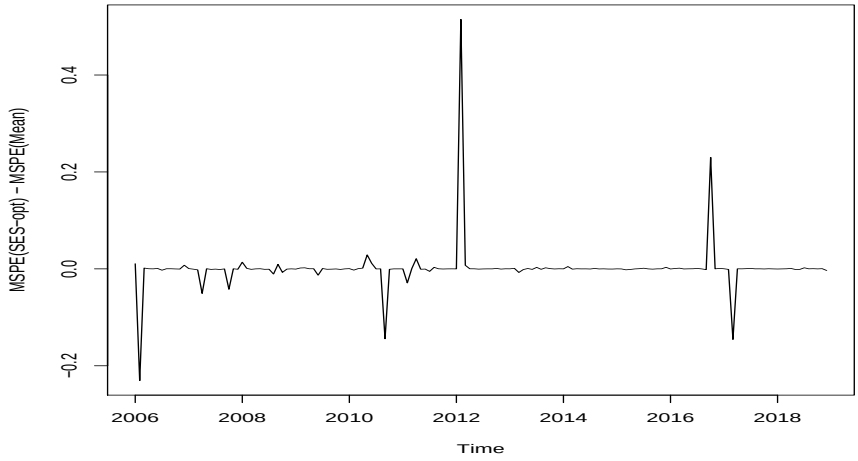


Figure 728: Mean squared forecasting errors of 12-step-ahead AR(1) forecast of EP: Difference from benchmark

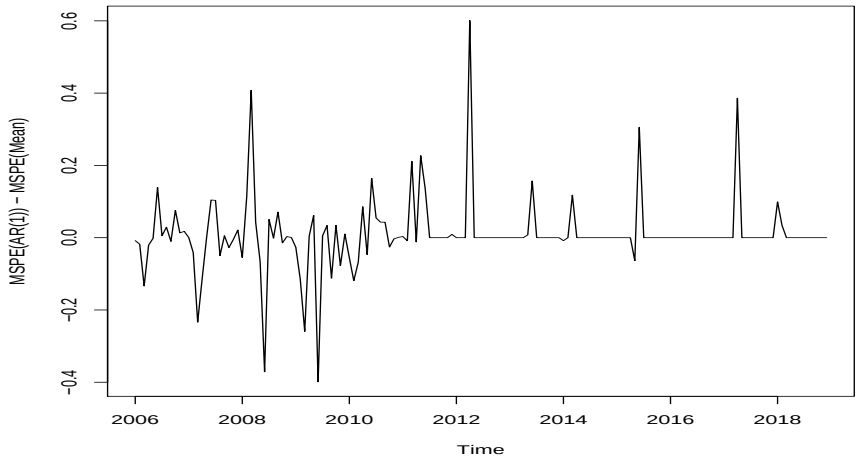


Figure 729: Mean squared forecasting errors of 12-step-ahead AR(p) forecast of EP: Difference from benchmark

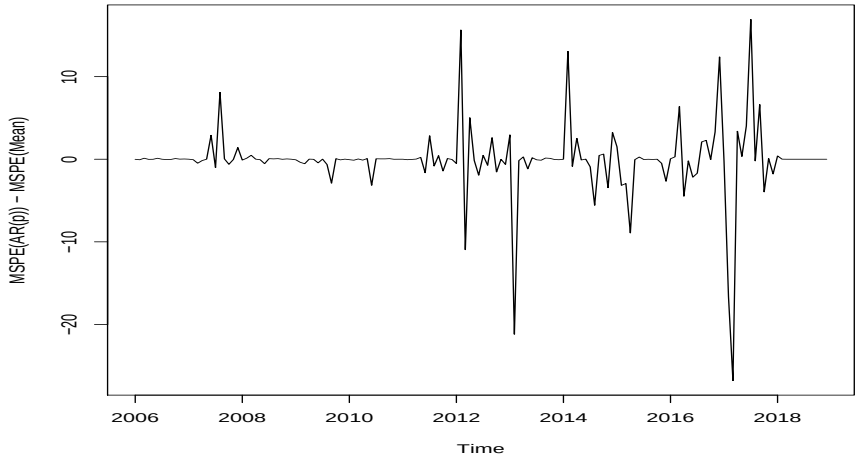


Figure 730: Mean squared forecasting errors of 12-step-ahead ARd(1) forecast of EP: Difference from benchmark

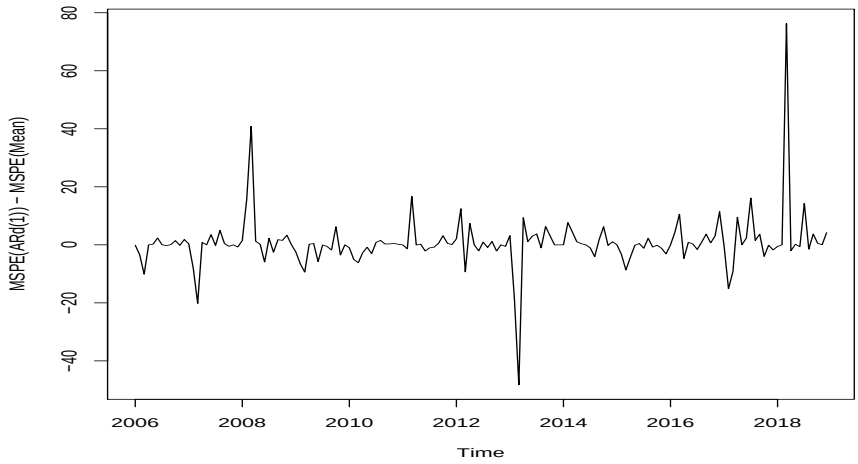


Figure 731: Mean squared forecasting errors of 12-step-ahead ARd(p) forecast of EP: Difference from benchmark

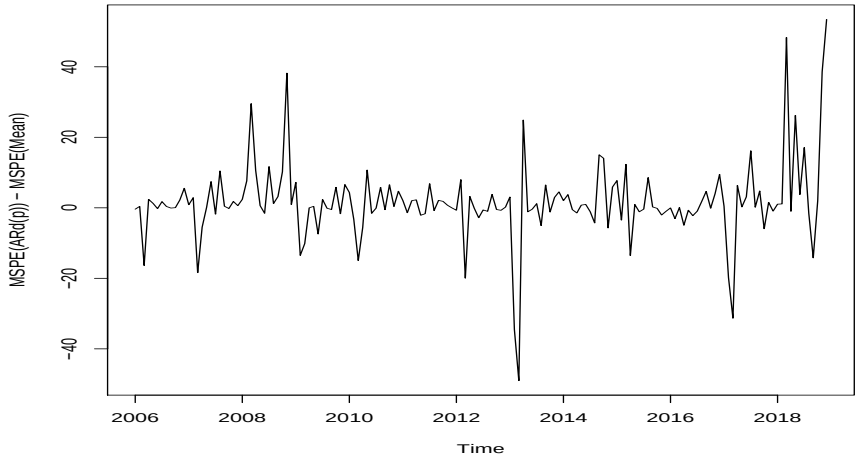


Figure 732: Mean squared forecasting errors of 12-step-ahead ARMA(1,1) forecast of EP: Difference from benchmark

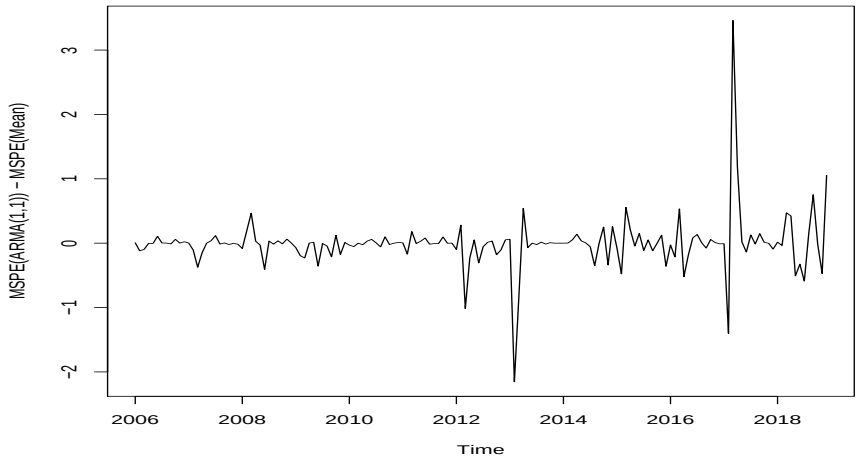


Figure 733: Mean squared forecasting errors of 12-step-ahead ARMA(p,q) forecast of EP: Difference from benchmark

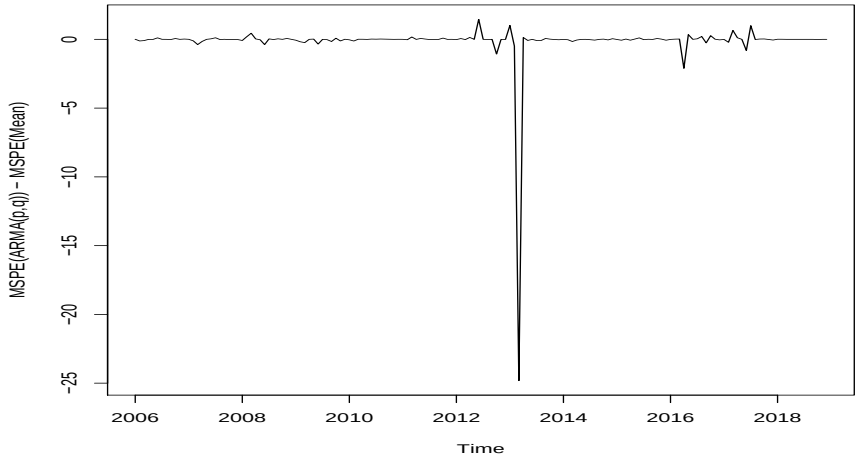


Figure 734: Mean squared forecasting errors of 12-step-ahead VAR(1) forecast of EP: Difference from benchmark

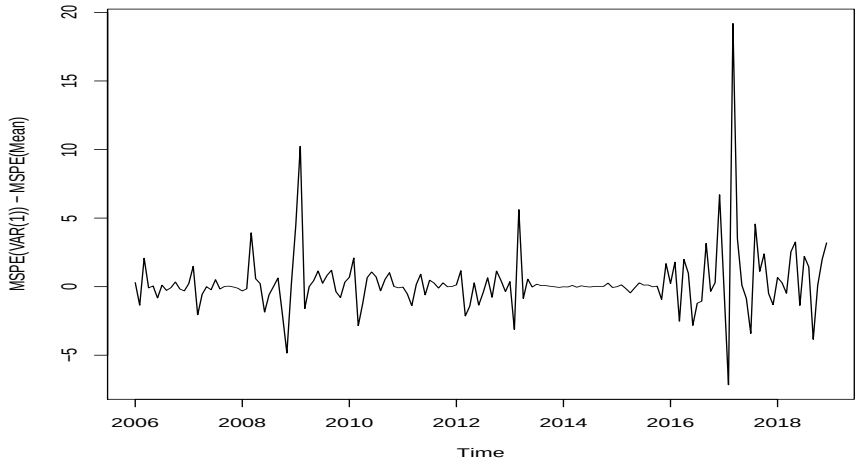


Figure 735: Mean squared forecasting errors of 12-step-ahead VAR(p) forecast of EP: Difference from benchmark

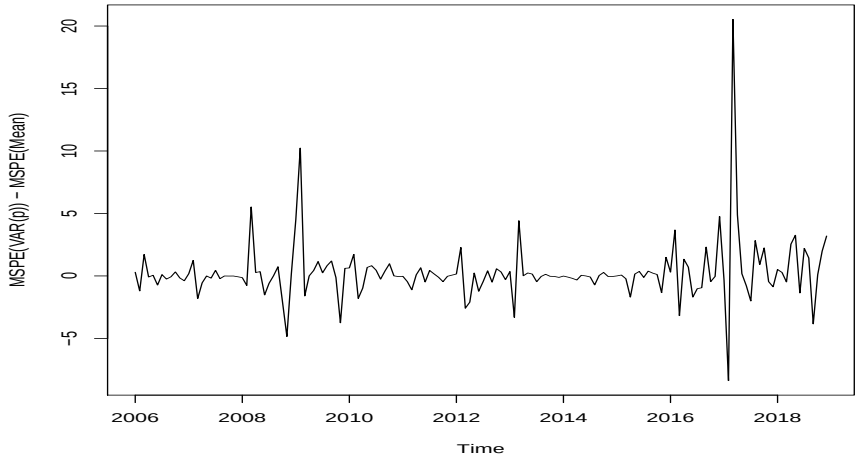


Figure 736: Mean squared forecasting errors of 12-step-ahead BVAR forecast of EP: Difference from benchmark

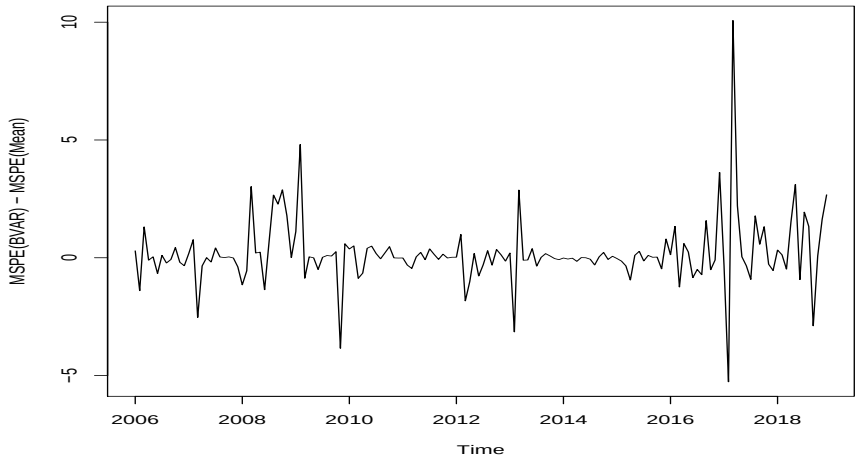


Figure 737: Mean squared forecasting errors of 12-step-ahead Factor(2) forecast of EP: Difference from benchmark

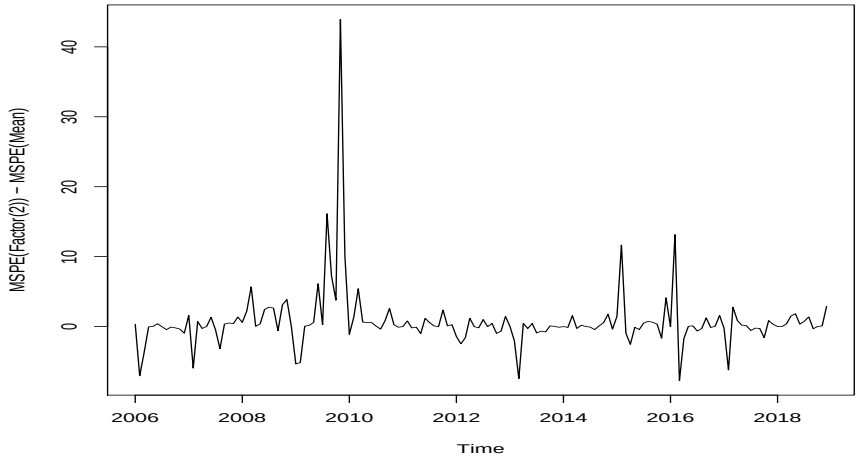


Figure 738: Mean squared forecasting errors of 12-step-ahead Factor(k) forecast of EP: Difference from benchmark

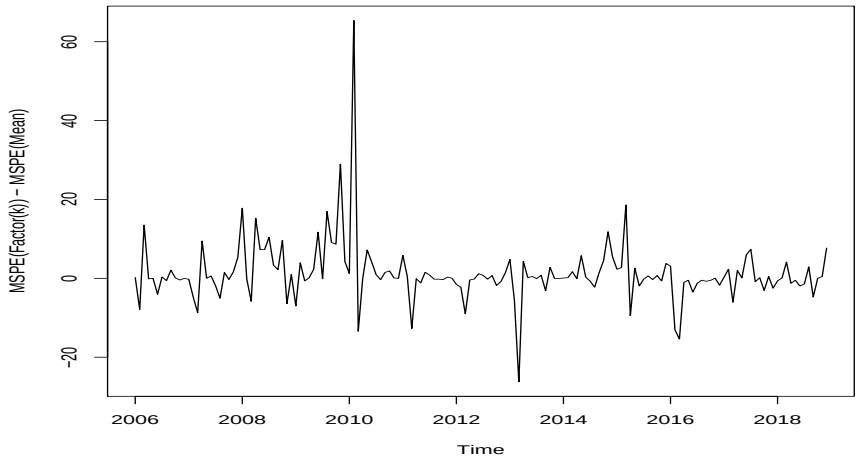


Figure 739: Mean squared forecasting errors of 12-step-ahead F(2)VAR(1) forecast of EP: Difference from benchmark

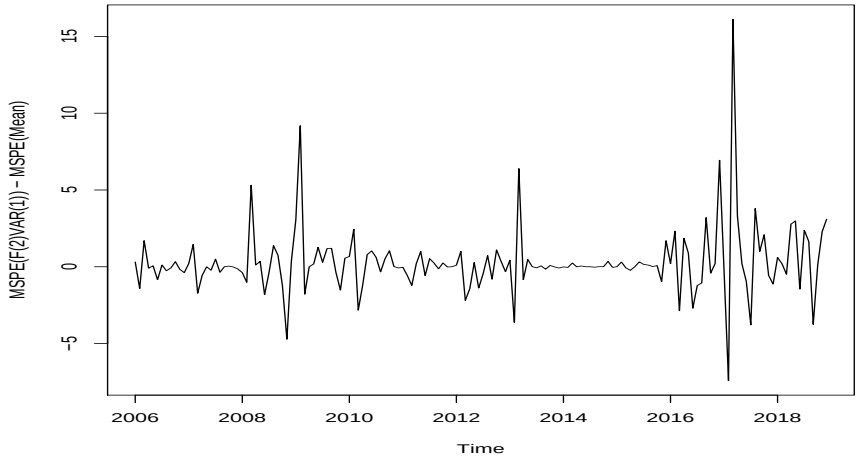
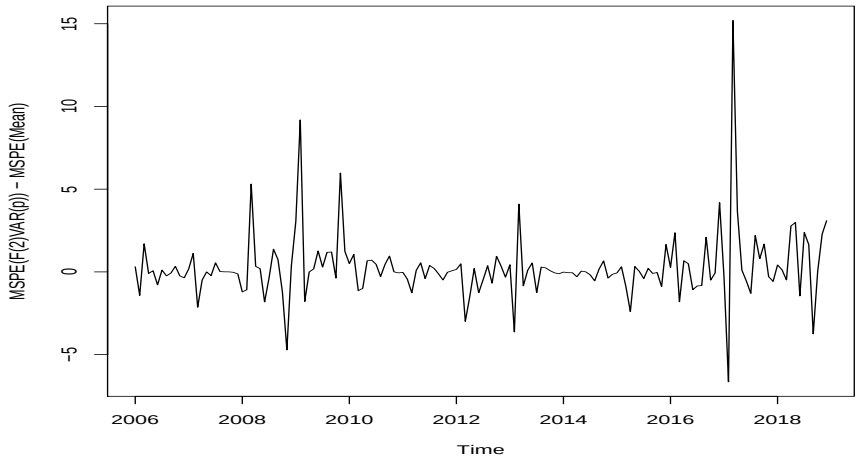


Figure 740: Mean squared forecasting errors of 12-step-ahead F(2)VAR(p) forecast of EP: Difference from benchmark



5 Post-2010 Results

Table 29: Inflation: Standardized Mean Squared Forecast Errors by Horizon

(a) CPI

	h = 1	h = 3	h = 6	h = 9	h = 12
Mean	1.000	1.000	1.000	1.000	1.000
Naive	1.567	1.828	1.782	1.226	2.189
MA	1.145	1.209	1.022	1.069	1.380
MA-opt	0.964	1.018	1.041	1.023	1.123
SES	1.153	1.280	1.233	0.959	1.477
SES-opt	1.037	1.086	1.064	0.960	1.295
AR(1)	1.011	0.994	0.997	0.982	1.007
AR(p)	1.135	1.072	1.043	0.958	1.081
ARd(1)	1.011	1.029	1.011	1.004	1.018
ARd(p)	1.121	1.117	1.081	1.098	1.189
ARMA(1,1)	1.026	1.026	0.990	0.978	0.989
ARMA(p,q)	1.029	1.017	1.001	0.992	1.012
VAR(1)	1.007	1.073	1.013	0.969	1.046
VAR(p)	1.026	1.051	1.052	1.060	1.100
BVAR	1.020	1.128	1.069	1.081	1.070
Factor(2)	1.013	1.030	0.984	0.965	1.032
Factor(k)	1.250	1.353	1.197	1.057	1.412
F(2)VAR(1)	1.012	1.053	0.990	0.980	1.042
F(2)VAR(p)	1.115	1.112	1.072	1.082	1.093

(b) PPI

	h = 1	h = 3	h = 6	h = 9	h = 12
Mean	33.370	5.953	2.572	1.626	1.096
Naive	1.000	1.000	1.000	1.000	1.000
MA	5.212	1.916	1.360	1.283	1.163
MA-opt	19.223	4.477	2.473	1.906	1.509
SES	3.046	1.472	1.188	1.150	1.084
SES-opt	1.000	1.000	1.000	1.000	1.000
AR(1)	1.071	1.063	1.033	1.028	0.996
AR(p)	0.455	0.936	1.287	1.302	1.097
ARd(1)	1.071	1.170	1.405	1.564	1.354
ARd(p)	0.434	1.067	1.729	1.901	1.829
ARMA(1,1)	0.499	0.823	0.901	0.851	0.806
ARMA(p,q)	0.391	0.816	1.238	1.222	1.040
VAR(1)	1.471	1.497	1.323	1.062	0.794
VAR(p)	0.400	0.796	1.119	1.098	0.954
BVAR	0.402	0.810	1.137	1.077	0.950
Factor(2)	33.540	5.386	2.181	1.326	0.935
Factor(k)	40.944	6.689	2.534	1.467	0.988
F(2)VAR(1)	1.152	1.253	1.198	0.970	0.738
F(2)VAR(p)	0.528	0.908	1.129	1.004	0.846

The rows are the forecasting models described in the paper. The columns are forecast horizons. The table elements are the point estimates of the mean squared forecasting error expressed as a ratio of the mean squared forecasting error of the benchmark model for the same forecast horizon. Thus, a number less than 1 indicates that the model produced a smaller sample mean squared forecasting error than the benchmark model at that forecast horizon. The benchmark models are the simple mean forecast for the CPI, and the naive forecast for the PPI.

Table 30: Inflation: p-values for Conditional Test by Horizon

(a) CPI

	h = 1	h = 3	h = 6	h = 9	h = 12
Naive	*0.046*	*0.005*	*0*	0.393	*0.016*
MA	0.478	0.191	0.937	0.501	0.374
MA-opt	0.313	0.938	0.512	0.572	0.686
SES	0.496	0.155	0.3	0.851	0.239
SES-opt	0.85	0.703	0.322	0.929	0.422
AR(1)	0.964	0.612	0.776	**0.009**	0.188
AR(p)	0.429	0.558	0.265	0.437	*0.048*
ARd(1)	0.964	0.514	0.8	0.497	0.193
ARd(p)	0.458	0.429	0.457	0.274	*0*
ARMA(1,1)	0.927	0.454	0.247	0.12	0.071
ARMA(p,q)	0.809	0.428	0.978	0.164	0.143
VAR(1)	0.458	0.139	0.685	0.249	0.543
VAR(p)	0.636	0.693	0.579	0.417	0.42
BVAR	0.871	0.258	0.555	0.405	0.514
Factor(2)	0.955	0.534	0.082	**0.005**	0.315
Factor(k)	0.325	0.077	*0.028*	0.677	*0.001*
F(2)VAR(1)	0.387	0.112	0.747	0.085	0.561
F(2)VAR(p)	0.467	0.417	0.626	0.47	0.58

(b) PPI

	h = 1	h = 3	h = 6	h = 9	h = 12
Mean	*0*	*0*	*0.003*	0.199	0.056
MA	*0*	*0.016*	0.154	0.074	0.095
MA-opt	*0*	*0.003*	*0.046*	0.146	0.063
SES	*0*	*0.026*	0.193	0.106	0.092
SES-opt	*0*	*0.009*	0.247	0.09	0.066
AR(1)	0.055	0.4	0.283	0.086	**0.02**
AR(p)	**0.005**	0.052	0.443	0.82	0.533
ARd(1)	0.055	0.198	0.173	0.221	0.302
ARd(p)	**0.003**	*0.033*	0.171	0.308	0.498
ARMA(1,1)	**0**	0.144	0.712	0.495	0.407
ARMA(p,q)	**0.001**	0.234	0.514	0.825	0.241
VAR(1)	*0*	*0.037*	0.325	0.179	0.059
VAR(p)	**0**	0.452	0.429	0.28	0.317
BVAR	**0.001**	0.629	0.268	0.221	0.354
Factor(2)	*0*	*0*	*0.011*	0.495	0.051
Factor(k)	*0*	*0*	*0*	0.229	0.097
F(2)VAR(1)	*0.042*	0.19	0.519	0.085	0.072
F(2)VAR(p)	**0.012**	0.884	0.315	0.07	**0.039**

The rows are the forecasting models described in the paper. The columns are forecast horizons. The table elements are the p-values for the Giacomini and White (2006) conditional test that the mean squared forecasting error is equal to that of the benchmark model. If a p-value is less than 0.05, and the corresponding within-sample relative mean squared error in Table 29 is less than 1, then the p-value is in a bold font, indicating that the model generates significantly better forecasts at the 5% significance level. If the p-value is less than 0.05, and the corresponding within-sample relative mean squared error in Table 29 is greater than 1, then the p-value is in italics, indicating that the model generates significantly worse forecasts. The benchmark model for the CPI forecasts is the mean forecast. The benchmark for the PPI forecasts is the naive forecast.

Table 31: Inflation: p-values for Unconditional Test by Horizon

(a) CPI

	h = 1	h = 3	h = 6	h = 9	h = 12
Naive	*0.013*	*0.001*	*0.001*	0.198	*0.003*
MA	0.236	0.077	0.88	0.659	0.185
MA-opt	0.624	0.86	0.737	0.838	0.42
SES	0.265	*0.047*	0.188	0.775	0.094
SES-opt	0.714	0.413	0.667	0.753	0.193
AR(1)	0.895	0.695	0.695	**0.002**	0.323
AR(p)	0.337	0.437	0.588	0.341	0.152
ARd(1)	0.895	0.261	0.828	0.903	0.697
ARd(p)	0.394	0.265	0.4	0.247	0.057
ARMA(1,1)	0.774	0.206	0.308	0.059	0.061
ARMA(p,q)	0.753	0.485	0.955	0.527	0.499
VAR(1)	0.939	0.321	0.823	0.423	0.444
VAR(p)	0.773	0.376	0.505	0.506	0.358
BVAR	0.816	0.054	0.415	0.344	0.504
Factor(2)	0.875	0.669	0.648	0.48	0.514
Factor(k)	0.12	*0.032*	*0.007*	0.486	*0.001*
F(2)VAR(1)	0.91	0.46	0.864	0.704	0.508
F(2)VAR(p)	0.306	0.116	0.417	0.458	0.441

(b) PPI

	h = 1	h = 3	h = 6	h = 9	h = 12
Mean	*0*	*0*	*0.001*	0.124	0.794
MA	*0*	*0.009*	*0.027*	*0.011*	*0.029*
MA-opt	*0*	*0.001*	*0.005*	*0.015*	*0.045*
SES	*0*	*0.013*	*0.044*	*0.021*	*0.049*
SES-opt	*0*	*0.006*	0.065	*0.027*	*0.033*
AR(1)	*0.03*	0.229	0.503	0.6	0.93
AR(p)	**0.002**	0.755	0.32	0.406	0.782
ARd(1)	*0.03*	0.135	0.074	0.139	0.44
ARd(p)	**0.001**	0.786	0.065	0.11	0.271
ARMA(1,1)	**0**	**0.033**	0.324	0.278	0.219
ARMA(p,q)	**0.001**	0.36	0.427	0.568	0.918
VAR(1)	*0.001*	*0.011*	0.182	0.753	0.22
VAR(p)	**0**	0.144	0.547	0.678	0.835
BVAR	**0.001**	0.23	0.505	0.725	0.818
Factor(2)	*0*	*0*	*0.005*	0.329	0.81
Factor(k)	*0*	*0*	*0*	0.207	0.974
F(2)VAR(1)	0.349	0.118	0.35	0.874	0.165
F(2)VAR(p)	**0.005**	0.451	0.46	0.984	0.453

The rows are the forecasting models described in the paper. The columns are forecast horizons. The table elements are the p-values for the Giacomini and White (2006) unconditional test that the mean squared forecasting error is equal to that of the benchmark model. If a p-value is less than 0.05, and the corresponding within-sample relative mean squared error in Table 29 is less than 1, then the p-value is in a bold font, indicating that the model generates significantly better forecasts at the 5% significance level. If the p-value is less than 0.05, and the corresponding within-sample relative mean squared error in Table 29 is greater than 1, then the p-value is in italics, indicating that the model generates significantly worse forecasts. The benchmark model for the CPI forecasts is the mean forecast. The benchmark for the PPI forecasts is the naive forecast.

Table 32: Real Activity: Standardized Mean Squared Forecast Errors by Horizon

(a) IP

	h = 1	h = 3	h = 6	h = 9	h = 12
Mean	1.000	1.000	1.000	1.000	1.000
Naive	3.300	13.162	25.611	38.341	51.069
MA	1.567	2.368	3.979	4.904	6.274
MA-opt	1.146	1.449	1.856	2.101	2.354
SES	1.950	4.875	8.179	11.292	14.615
SES-opt	1.232	2.632	4.382	6.015	7.438
AR(1)	1.158	1.191	0.979	0.822	0.730
AR(p)	1.069	0.668	0.683	0.585	0.584
ARd(1)	1.151	0.838	0.859	0.712	0.621
ARd(p)	0.950	0.759	0.646	0.608	0.610
ARMA(1,1)	1.626	3.697	6.280	8.660	10.765
ARMA(p,q)	1.388	2.964	4.484	5.379	5.732
VAR(1)	1.217	1.282	1.015	0.843	0.757
VAR(p)	1.152	0.957	0.808	0.681	0.623
BVAR	1.084	0.737	0.718	0.625	0.641
Factor(2)	1.133	1.097	0.911	0.943	0.923
Factor(k)	1.239	1.253	1.122	0.983	0.937
F(2)VAR(1)	1.390	1.437	1.072	0.877	0.809
F(2)VAR(p)	1.529	1.181	0.995	0.768	0.683

(b) EP

	h = 1	h = 3	h = 6	h = 9	h = 12
Mean	1.000	1.000	1.000	1.000	1.000
Naive	2.046	1.992	2.123	2.216	2.089
MA	1.355	1.269	1.311	1.262	1.199
MA-opt	1.103	1.095	1.104	1.067	1.051
SES	1.431	1.346	1.383	1.407	1.363
SES-opt	1.001	1.000	0.999	1.000	1.001
AR(1)	1.003	0.999	1.000	0.997	1.001
AR(p)	1.119	1.113	1.115	1.051	1.017
ARd(1)	1.024	1.024	1.010	1.015	1.121
ARd(p)	1.215	1.201	1.200	1.187	1.180
ARMA(1,1)	1.019	0.984	1.004	0.999	1.001
ARMA(p,q)	1.031	1.031	1.011	0.987	0.978
VAR(1)	1.111	1.041	1.040	1.025	1.043
VAR(p)	1.191	1.043	1.054	1.027	1.038
BVAR	1.119	1.058	1.039	1.008	1.023
Factor(2)	0.998	1.005	1.011	0.976	1.005
Factor(k)	1.134	1.025	0.984	1.069	0.993
F(2)VAR(1)	1.086	1.033	1.043	1.029	1.039
F(2)VAR(p)	1.149	1.027	1.053	1.012	1.028

The rows are the forecasting models described in the paper. The columns are forecast horizons. The table elements are the point estimates of the mean squared forecasting error expressed as a ratio of the mean squared forecasting error of the benchmark model for the same forecast horizon. Thus, a number less than 1 indicates that the model produced a smaller sample mean squared forecasting error than the benchmark model at that forecast horizon. The benchmark model is the simple mean forecast for both IP and EP.

Table 33: Real Activity: p-values for Conditional Test by Horizon

(a) IP

	h = 1	h = 3	h = 6	h = 9	h = 12
Naive	*0.01*	*0.019*	*0.012*	*0.043*	*0.02*
MA	*0.022*	*0.026*	*0.02*	*0.048*	0.075
MA-opt	0.253	*0.011*	*0.016*	*0.008*	*0.049*
SES	*0.023*	*0.049*	0.051	0.055	0.059
SES-opt	0.407	0.31	0.268	0.252	0.238
AR(1)	0.063	0.109	**0.017**	0.839	0.352
AR(p)	0.458	0.519	0.542	0.191	0.573
ARd(1)	0.093	0.45	0.79	0.163	0.151
ARd(p)	0.219	0.809	0.259	0.408	0.351
ARMA(1,1)	*0.045*	0.459	0.108	0.229	0.114
ARMA(p,q)	0.425	0.381	0.611	0.815	0.552
VAR(1)	0.072	0.091	0.064	0.066	0.245
VAR(p)	0.222	0.753	0.843	0.355	0.442
BVAR	0.189	0.548	0.217	0.204	0.559
Factor(2)	0.278	*0.008*	0.052	**0**	**0.002**
Factor(k)	0.085	0.754	*0.001*	**0.018**	**0.019**
F(2)VAR(1)	*0.009*	*0.002*	0.086	0.138	0.252
F(2)VAR(p)	*0.006*	0.188	0.846	0.658	0.62

(b) EP

	h = 1	h = 3	h = 6	h = 9	h = 12
Naive	*0.018*	*0.001*	*0.003*	*0.007*	*0.03*
MA	*0.003*	0.116	*0.02*	0.099	0.495
MA-opt	0.073	*0.01*	0.123	0.416	0.569
SES	*0.007*	*0.042*	*0.001*	*0.009*	0.084
SES-opt	0.363	0.587	0.171	0.34	0.417
AR(1)	0.48	0.732	0.571	0.096	0.183
AR(p)	0.323	0.103	0.06	0.636	0.065
ARd(1)	0.286	0.268	0.553	0.51	0.243
ARd(p)	0.137	0.178	0.25	0.113	0.51
ARMA(1,1)	0.894	0.373	0.729	0.653	0.063
ARMA(p,q)	0.158	0.087	0.157	0.197	0.28
VAR(1)	0.081	0.223	*0.042*	0.426	0.302
VAR(p)	*0.042*	0.113	*0.048*	0.402	0.425
BVAR	0.228	*0.04*	*0.005*	0.684	0.354
Factor(2)	0.978	0.133	0.367	0.813	0.86
Factor(k)	0.393	0.941	0.633	0.133	0.989
F(2)VAR(1)	0.093	0.306	*0.027*	0.357	0.287
F(2)VAR(p)	0.093	0.501	0.138	0.694	0.478

The rows are the forecasting models described in the paper. The columns are forecast horizons. The table elements are the p-values for the Giacomini and White (2006) conditional test that the mean squared forecasting error is equal to that of the benchmark model. If a p-value is less than 0.05, and the corresponding within-sample relative mean squared error in Table 32 is less than 1, then the p-value is in a bold font, indicating that the model generates significantly better forecasts at the 5% significance level. If the p-value is less than 0.05, and the corresponding within-sample relative mean squared error in Table 32 is greater than 1, then the p-value is in italics, indicating that the model generates significantly worse forecasts. The benchmark model is the mean forecast.

Table 34: Real Activity: p-values for Unconditional Test by Horizon

(a) IP

	h = 1	h = 3	h = 6	h = 9	h = 12
Naive	*0.003*	*0.023*	*0.022*	*0.027*	*0.03*
MA	*0.019*	*0.011*	*0.009*	*0.009*	*0.009*
MA-opt	0.086	*0.002*	*0.008*	*0.012*	*0.019*
SES	*0.004*	*0.017*	*0.015*	*0.017*	*0.02*
SES-opt	0.345	0.301	0.289	0.279	0.278
AR(1)	*0.037*	0.08	0.862	0.316	0.277
AR(p)	0.424	0.223	0.281	0.152	0.224
ARd(1)	*0.048*	0.119	0.304	0.097	0.12
ARd(p)	0.789	0.493	0.386	0.276	0.282
ARMA(1,1)	0.152	0.269	0.288	0.29	0.291
ARMA(p,q)	0.321	0.318	0.312	0.305	0.299
VAR(1)	*0.019*	*0.039*	0.907	0.383	0.328
VAR(p)	0.168	0.8	0.352	0.197	0.207
BVAR	0.409	0.277	0.323	0.219	0.295
Factor(2)	0.076	0.198	0.71	0.872	0.843
Factor(k)	*0.033*	0.553	0.743	0.967	0.887
F(2)VAR(1)	*0.003*	*0.003*	0.507	0.442	0.393
F(2)VAR(p)	*0.001*	0.247	0.977	0.266	0.193

(b) EP

	h = 1	h = 3	h = 6	h = 9	h = 12
Naive	*0.005*	*0.029*	*0.003*	*0.005*	*0.008*
MA	*0.002*	*0.048*	*0.005*	0.057	0.251
MA-opt	*0.024*	*0.008*	*0.032*	0.188	0.404
SES	*0.001*	0.09	*0.003*	*0.016*	0.053
SES-opt	0.17	0.348	0.32	0.455	0.174
AR(1)	0.807	0.514	0.781	0.115	*0.035*
AR(p)	0.144	*0.036*	*0.047*	0.486	0.621
ARd(1)	0.184	0.101	0.552	0.111	0.241
ARd(p)	0.068	0.072	0.098	*0.049*	0.248
ARMA(1,1)	0.692	0.254	0.637	0.872	0.903
ARMA(p,q)	0.559	*0.027*	0.063	0.086	0.293
VAR(1)	*0.028*	0.118	0.114	0.225	0.132
VAR(p)	*0.031*	0.166	*0.049*	0.257	0.212
BVAR	0.085	*0.019*	0.053	0.517	0.172
Factor(2)	0.952	0.758	0.245	0.41	0.755
Factor(k)	0.197	0.795	0.761	0.082	0.886
F(2)VAR(1)	0.234	0.178	0.095	0.212	0.123
F(2)VAR(p)	*0.045*	0.472	0.117	0.528	0.253

The rows are the forecasting models described in the paper. The columns are forecast horizons. The table elements are the p-values for the Giacomini and White (2006) unconditional test that the mean squared forecasting error is equal to that of the benchmark model. If a p-value is less than 0.05, and the corresponding within-sample relative mean squared error in Table 32 is less than 1, then the p-value is in a bold font, indicating that the model generates significantly better forecasts at the 5% significance level. If the p-value is less than 0.05, and the corresponding within-sample relative mean squared error in Table 32 is greater than 1, then the p-value is in italics, indicating that the model generates significantly worse forecasts. The benchmark model is the mean forecast.

References

Giacomini, R. and White, H. (2006). Tests of conditional predictive ability. *Econometrica*, 74 (6):pp. 1545–1578. 2, 387, 388, 389