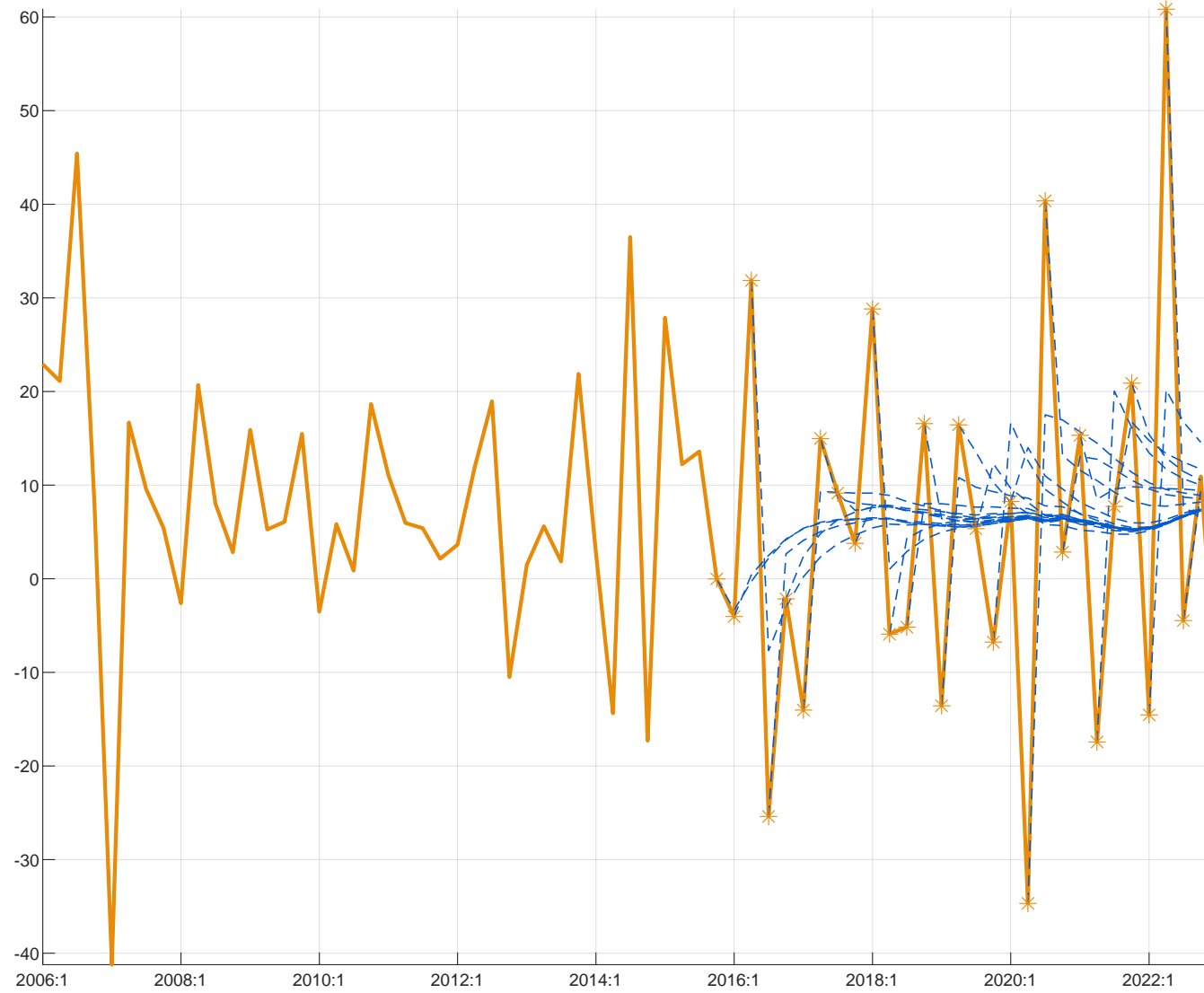
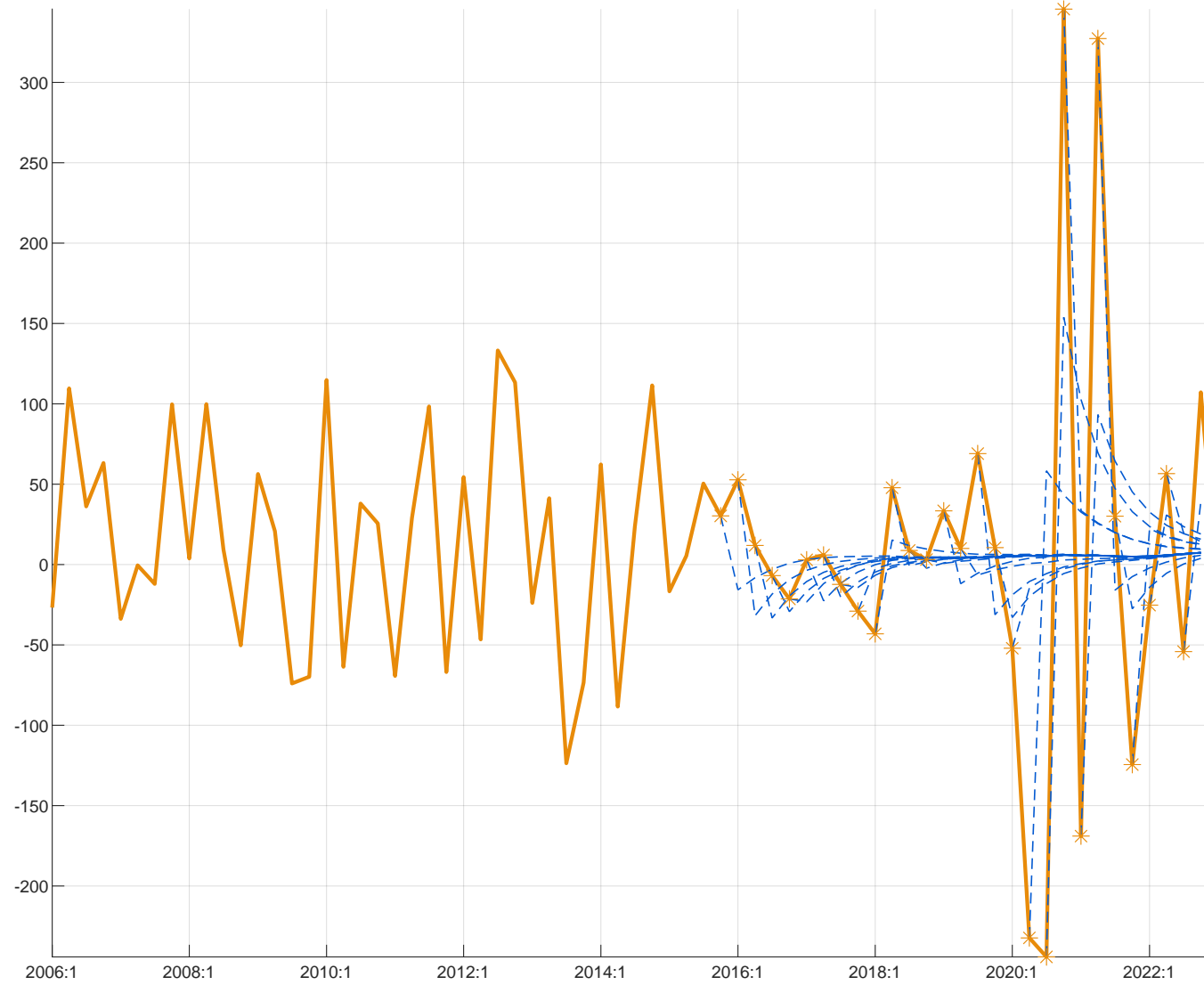


Historical forecasts

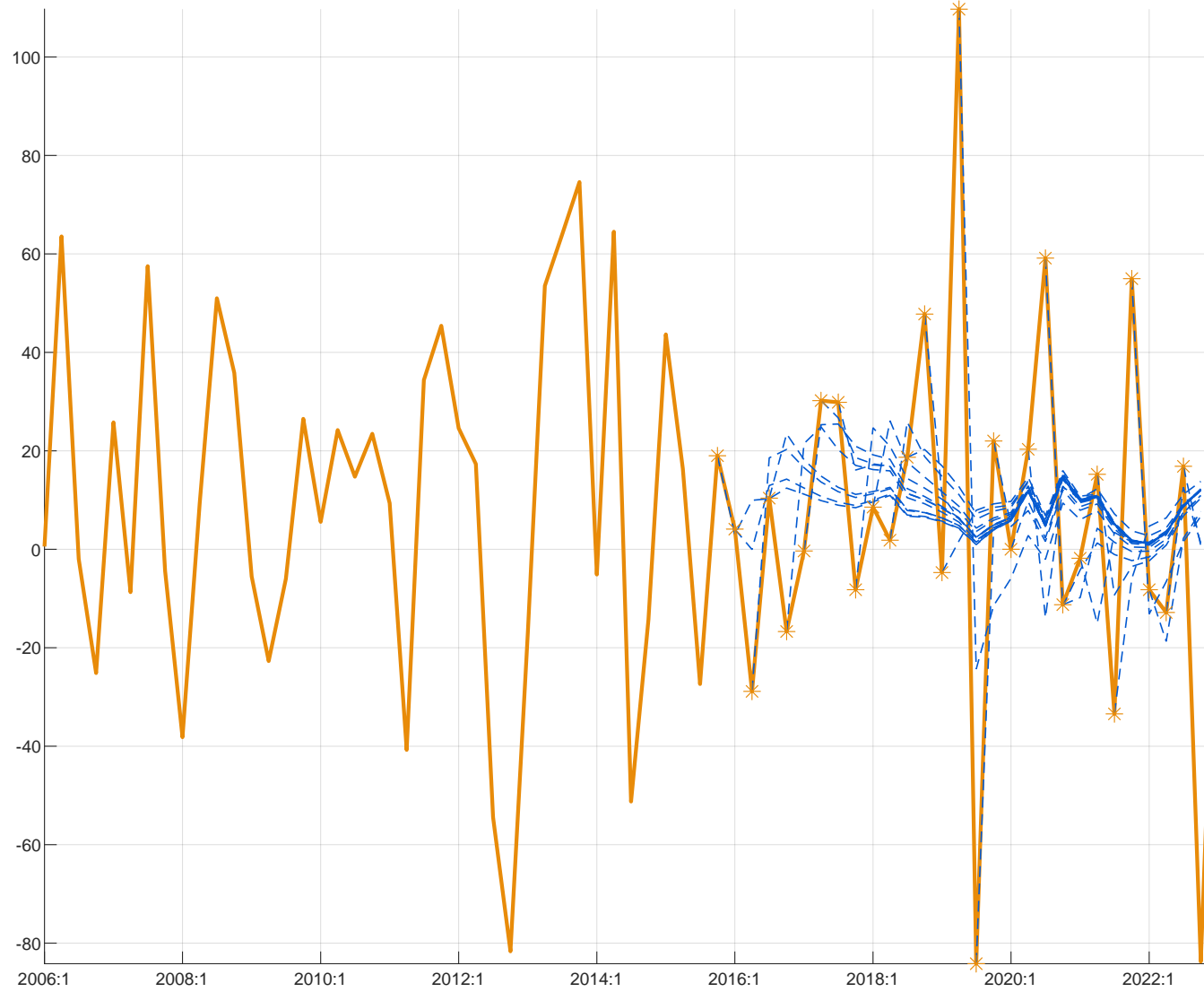
Round: 2023 July main round, time: 06-Dec-2023 15:58:34.

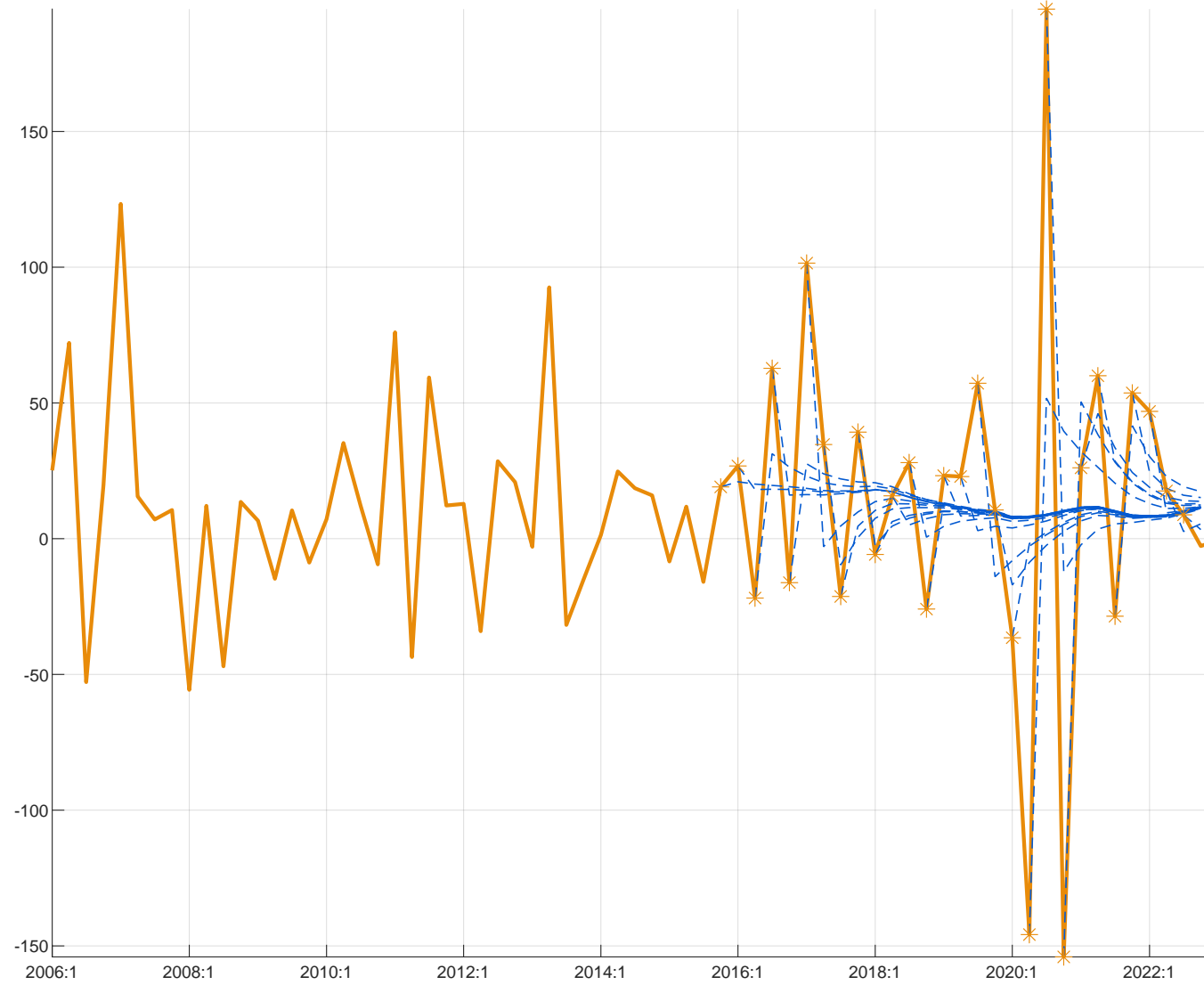
Consumption, ann. QQ % [dl_cons]

Investment, ann. QQ % [dl_inv]

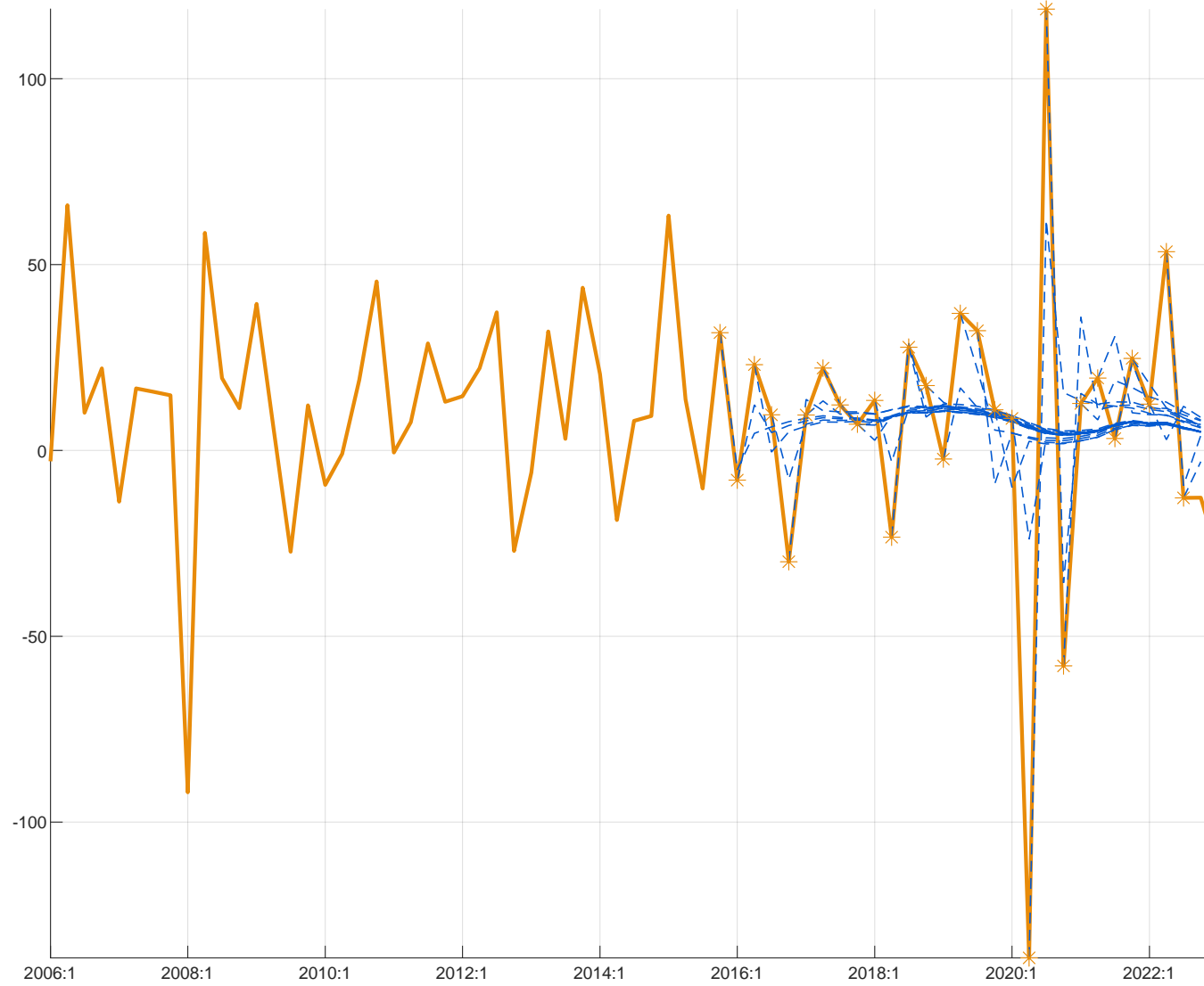


Gov. demand, ann. QQ % [dl_gdem]

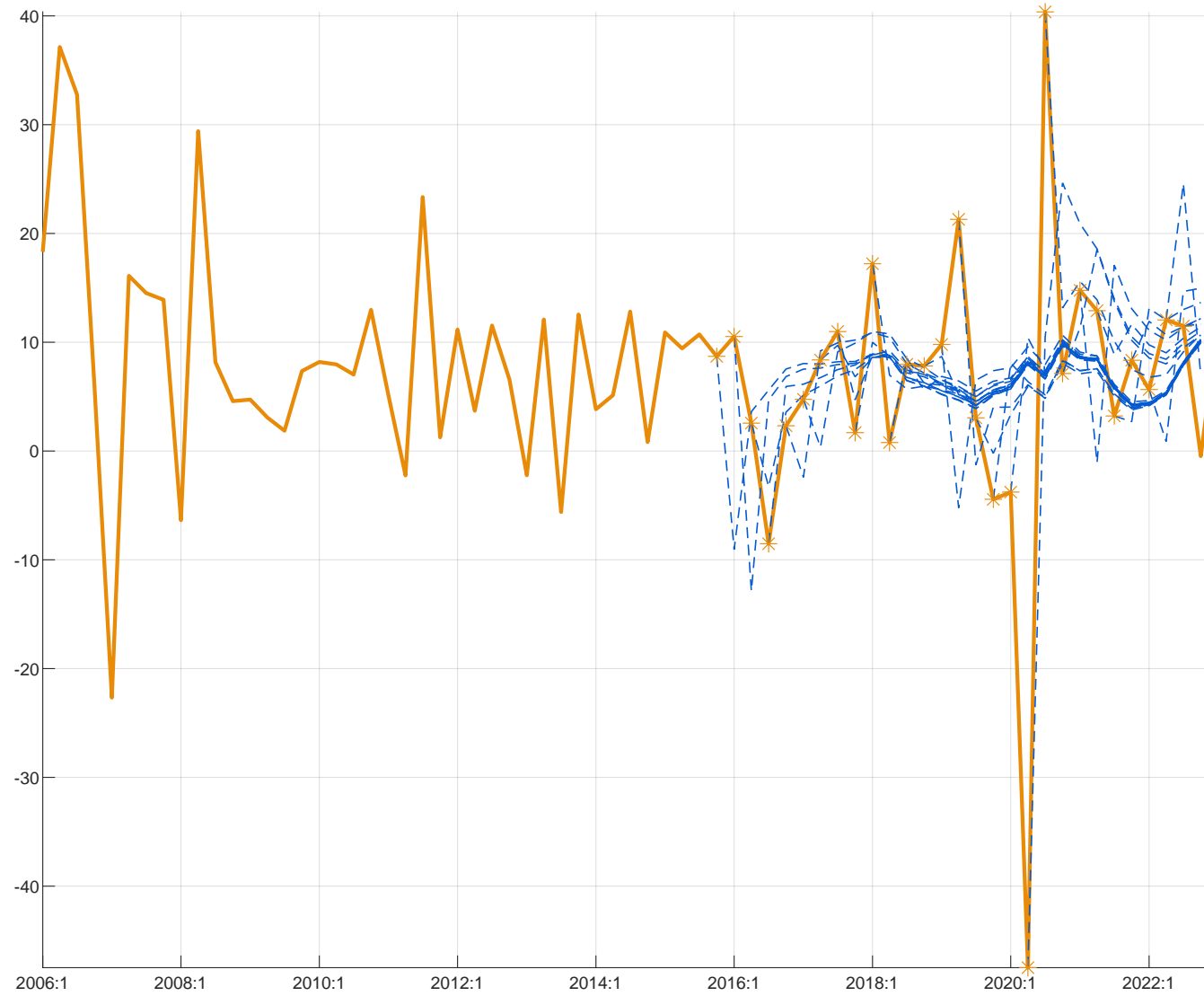


Export, ann. QQ % [dl_exp]

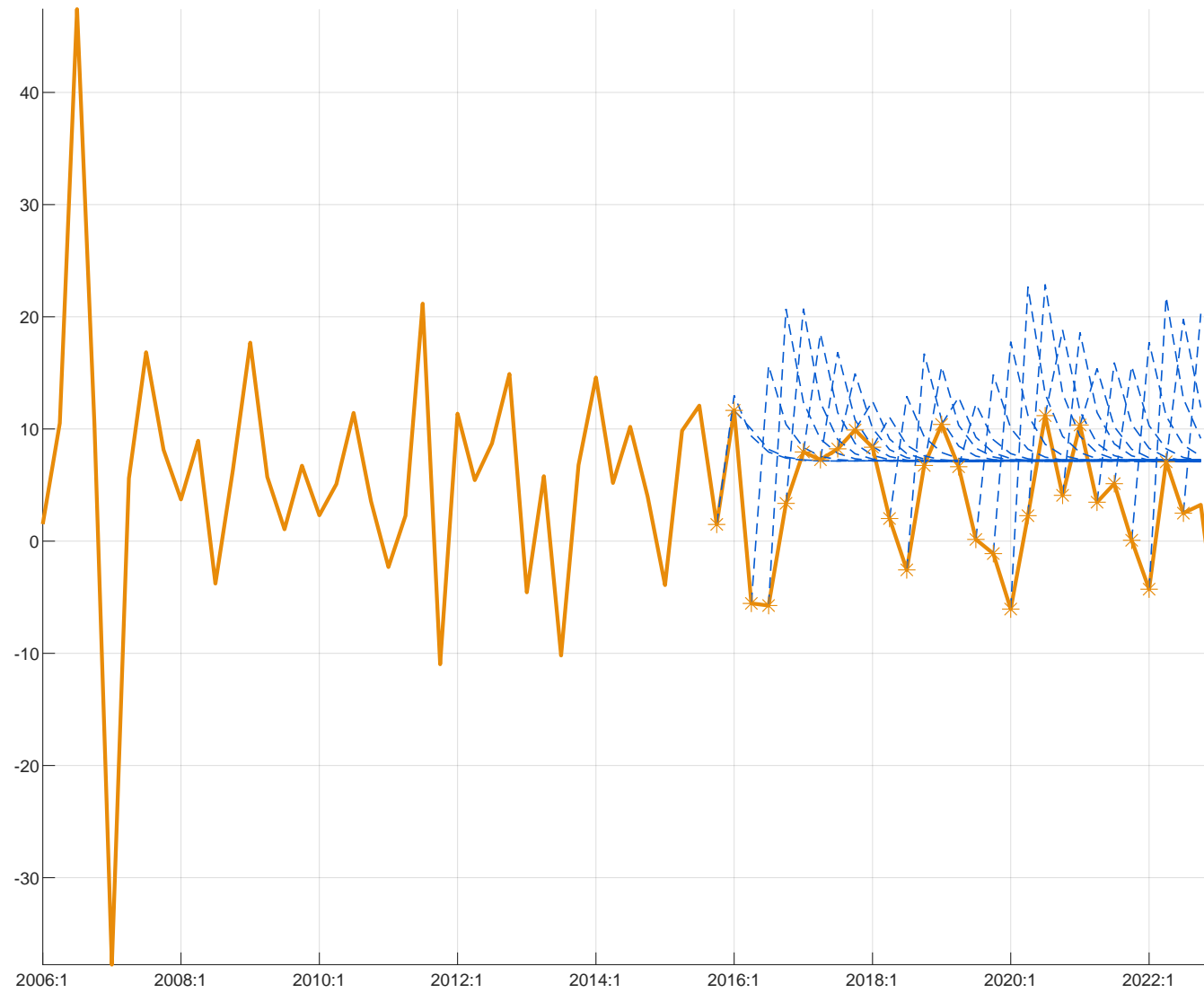
Import, ann. QQ % [dl_imp]



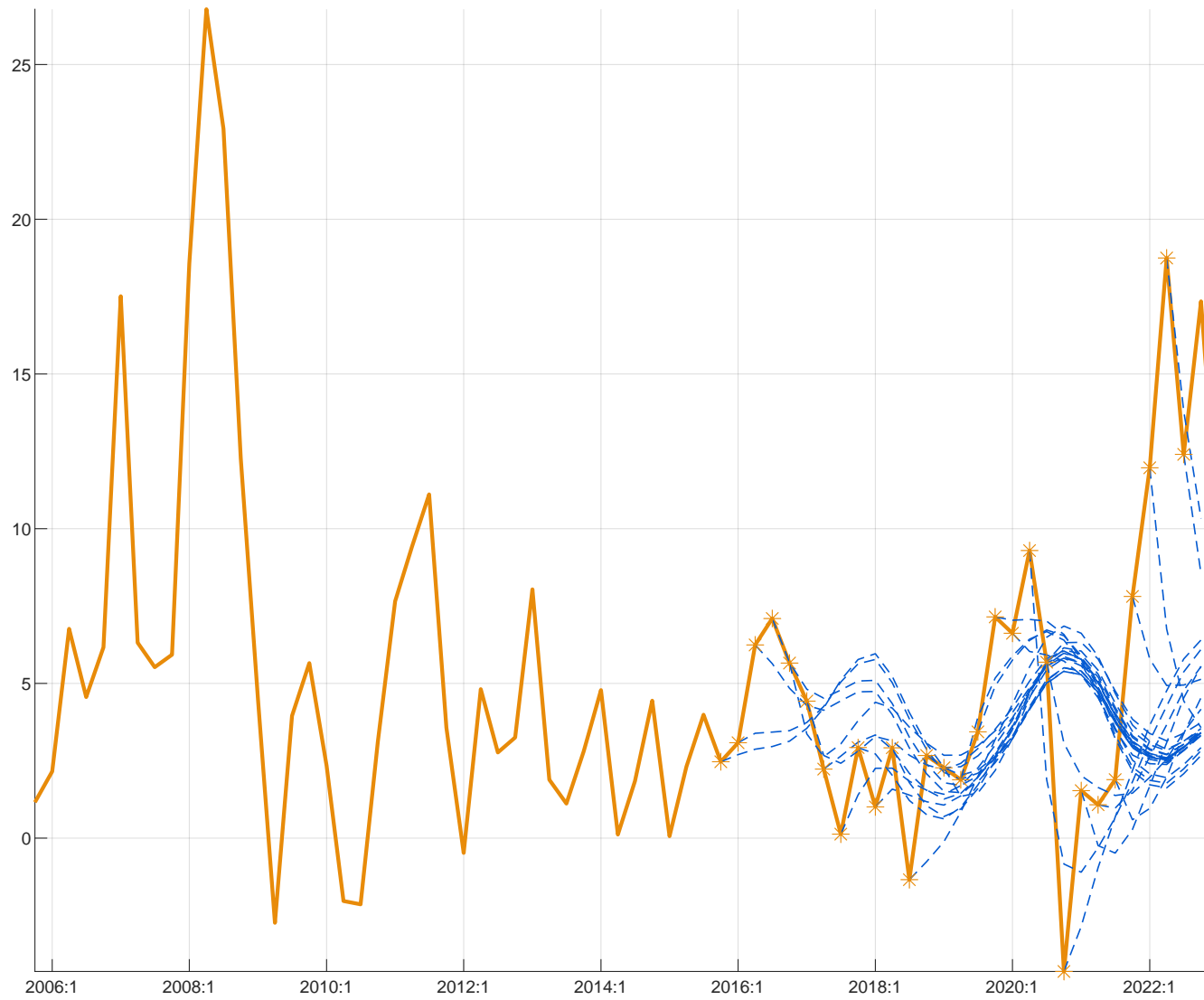
GDP, ann. QQ % [dl_y]

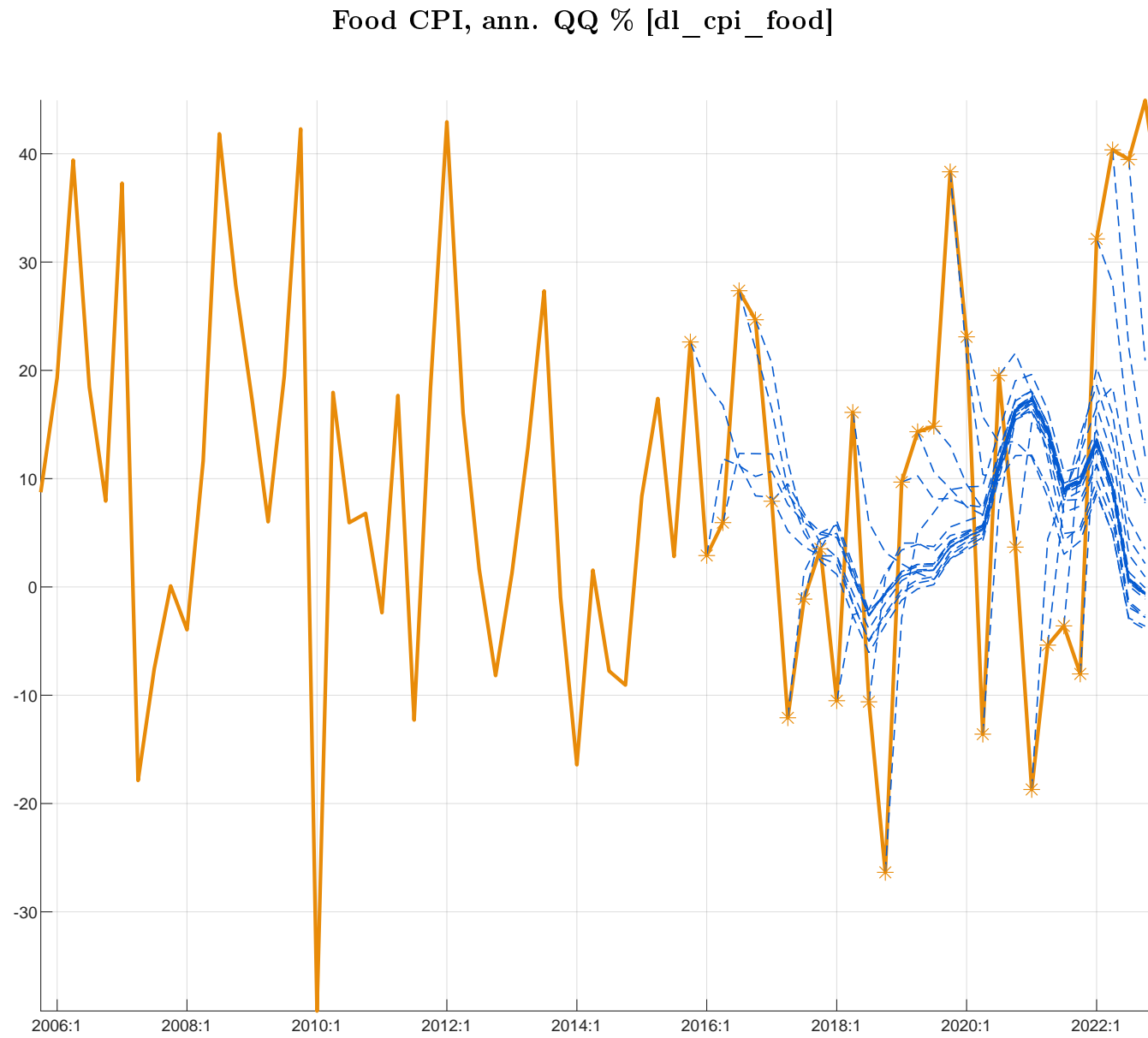


Agric. GDP, ann.QQ % [dl_y_agr]

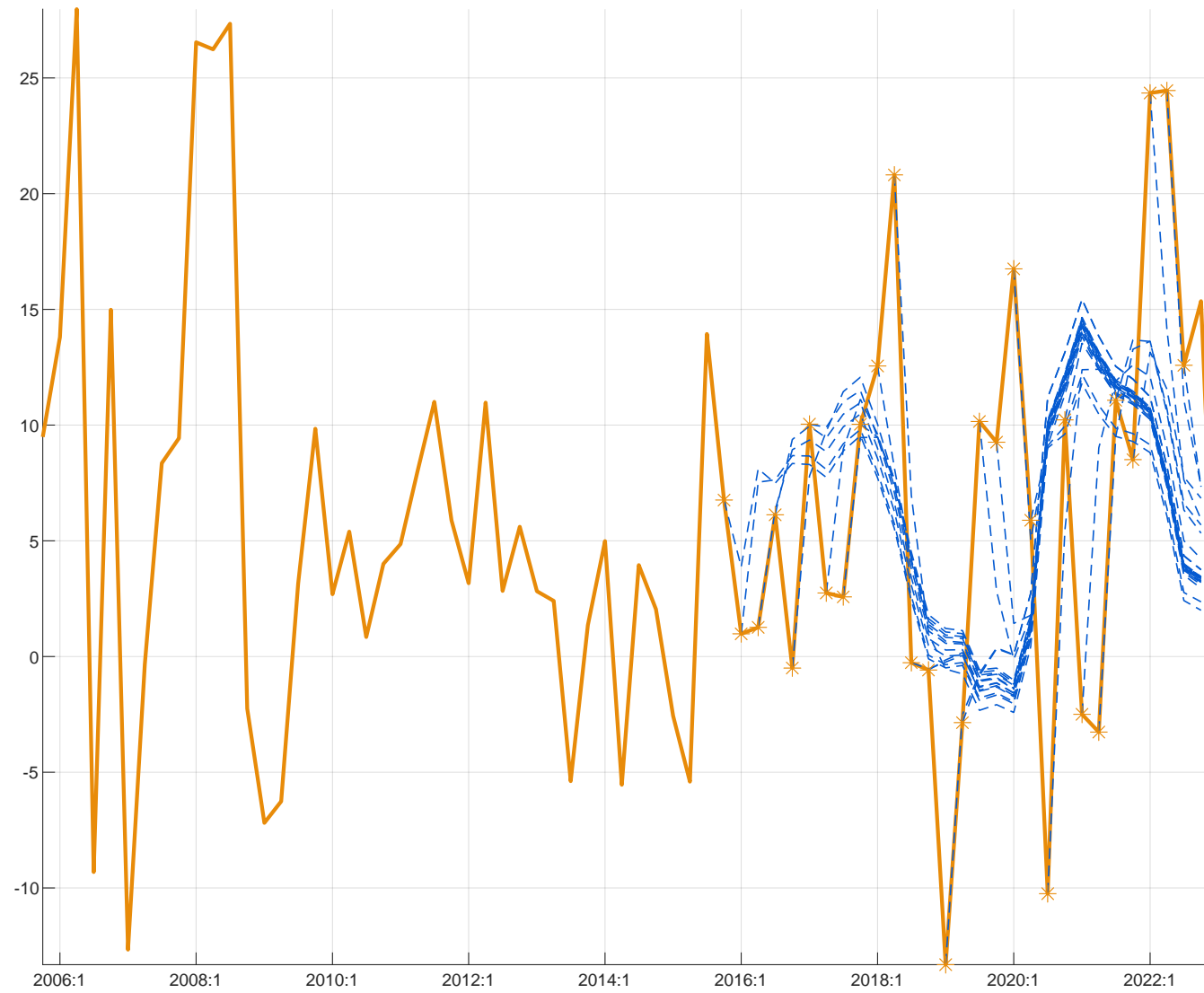


Core CPI, ann. QQ % [dl_cpi_core]

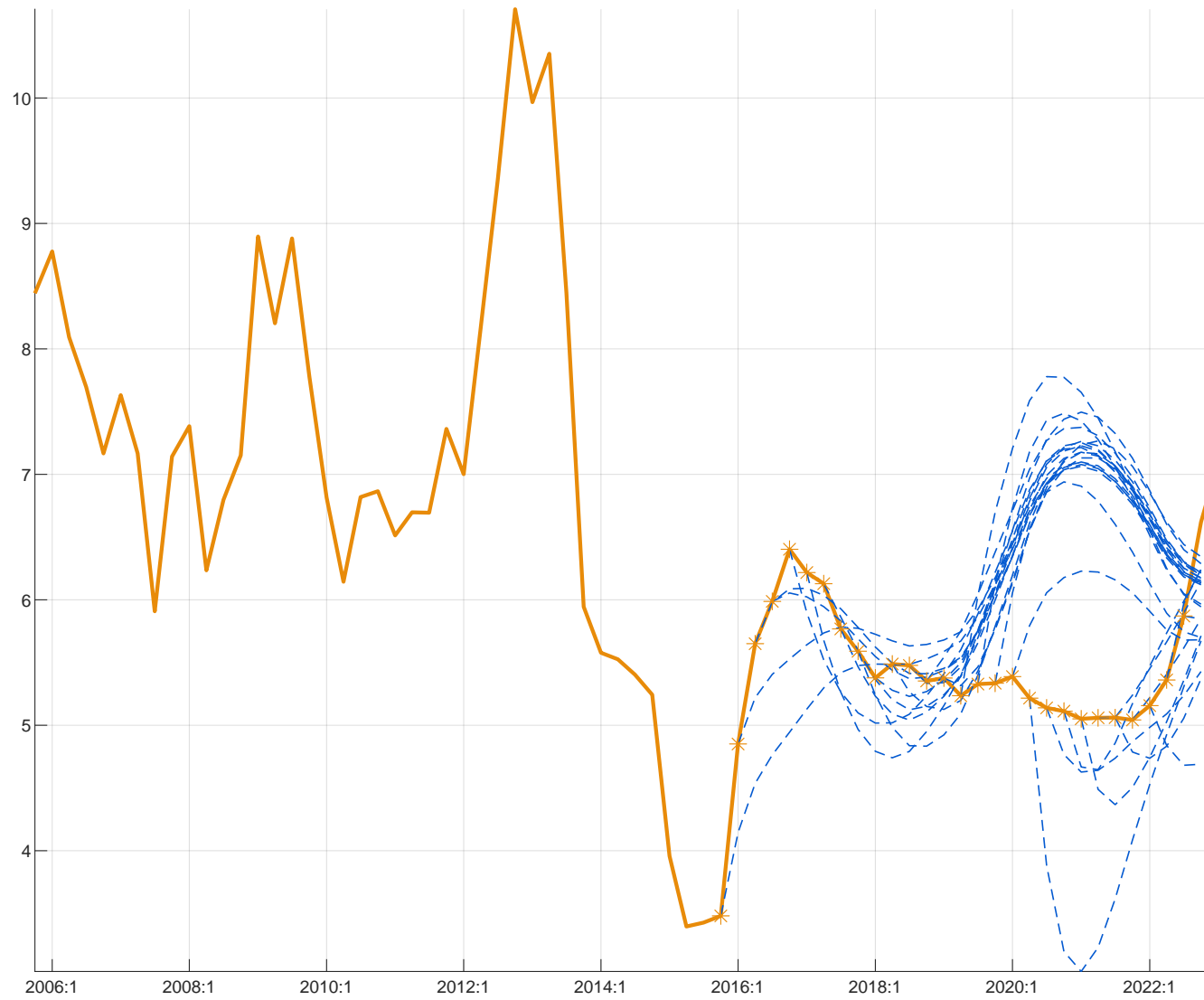


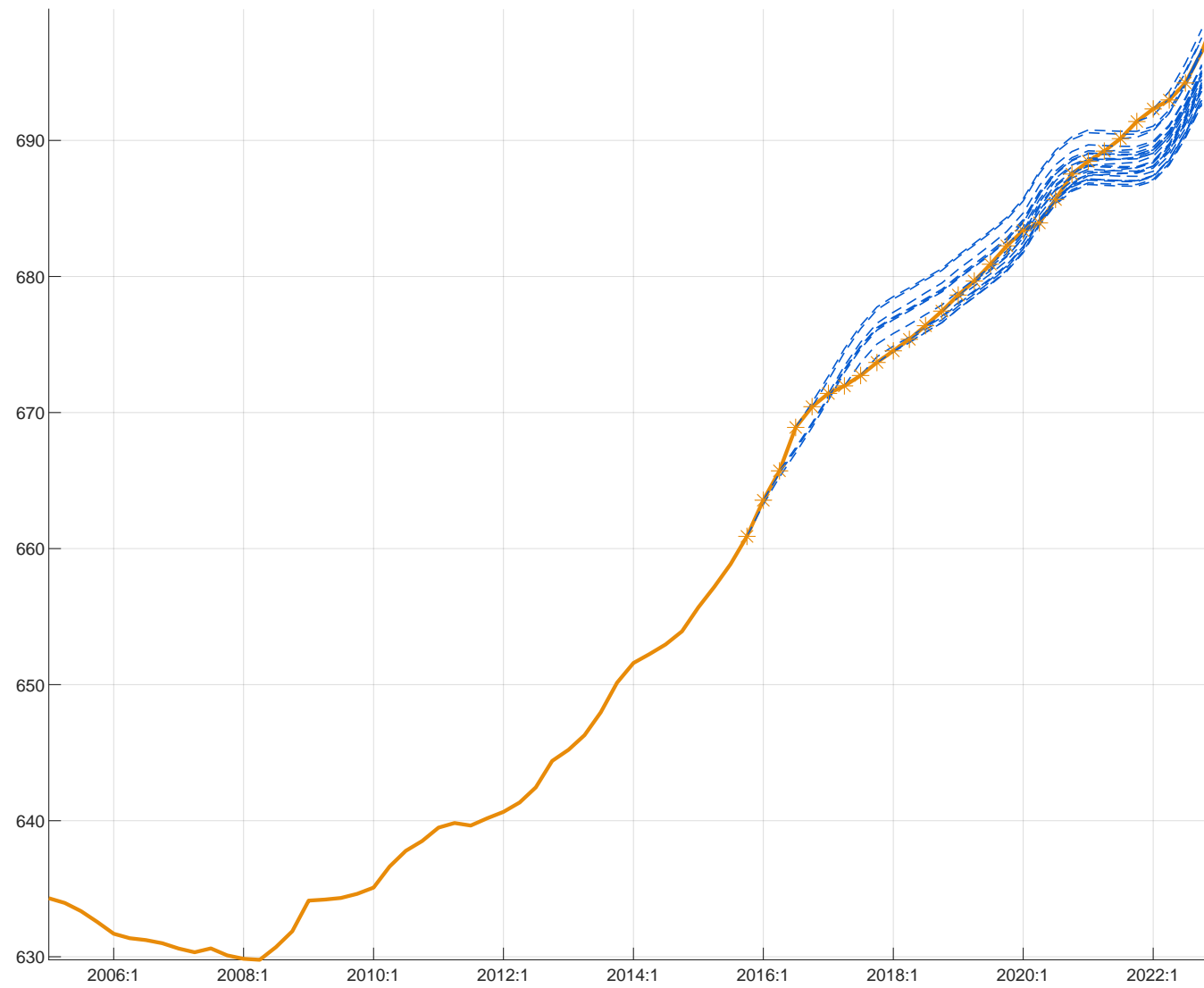


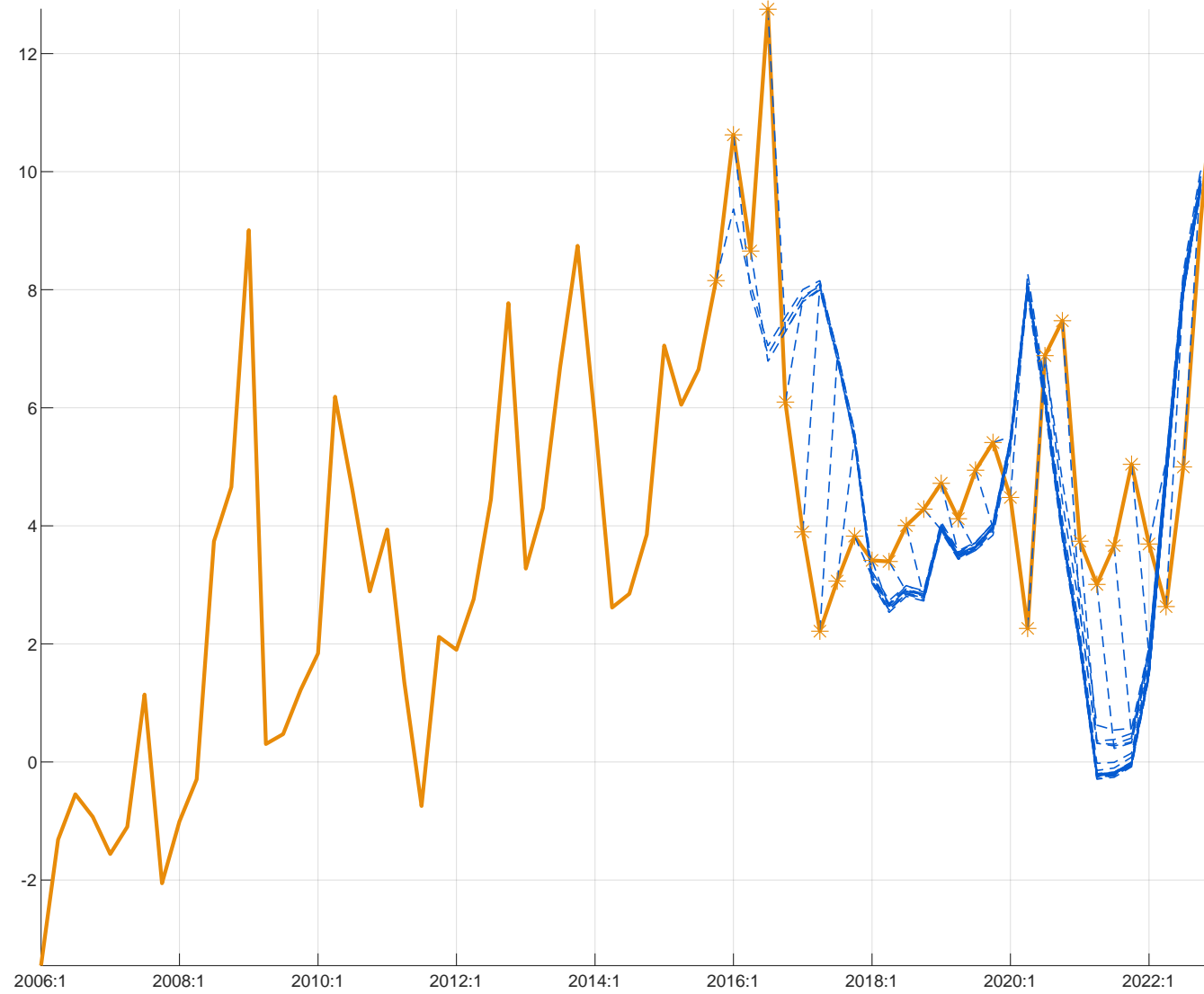
Energy CPI, ann. QQ % [dl_cpi_ener]



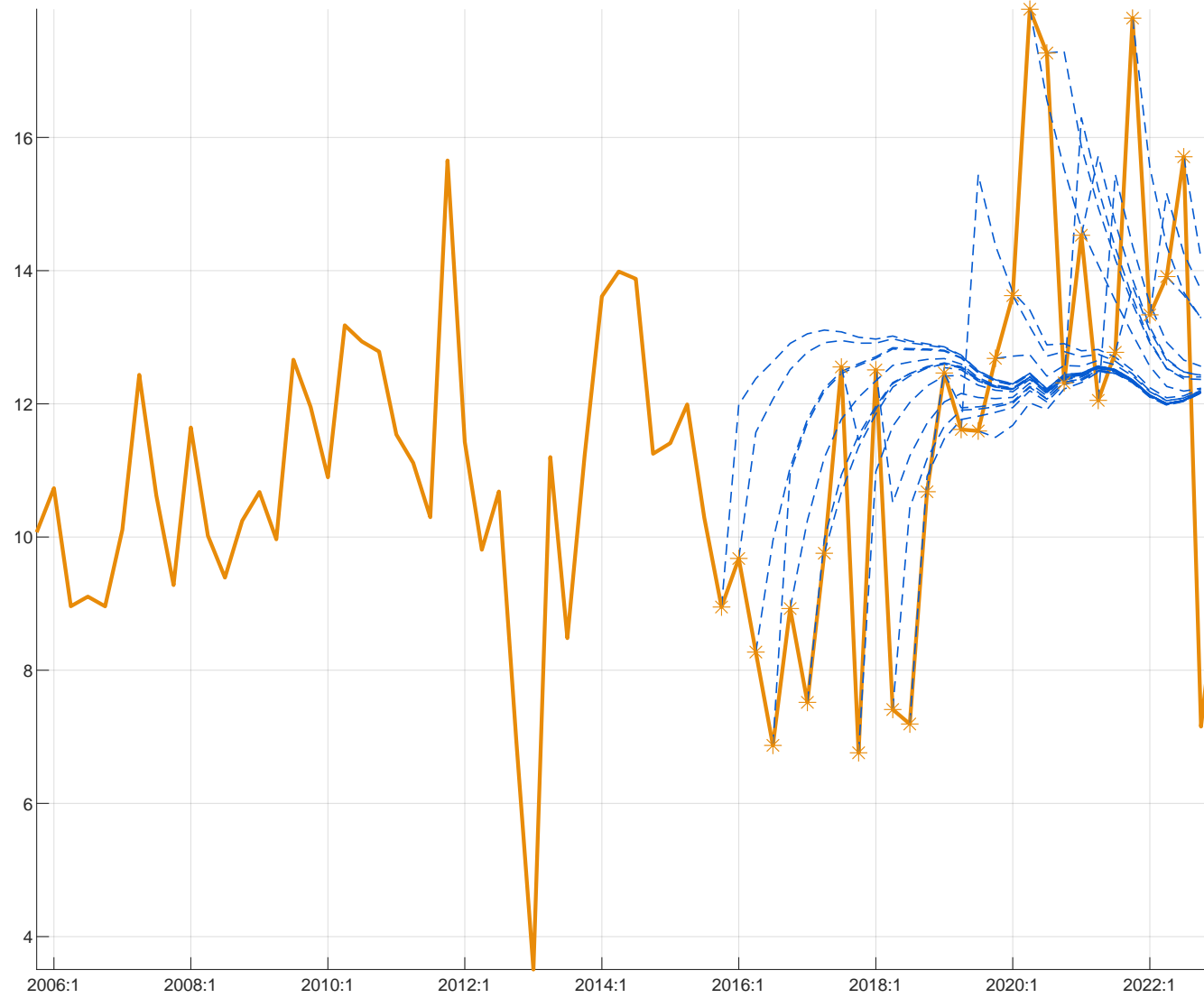
Policy rate (IB rate used), % [i]

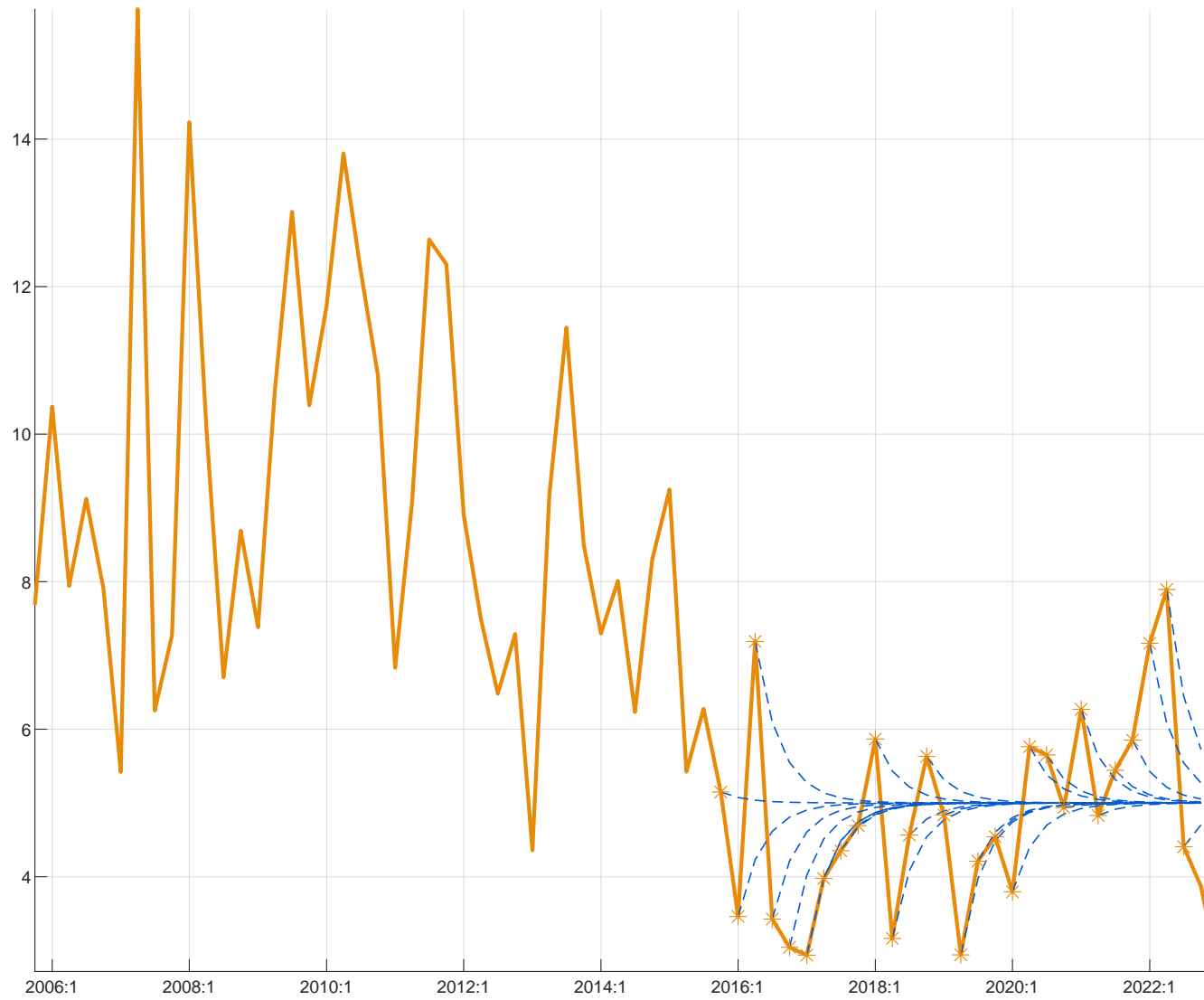


Exchng. rate, $100 \cdot \log [l_s]$ 

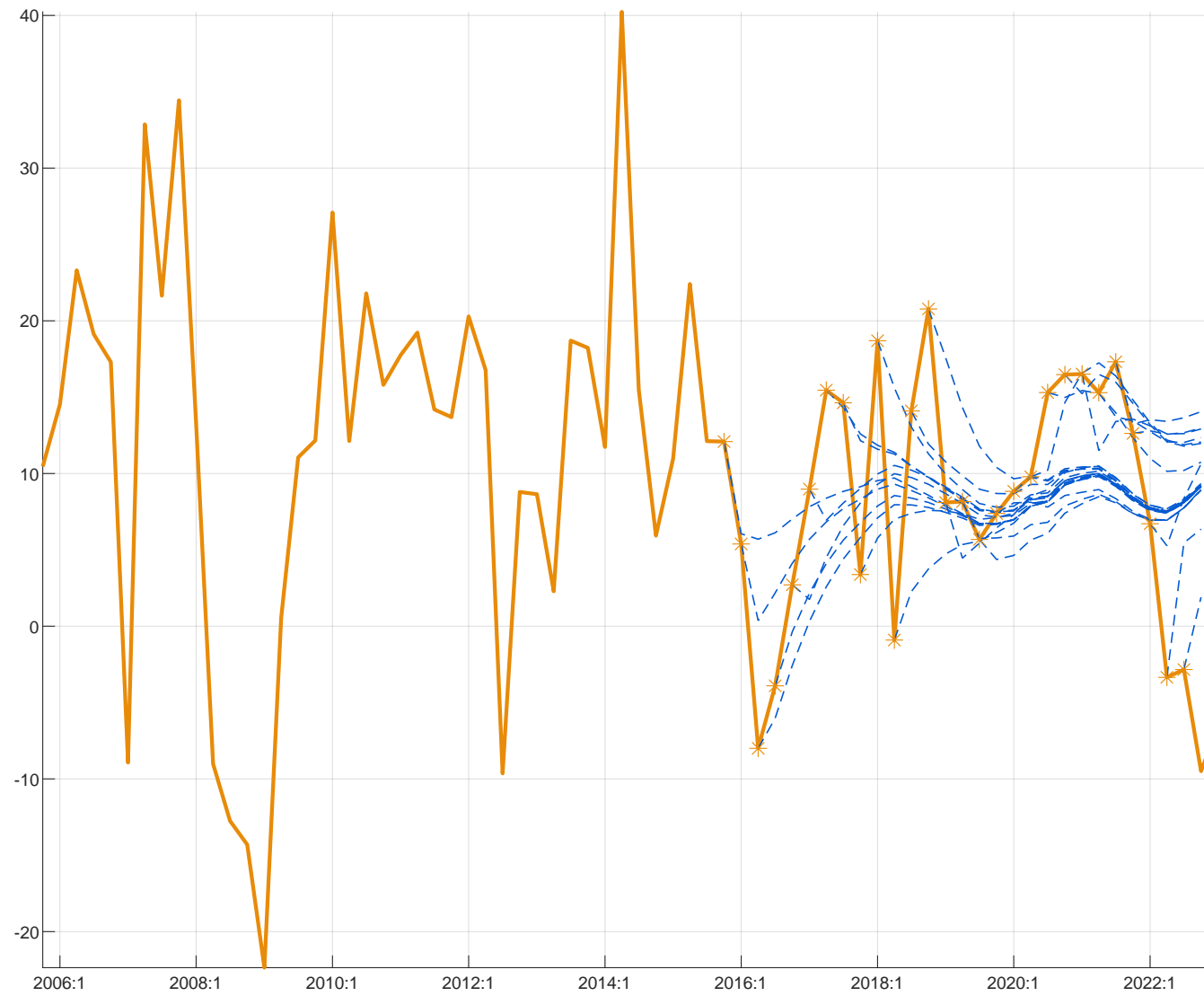
Exchn. rate, ann. QQ % [dl_s]

Budget deficit, % of GDP [def_y]

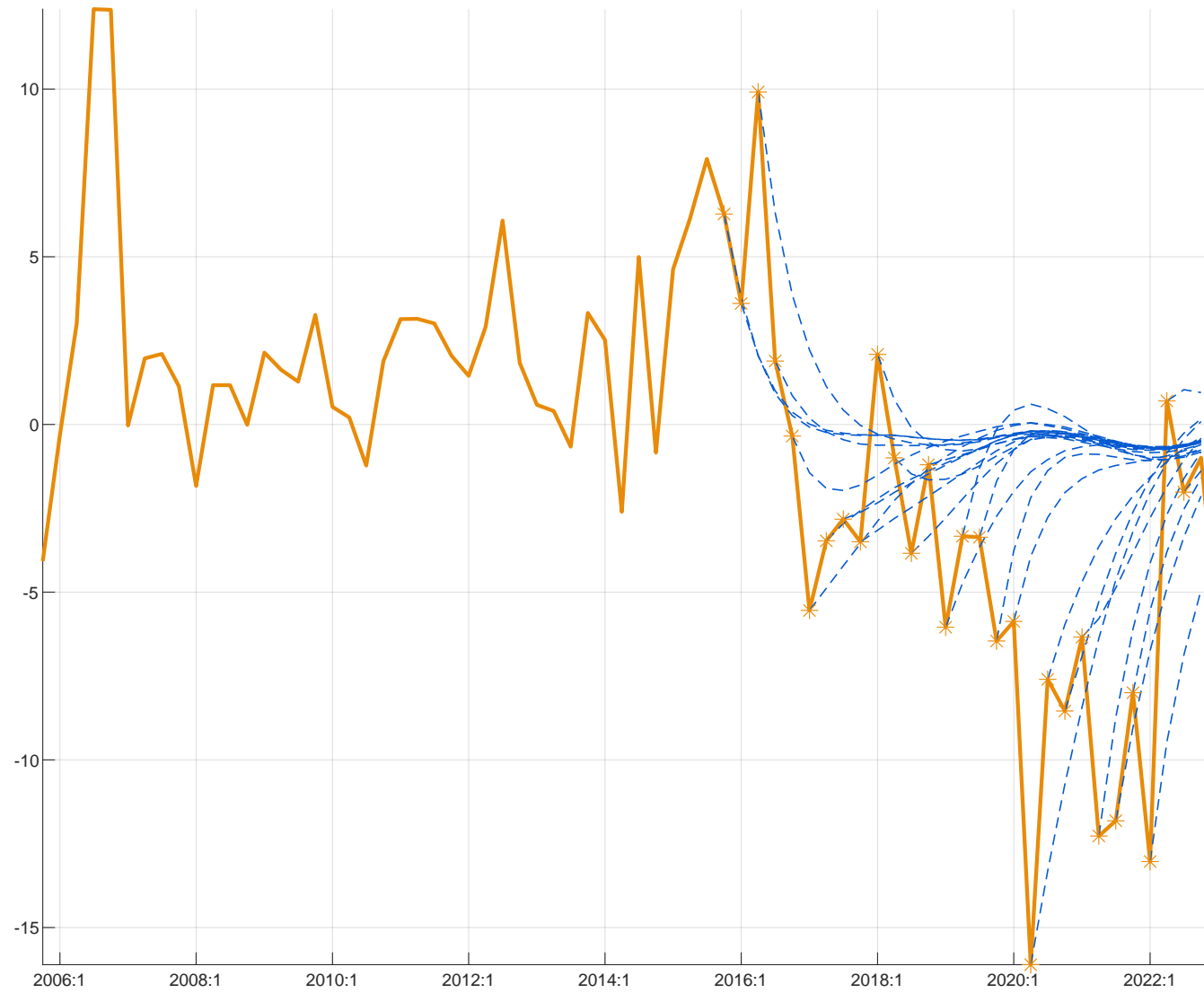


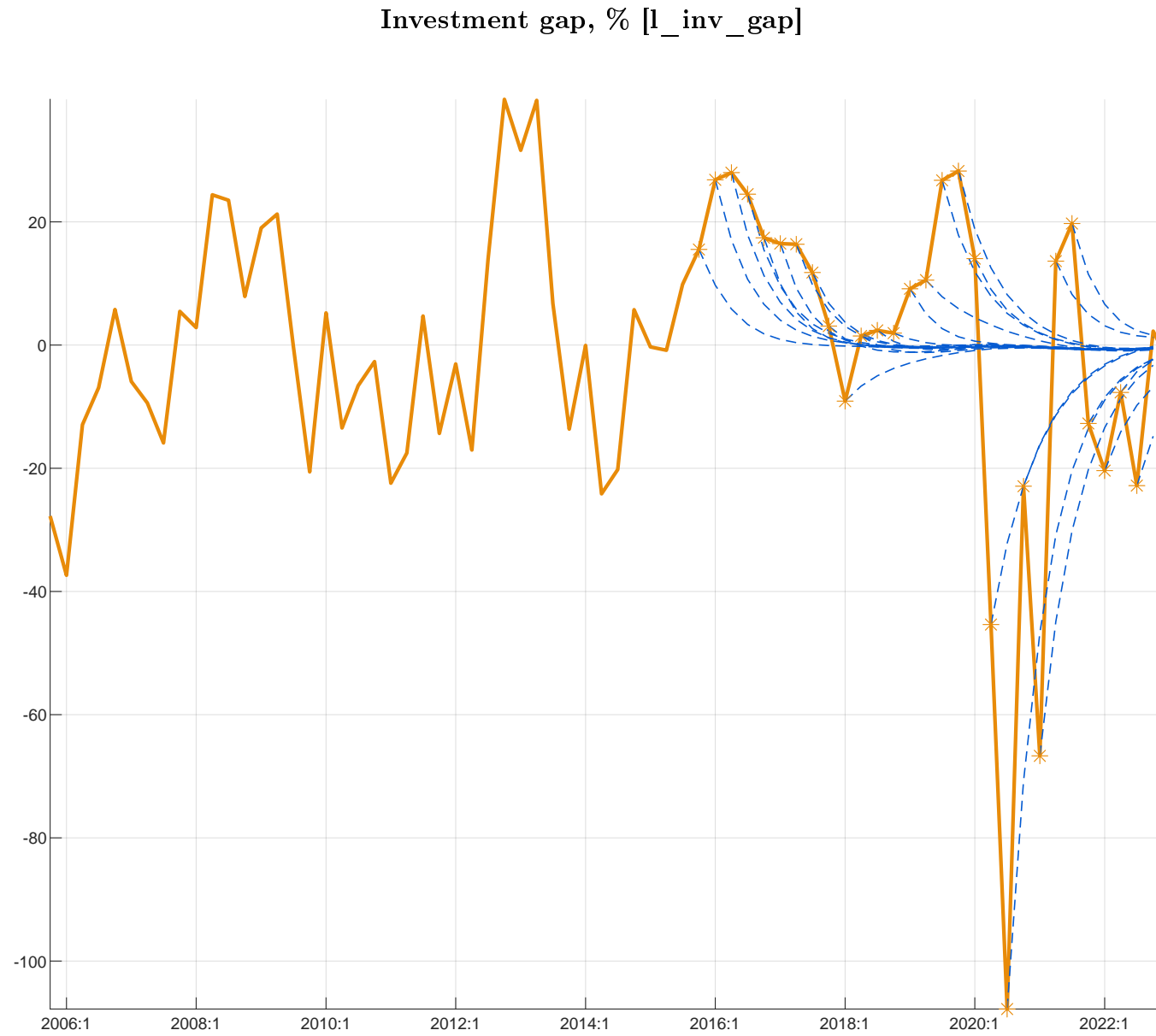
Fiscal grants, % of GDP [grants_y]

Real money, ann. QQ % [dl_rmd]

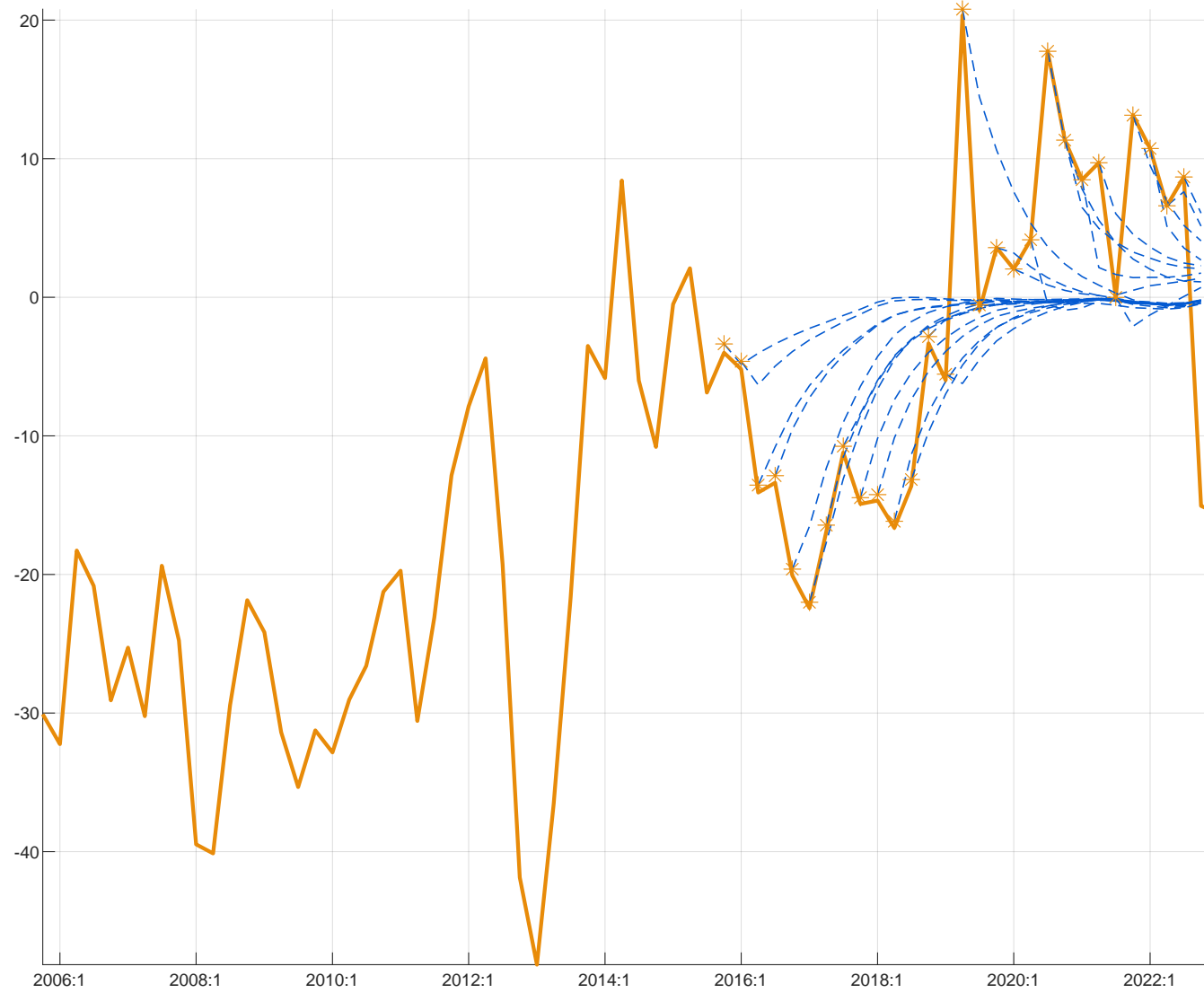


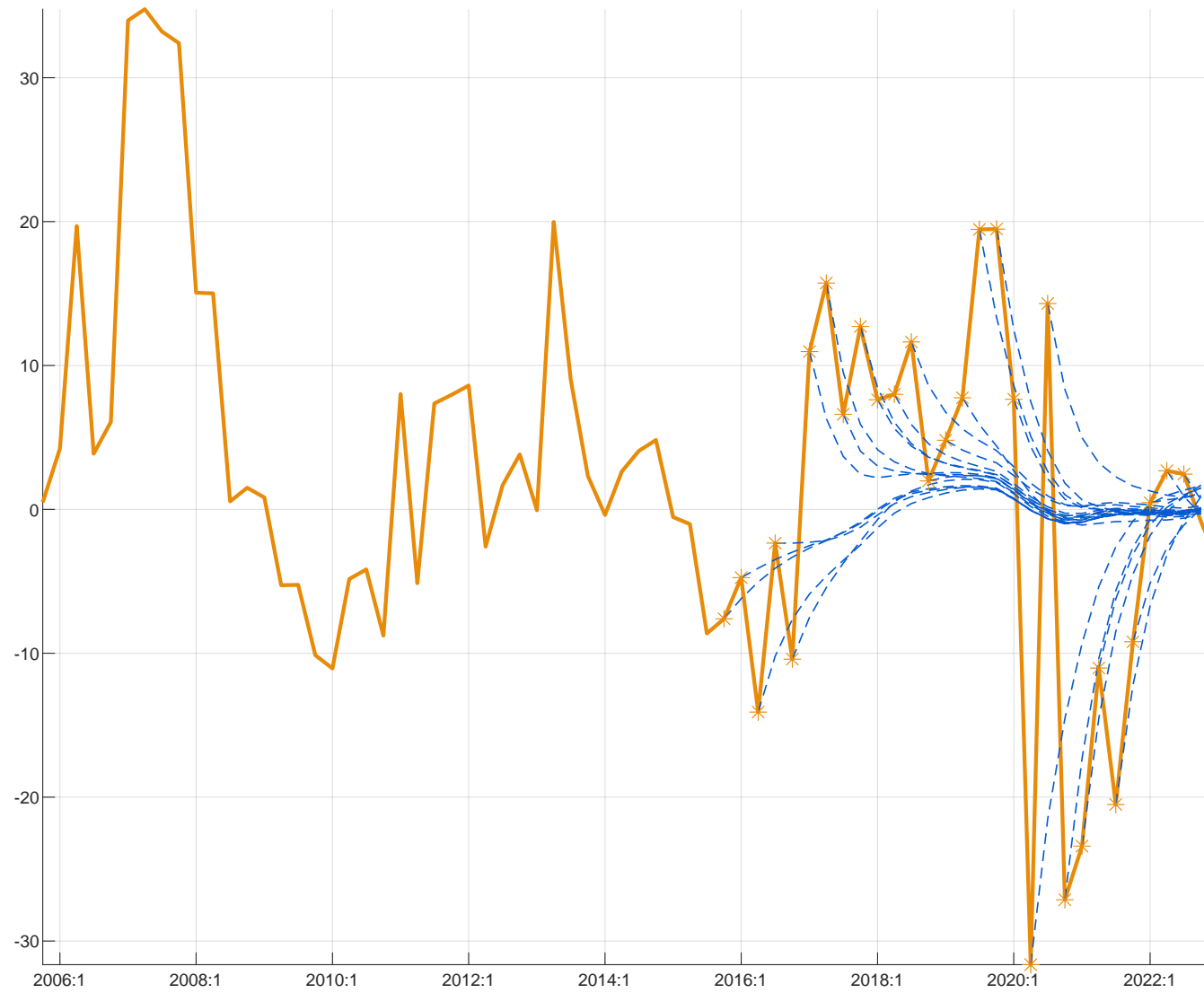
Consumption gap, % [l_cons_gap]



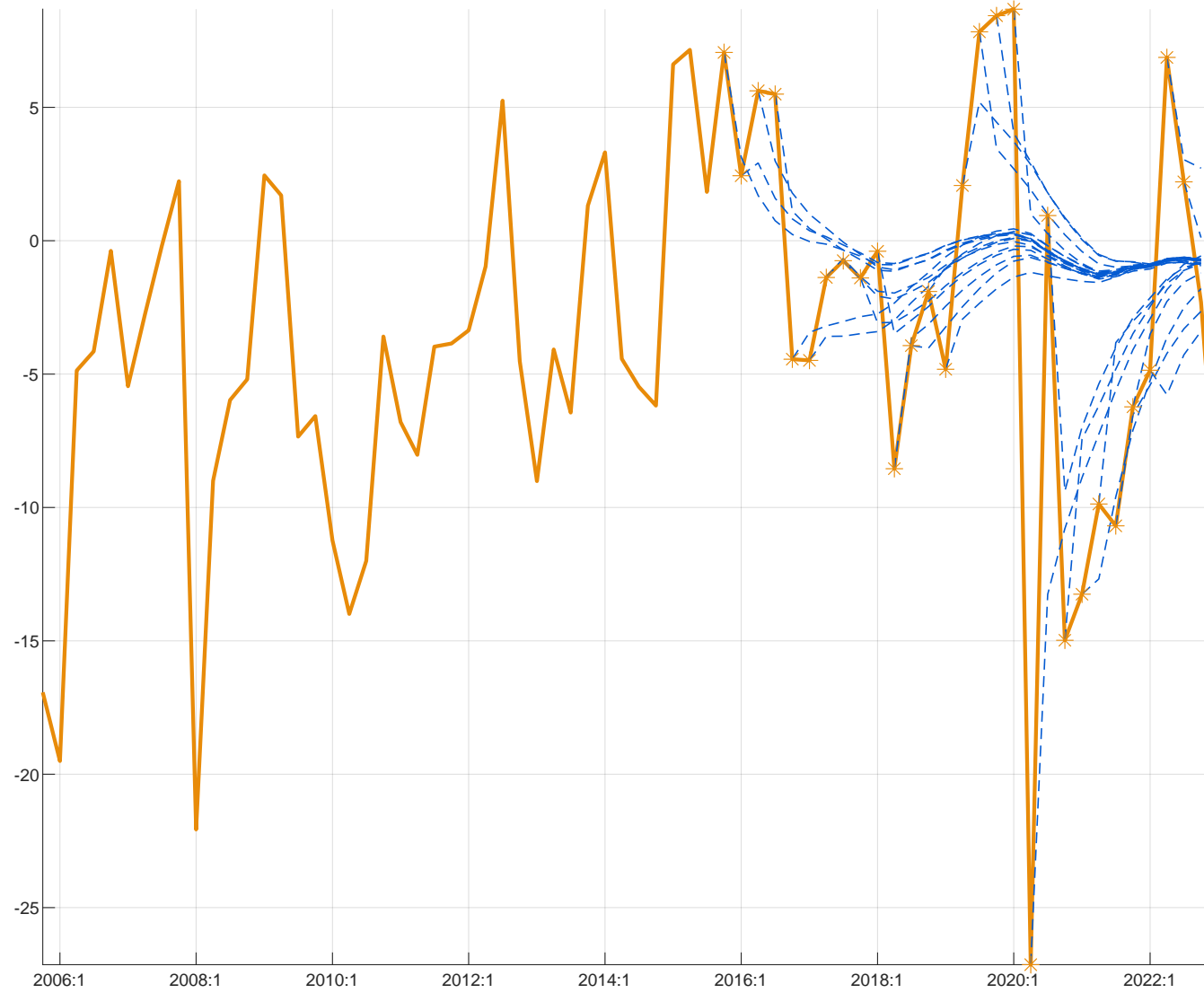


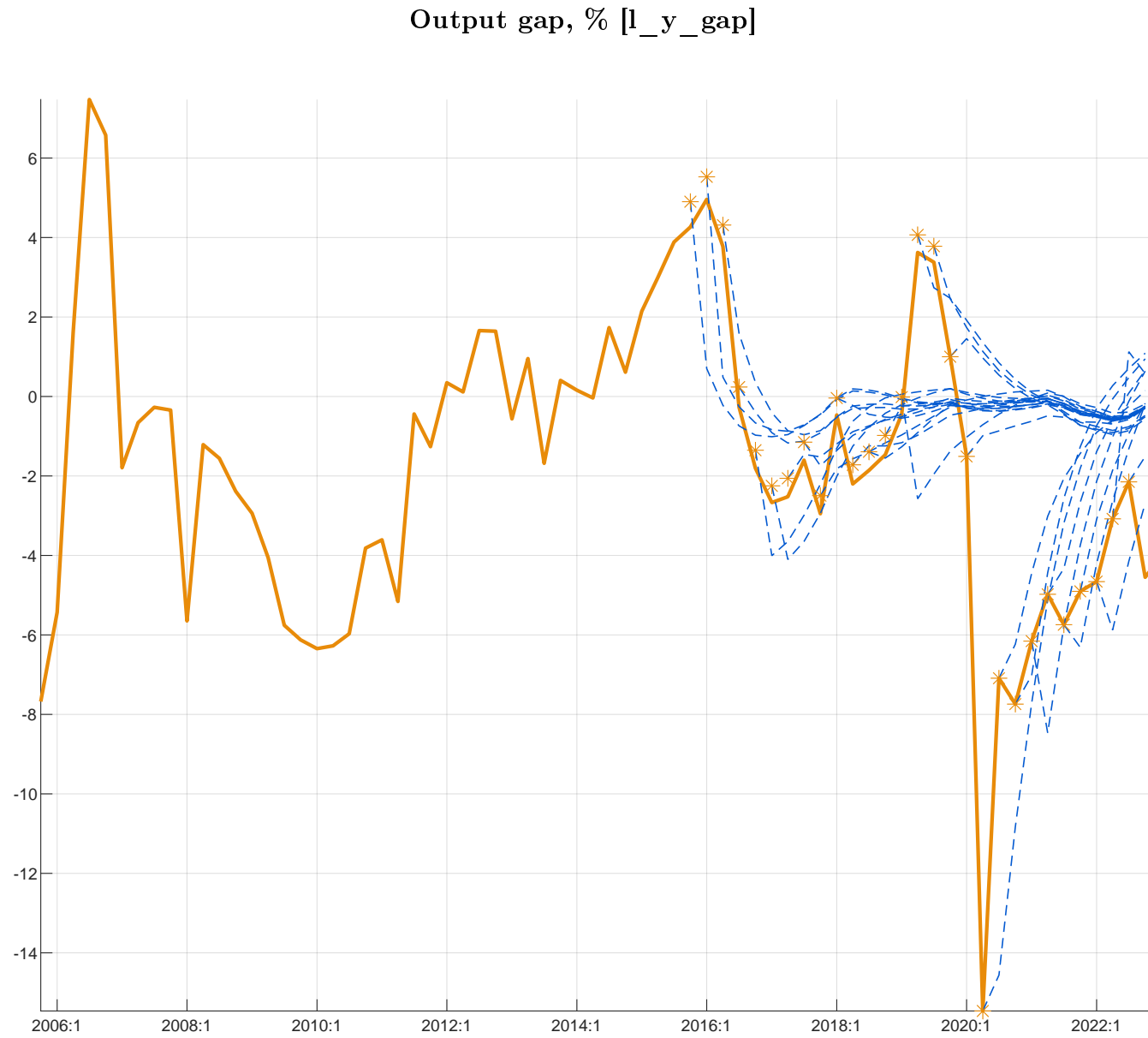
Gov. demand gap, % [l_gdem_gap]



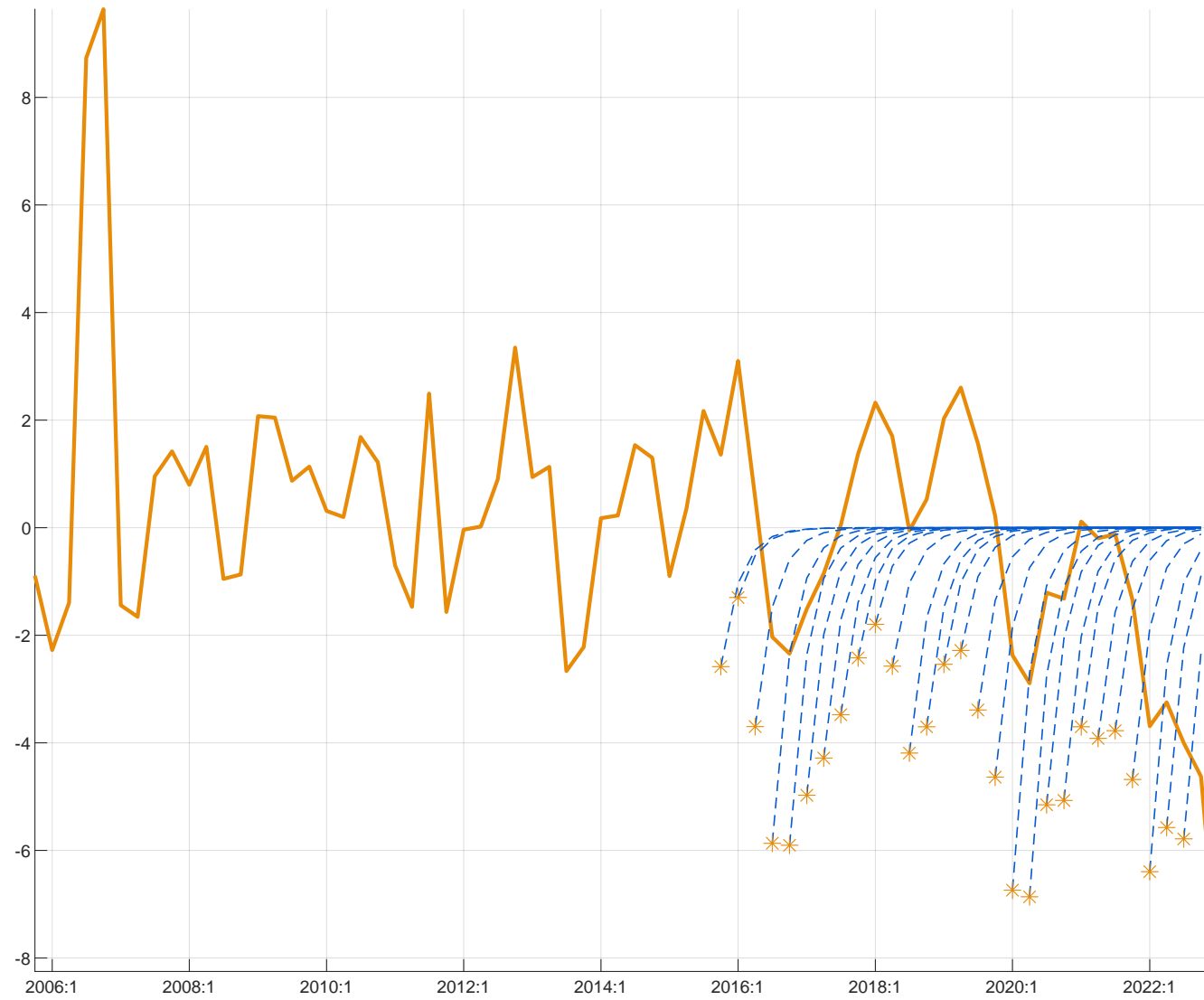
Export gap, % [l_exp_gap]

Import gap, % [l_imp_gap]

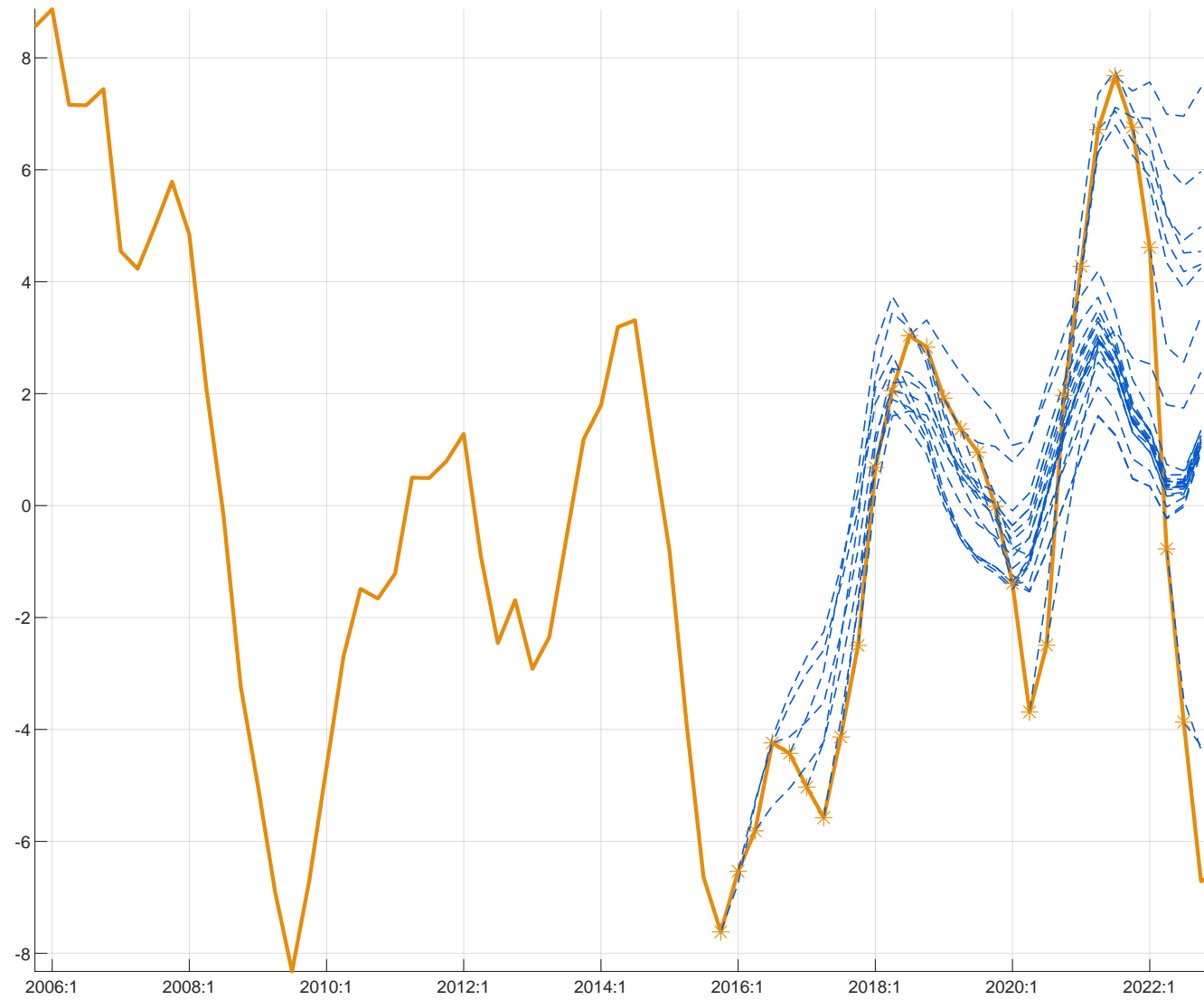


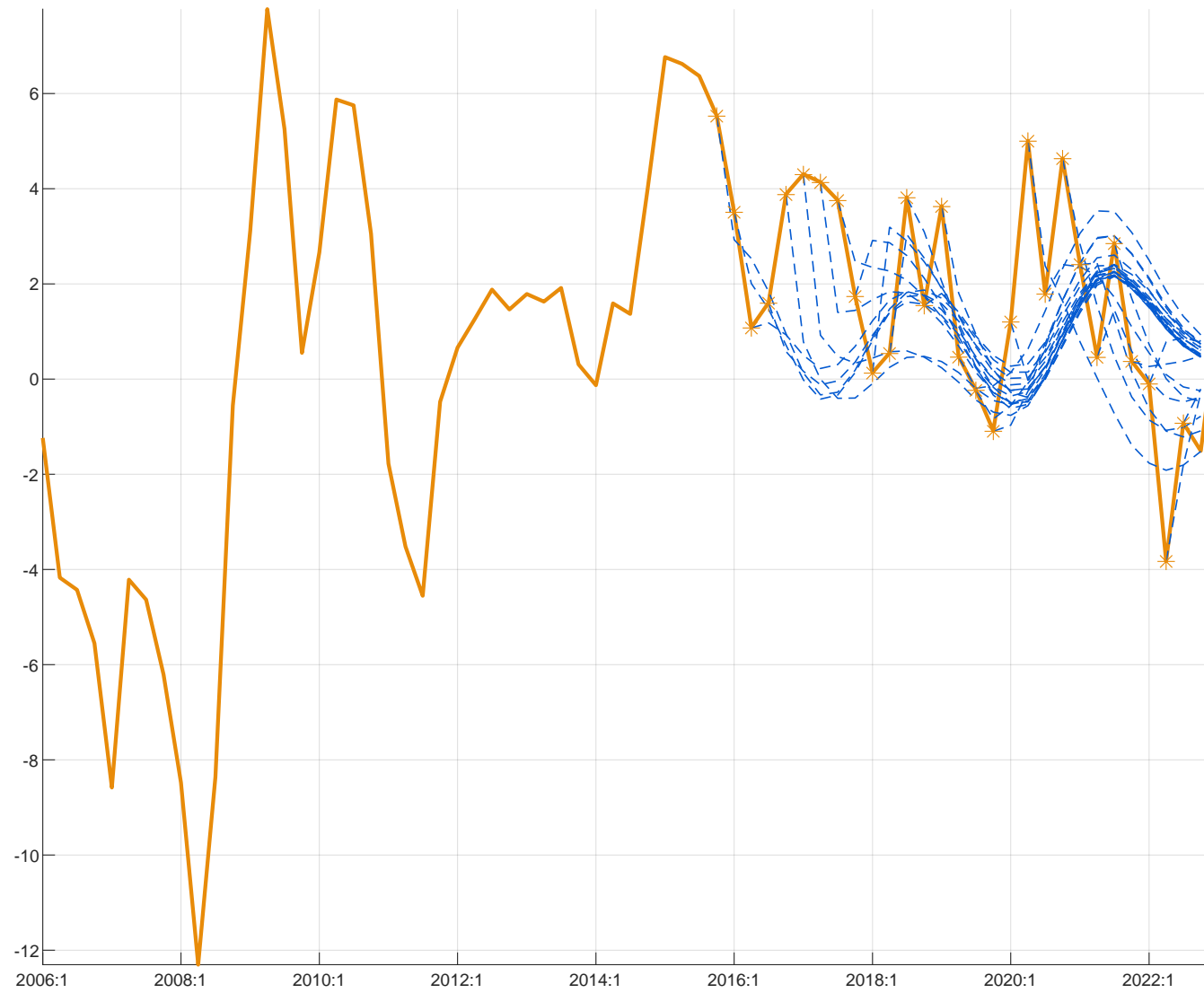


Agric. output gap, % [l_y_agr_gap]

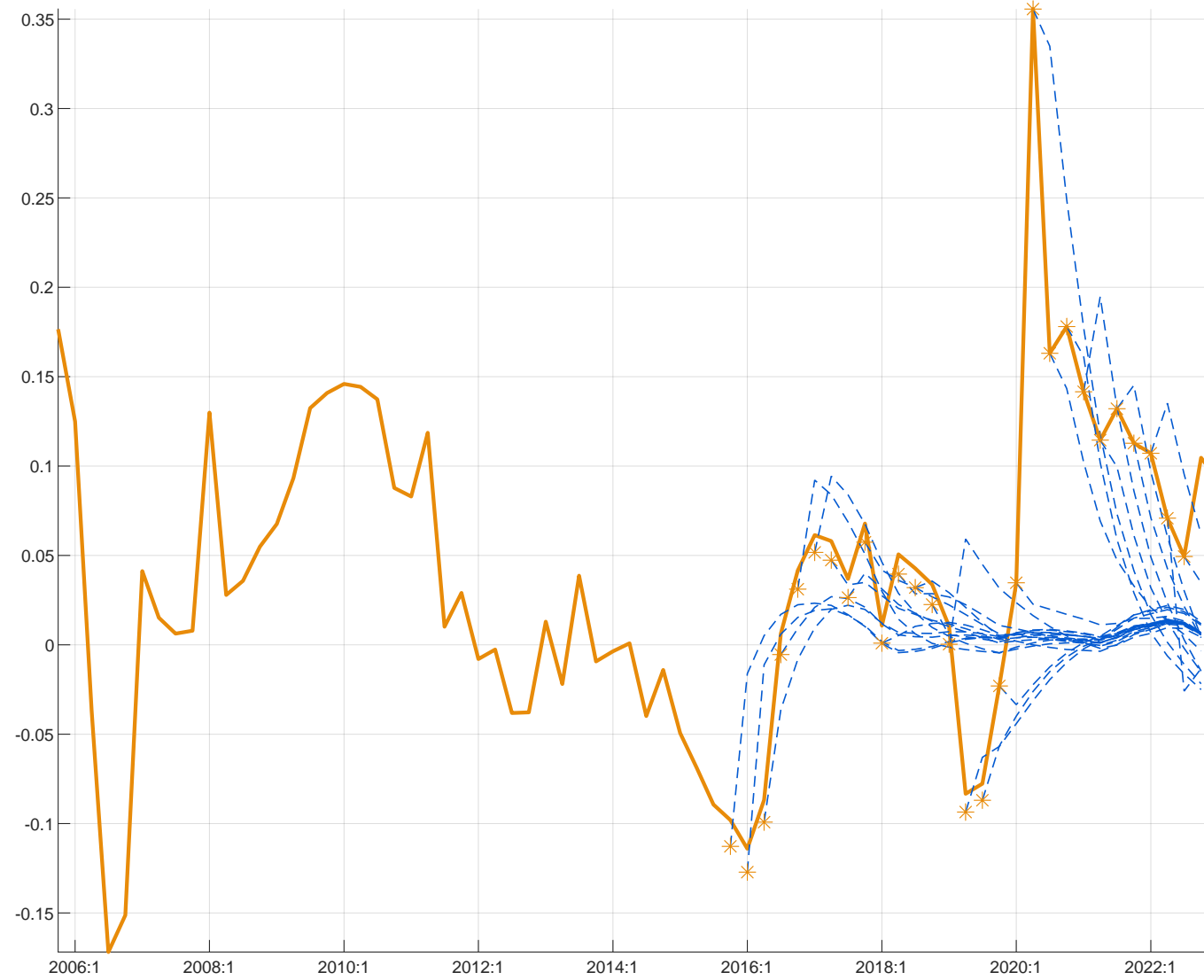


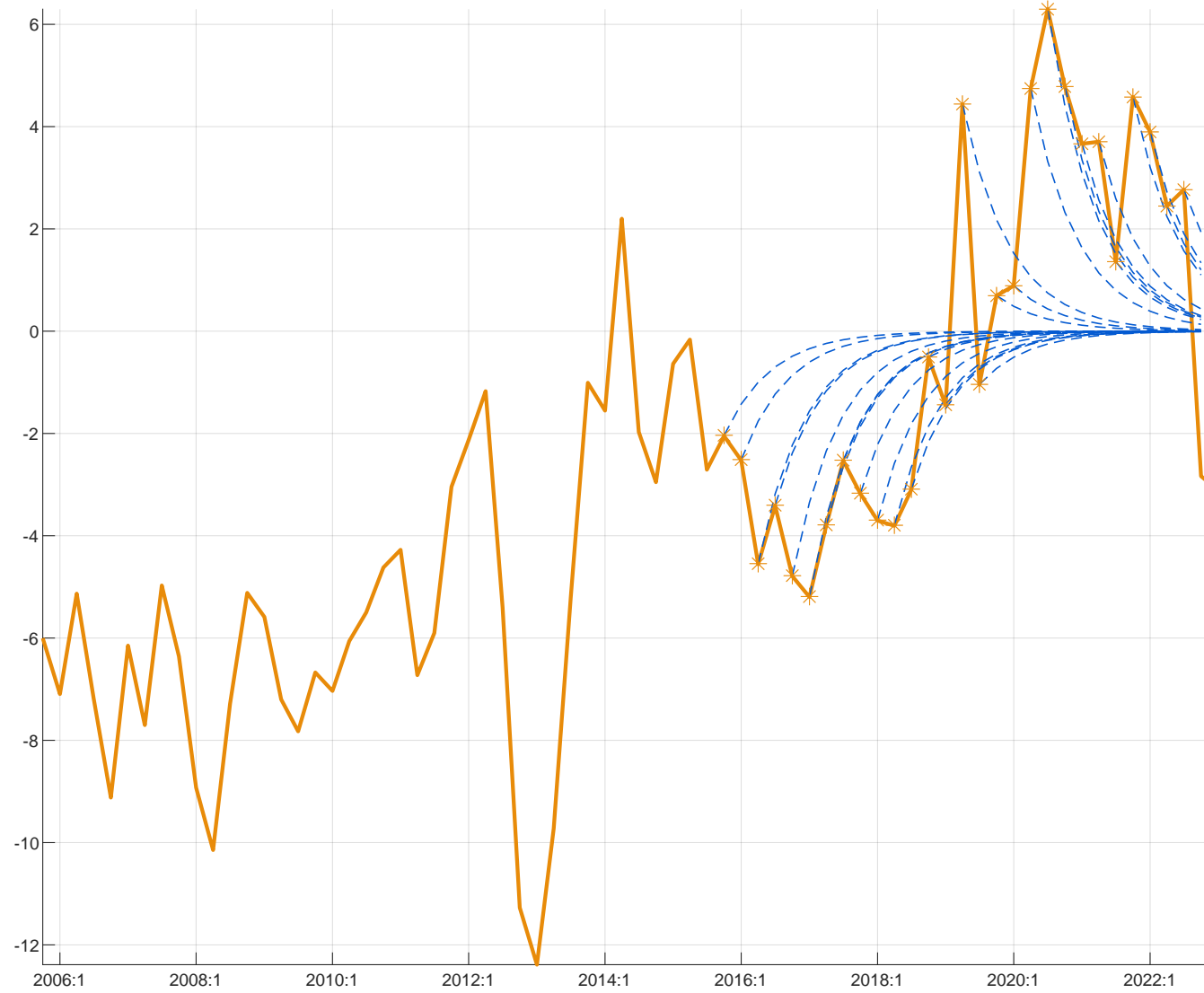
Real exchng. rate gap, % [l_z_gap]

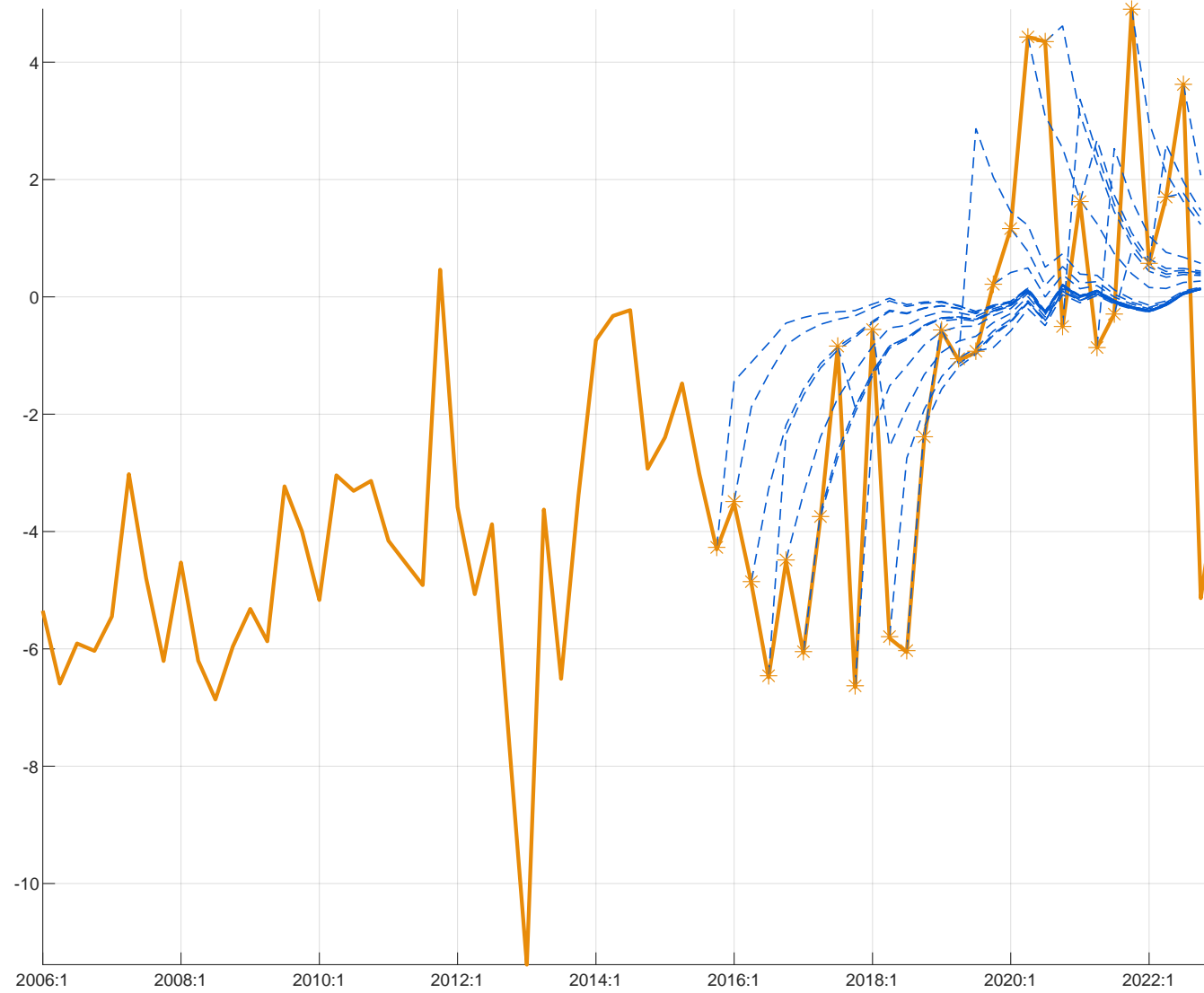


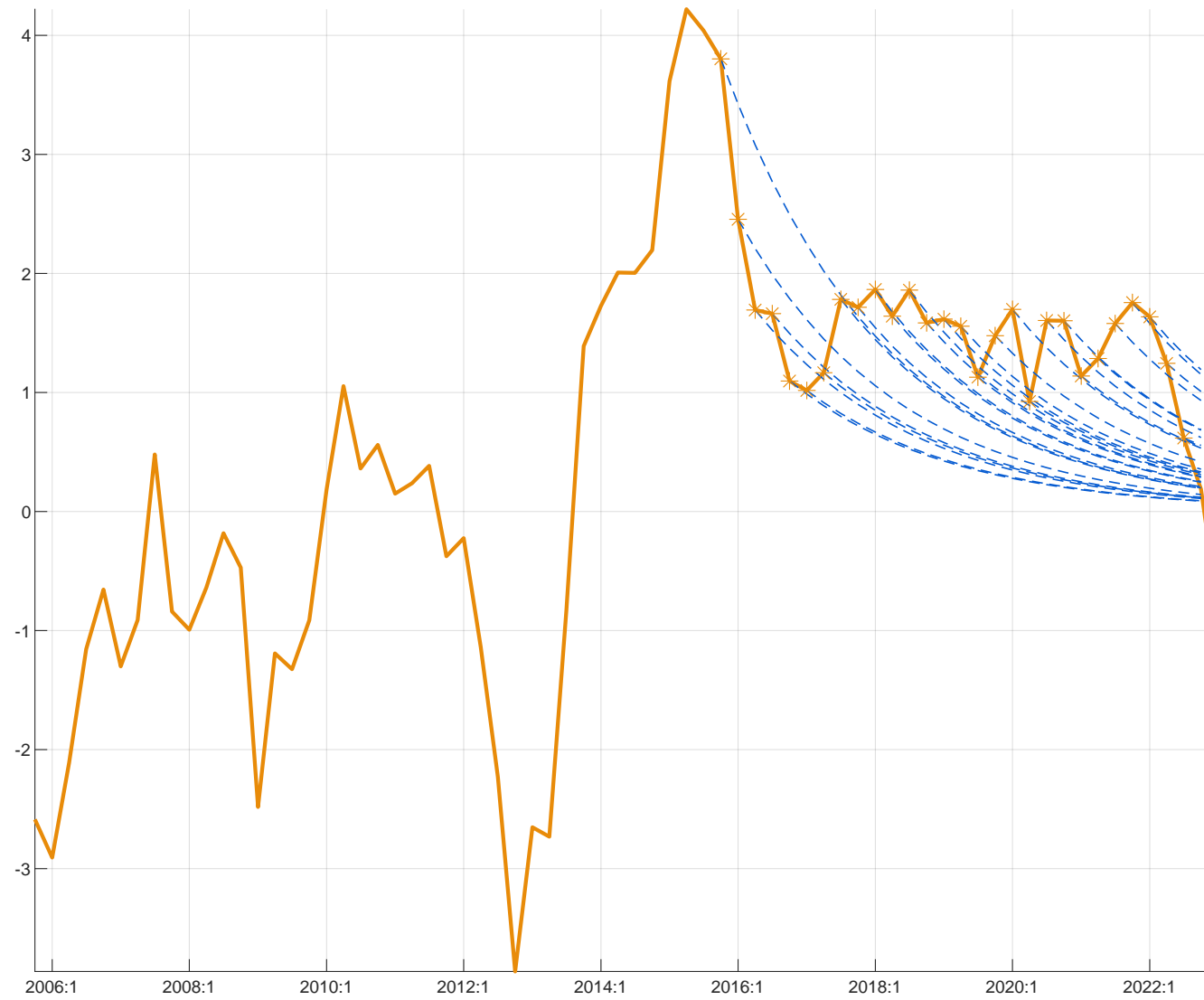
Exptd. RIR (lending) gap, 4-Q ahead av., % [r4_gap]

Cyc. govt. demand (G&S), % GDP [gdem_y_cyc]

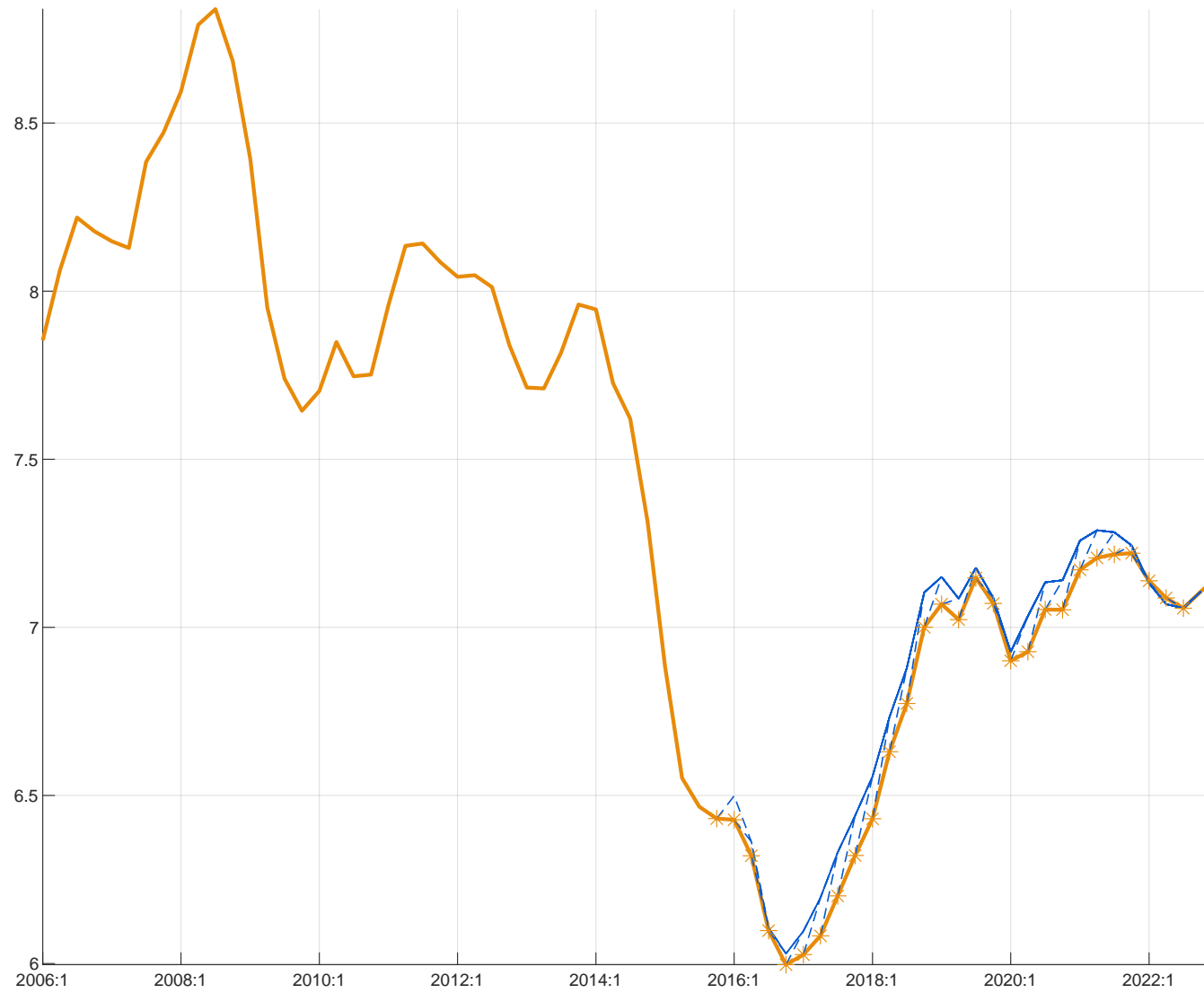


Discr. govt. demand (G&S), % GDP [gdem_y_discr]

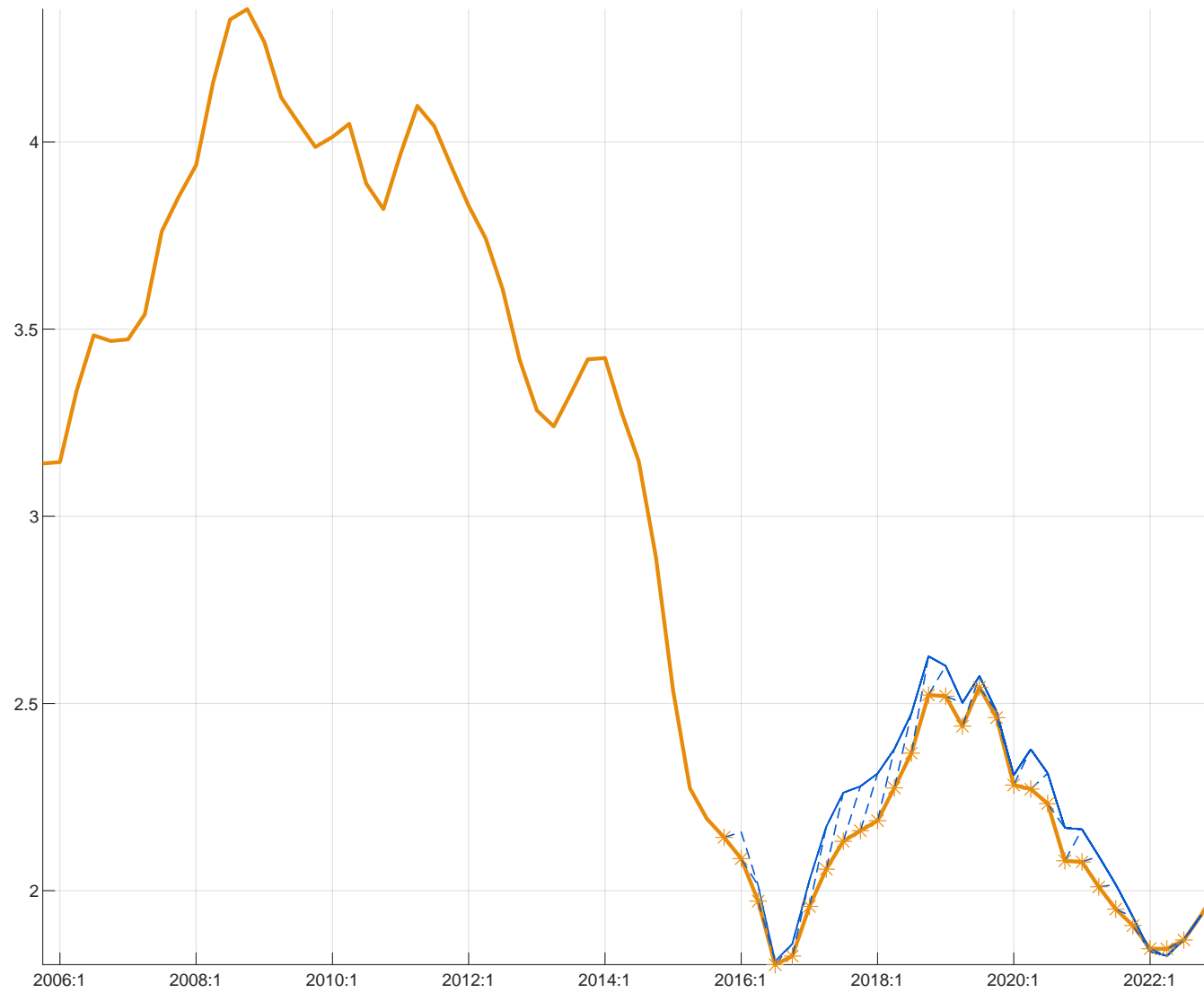
Fiscal impulse, % of GDP [fisc_imp]

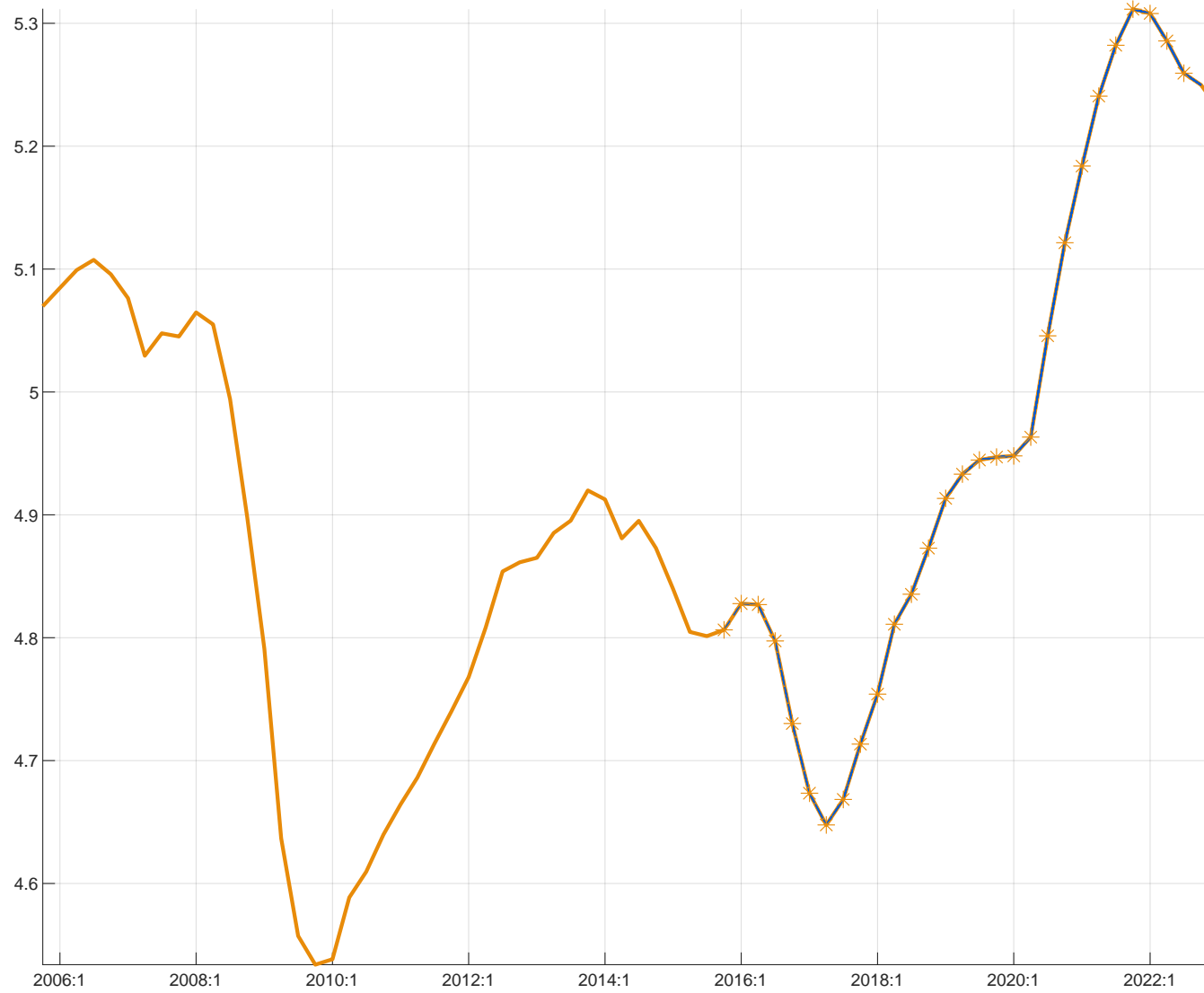
Lending premium gap, % [prem_d_gap]

Policy rate tnd (IB rate used), % [i_tnd]

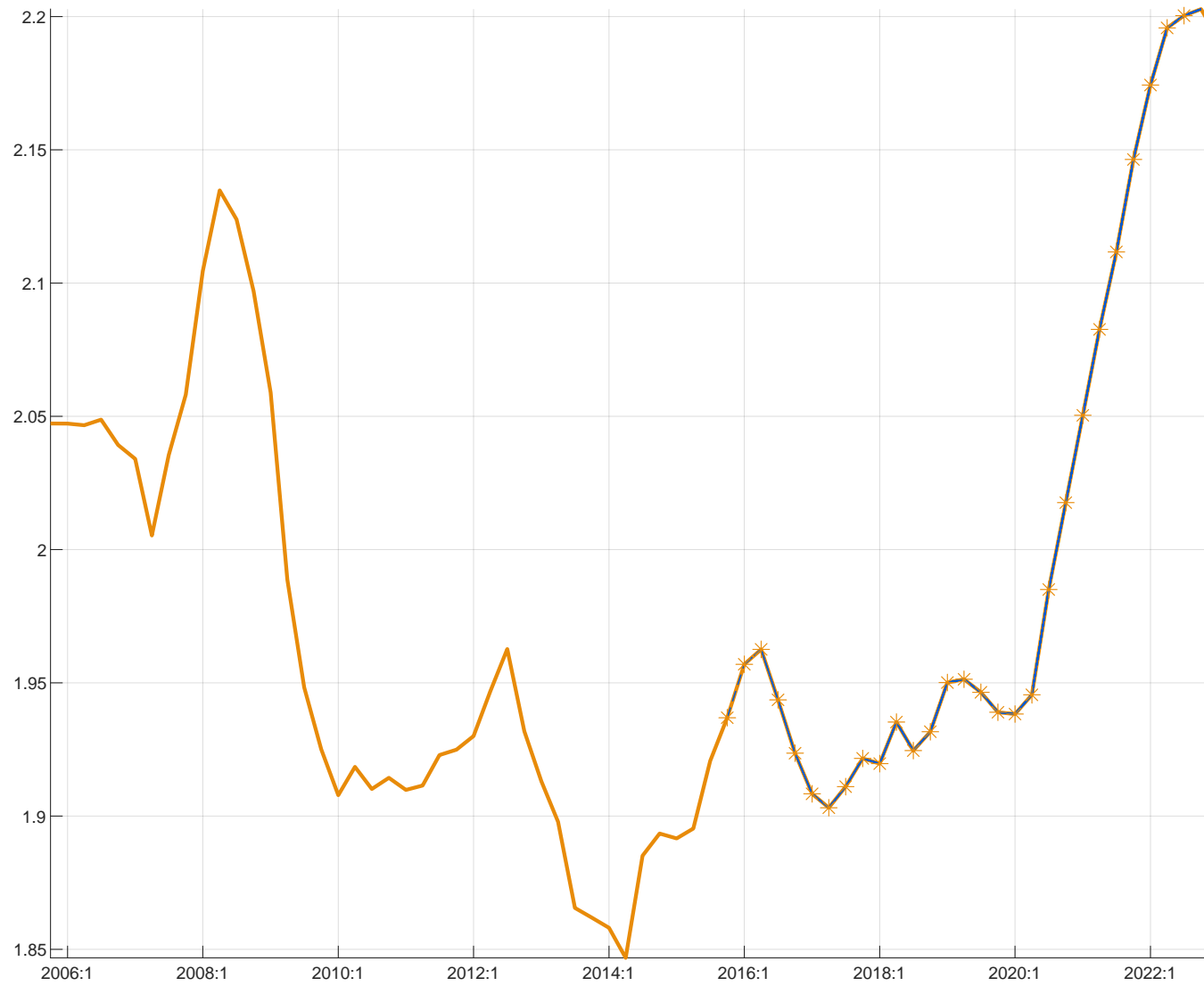


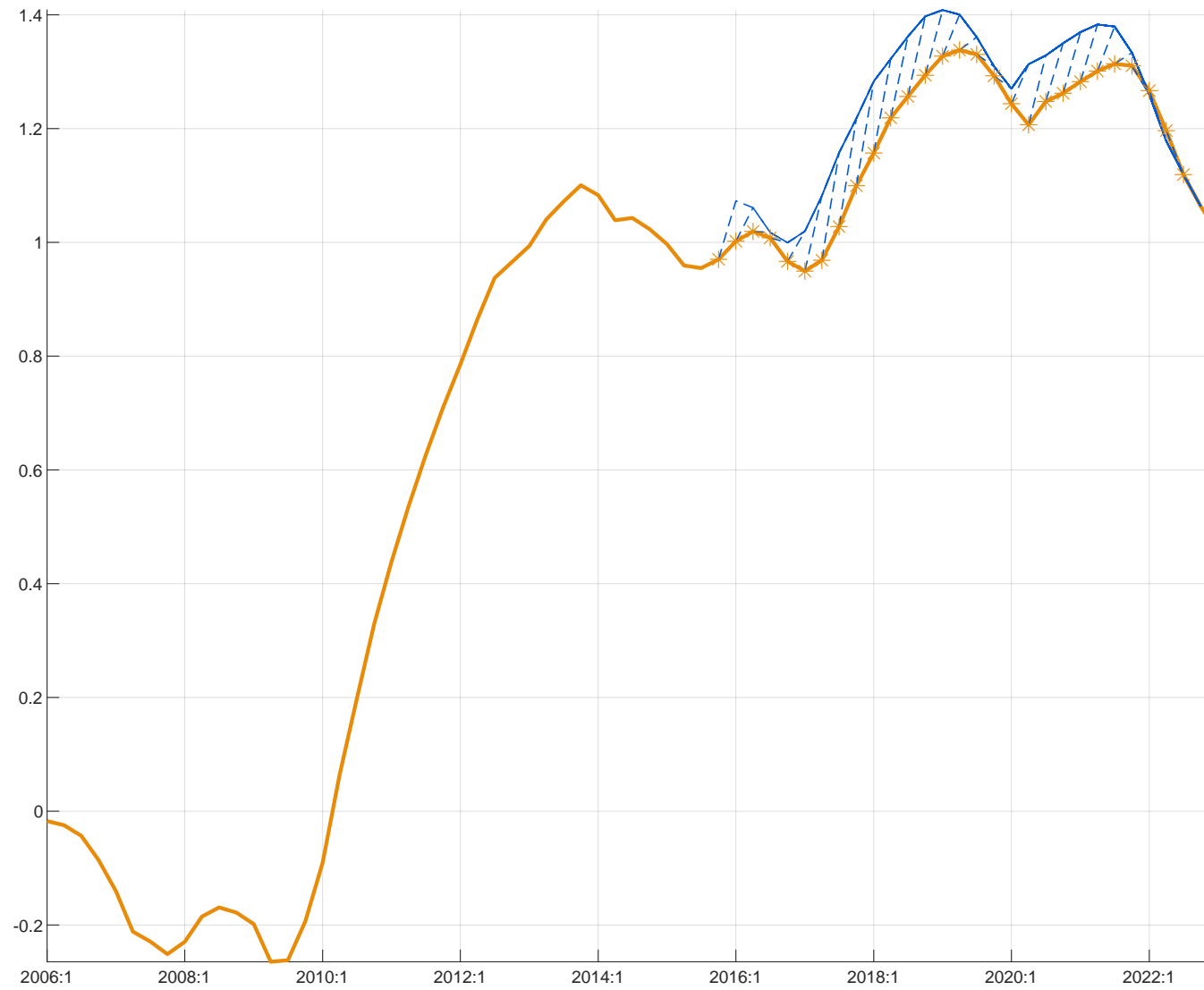
RIR (policy) trend, % [r_tnd]



Inflation target, YY % [d4l_cpi_tar]

Risk premium, % [prem]



Exp. RER trend., ann. QQ % [e_dl_z_tnd]

Root-mean-square error,

	1q	2q	3q	4q	5q	6q	7q	8q
Consumption, ann. QQ % [dl_cons]	18.677	20.953	19.452	19.394	19.951	19.391	20.296	20.137
Investment, ann. QQ % [dl_inv]	106.441	121.891	122.551	127.458	133.059	135.956	137.548	141.037
Gov. demand, ann. QQ % [dl_gdem]	37.342	39.726	38.579	39.579	41.457	40.751	42.020	42.650
Export, ann. QQ % [dl_exp]	54.676	66.857	65.656	65.295	67.644	66.393	67.900	69.271
Import, ann. QQ % [dl_imp]	28.924	41.155	41.252	41.981	42.866	43.198	44.639	45.396
GDP, ann. QQ % [dl_y]	15.586	14.155	14.423	14.379	15.293	14.857	15.468	15.656
Agric. GDP, ann. QQ % [dl_y_agr]	13.998	8.475	6.539	5.636	5.551	5.615	5.731	5.869
Core CPI, ann. QQ % [dl_cpi_core]	4.085	4.509	5.785	5.737	5.889	5.898	6.086	6.093
Food CPI, ann. QQ % [dl_cpi_food]	16.925	18.532	18.936	18.854	19.958	21.671	22.128	23.282
Energy CPI, ann. QQ % [dl_cpi_ener]	8.793	9.394	9.566	9.816	10.515	10.945	11.337	11.639
Policy rate (IB rate used), % [i]	0.475	0.760	0.967	1.020	1.080	1.106	1.163	1.209
Exchng. rate, 100*log [l_s]	0.705	1.234	1.609	1.805	1.964	2.088	2.137	2.138
Exchng. rate, ann. QQ % [dl_s]	2.821	2.836	2.878	2.710	2.795	2.748	2.557	2.529
Budget deficit, % of GDP [def_y]	2.992	3.106	3.267	3.227	3.201	3.197	3.280	3.410
Fiscal grants, % of GDP [grants_y]	1.331	1.328	1.256	1.246	1.210	1.160	1.167	1.189
Real money, ann. QQ % [dl_rmd]	7.134	8.054	8.486	8.984	8.809	8.725	8.681	8.511
Consumption gap, % [l_cons_gap]	4.669	4.910	5.524	5.842	6.088	6.372	6.580	6.846
Investment gap, % [l_inv_gap]	26.610	29.448	31.771	32.539	31.798	31.325	31.944	32.486
Gov. demand gap, % [l_gdem_gap]	9.387	9.581	10.534	11.288	10.765	10.894	10.918	11.257
Export gap, % [l_exp_gap]	13.669	12.582	13.129	13.943	14.146	14.046	14.061	14.131
Import gap, % [l_imp_gap]	7.231	7.316	7.934	8.636	8.318	8.732	8.738	8.926
Output gap, % [l_y_gap]	3.830	4.080	4.299	4.677	4.652	4.875	5.025	5.127
Agric. output gap, % [l_y_agr_gap]	1.997	1.891	2.043	2.100	2.106	2.134	2.177	2.230
Real exchng. rate gap, % [l_z_gap]	1.234	2.086	3.257	3.744	4.248	4.186	4.253	4.095
Exptd. RIR (lending) gap, 4-Q ahead av., % [r4_gap]	2.164	2.287	2.386	2.217	2.306	2.178	2.328	2.082
Cyc. govt. demand (G&S), % GDP [gdem_y_cyc]	0.088	0.094	0.099	0.108	0.107	0.112	0.116	0.118
Discr. govt. demand (G&S), % GDP [gdem_y_discr]	2.266	2.571	2.959	3.142	3.175	3.216	3.296	3.395
Fiscal impulse, % of GDP [fisc_imp]	2.968	3.052	3.207	3.178	3.131	3.120	3.181	3.314
Lending premium gap, % [prem_d_gap]	0.406	0.550	0.604	0.696	0.733	0.749	0.785	0.827
Policy rate tnd (IB rate used), % [i_tnd]	0.076	0.076	0.077	0.079	0.080	0.081	0.079	0.076
RIR (policy) trend, % [r_tnd]	0.076	0.076	0.077	0.079	0.080	0.081	0.079	0.076
Inflation target, YY % [d4l_cpi_tar]	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
Risk premium, % [prem]	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
Exp. RER trend., ann. QQ % [e_dl_z_tnd]	0.076	0.076	0.077	0.079	0.080	0.081	0.079	0.076

Mean absolute error,

	1q	2q	3q	4q	1y	6q	7q	8q
Consumption, ann. QQ % [dl_cons]	14.245	16.177	14.985	14.693	15.277	14.187	15.097	15.222
Investment, ann. QQ % [dl_inv]	71.767	75.393	77.916	81.889	84.313	89.692	91.871	96.035
Gov. demand, ann. QQ % [dl_gdem]	25.738	28.490	27.735	28.744	29.209	28.644	29.414	30.137
Export, ann. QQ % [dl_exp]	36.866	43.662	44.075	42.594	45.492	42.793	44.087	44.279
Import, ann. QQ % [dl_imp]	18.150	24.494	23.803	24.936	24.810	25.451	26.358	27.443
GDP, ann. QQ % [dl_y]	10.456	8.534	8.566	8.582	8.788	8.438	9.226	9.214
Agric. GDP, ann. QQ % [dl_y_agr]	12.833	7.170	5.086	4.335	4.246	4.361	4.546	4.718
Core CPI, ann. QQ % [dl_cpi_core]	2.865	3.041	3.902	4.066	4.356	4.513	4.587	4.662
Food CPI, ann. QQ % [dl_cpi_food]	14.601	16.190	16.513	16.296	16.938	18.494	18.564	19.877
Energy CPI, ann. QQ % [dl_cpi_ener]	6.995	7.642	7.732	8.064	8.522	8.957	9.316	9.595
Policy rate (IB rate used), % [i]	0.369	0.584	0.732	0.761	0.804	0.818	0.850	0.895
Exchng. rate, 100*log [l_s]	0.558	1.045	1.358	1.449	1.548	1.713	1.811	1.858
Exchng. rate, ann. QQ % [dl_s]	2.232	2.250	2.322	2.204	2.269	2.205	2.079	2.033
Budget deficit, % of GDP [def_y]	2.495	2.578	2.507	2.499	2.404	2.407	2.403	2.593
Fiscal grants, % of GDP [grants_y]	1.062	1.072	1.012	1.020	0.973	0.928	0.925	0.941
Real money, ann. QQ % [dl_rmd]	5.590	6.395	6.697	7.163	6.503	6.760	6.822	6.583
Consumption gap, % [l_cons_gap]	3.561	3.942	4.211	4.585	4.915	4.884	5.160	5.426
Investment gap, % [l_inv_gap]	17.942	18.250	21.411	21.430	20.190	19.895	20.686	21.163
Gov. demand gap, % [l_gdem_gap]	6.530	7.679	8.710	9.439	9.152	9.257	9.275	9.570
Export gap, % [l_exp_gap]	9.217	8.830	9.969	10.777	11.259	11.079	10.942	10.967
Import gap, % [l_imp_gap]	4.537	4.737	5.379	5.845	5.868	6.192	6.276	6.713
Output gap, % [l_y_gap]	2.567	2.572	2.709	3.028	3.392	3.599	3.780	3.958
Agric. output gap, % [l_y_agr_gap]	1.677	1.558	1.676	1.680	1.658	1.667	1.706	1.787
Real exchng. rate gap, % [l_z_gap]	0.889	1.438	1.990	2.477	2.940	3.012	2.917	2.942
Exptd. RIR (lending) gap, 4-Q ahead av., % [r4_gap]	1.735	1.836	1.970	1.787	1.720	1.683	1.810	1.662
Cyc. govt. demand (G&S), % GDP [gdem_y_cyc]	0.059	0.059	0.062	0.070	0.078	0.083	0.087	0.091
Discr. govt. demand (G&S), % GDP [gdem_y_discr]	1.714	2.079	2.479	2.684	2.765	2.842	2.901	2.996
Fiscal impulse, % of GDP [fisc_imp]	2.460	2.529	2.524	2.455	2.346	2.359	2.337	2.518
Lending premium gap, % [prem_d_gap]	0.335	0.449	0.504	0.608	0.648	0.674	0.697	0.754
Policy rate tnd (IB rate used), % [i_tnd]	0.064	0.064	0.065	0.067	0.069	0.068	0.066	0.063
RIR (policy) trend, % [r_tnd]	0.064	0.064	0.065	0.067	0.069	0.068	0.066	0.063
Inflation target, YY % [d4l_cpi_tar]	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
Risk premium, % [prem]	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
Exp. RER trend., ann. QQ % [e_dl_z_tnd]	0.064	0.064	0.065	0.067	0.069	0.068	0.066	0.063

Mean error,

	1q	2q	3q	4q	5q	6q	7q	8q
Consumption, ann. QQ % [dl_cons]	3.940	3.131	3.901	2.218	1.553	0.293	0.359	0.222
Investment, ann. QQ % [dl_inv]	0.762	2.666	3.686	3.524	2.721	2.939	3.089	2.001
Gov. demand, ann. QQ % [dl_gdem]	-0.053	3.876	2.604	2.481	1.148	0.241	0.901	1.653
Export, ann. QQ % [dl_exp]	-0.680	0.181	-1.012	0.713	-0.861	2.497	3.331	1.558
Import, ann. QQ % [dl_imp]	1.157	1.775	2.363	2.291	0.617	0.424	0.834	0.781
GDP, ann. QQ % [dl_y]	-0.755	3.531	3.359	2.394	1.879	1.396	1.187	1.101
Agric. GDP, ann. QQ % [dl_y_agr]	12.833	7.170	4.527	3.274	2.933	2.998	3.122	3.334
Core CPI, ann. QQ % [dl_cpi_core]	-1.614	-2.164	-2.209	-1.782	-1.433	-1.176	-1.154	-1.365
Food CPI, ann. QQ % [dl_cpi_food]	2.782	0.988	-1.204	-2.009	-2.439	-3.083	-4.267	-4.780
Energy CPI, ann. QQ % [dl_cpi_ener]	0.602	0.646	0.262	0.023	-0.607	-0.751	-1.207	-1.679
Policy rate (IB rate used), % [i]	-0.136	-0.148	-0.099	0.069	0.234	0.419	0.565	0.703
Exchng. rate, 100*log [l_s]	-0.025	-0.047	-0.096	-0.128	-0.158	-0.194	-0.260	-0.360
Exchng. rate, ann. QQ % [dl_s]	-0.101	-0.052	-0.044	0.155	0.076	-0.124	-0.420	-0.642
Budget deficit, % of GDP [def_y]	1.275	1.098	0.898	0.627	0.441	0.211	0.059	0.035
Fiscal grants, % of GDP [grants_y]	0.117	0.107	0.198	0.153	0.088	0.008	-0.034	-0.065
Real money, ann. QQ % [dl_rmd]	0.045	0.831	0.725	0.373	0.047	-0.161	-0.058	-0.029
Consumption gap, % [l_cons_gap]	0.985	1.819	2.789	3.613	4.178	4.482	4.768	5.023
Investment gap, % [l_inv_gap]	0.190	1.496	2.657	4.005	5.040	6.024	7.116	8.219
Gov. demand gap, % [l_gdem_gap]	0.260	0.456	0.348	0.273	-0.225	-0.860	-1.462	-1.917
Export gap, % [l_exp_gap]	-0.170	-0.187	-0.467	-0.386	-0.656	-0.136	0.583	0.878
Import gap, % [l_imp_gap]	0.289	0.654	1.077	1.736	1.917	2.121	2.360	2.643
Output gap, % [l_y_gap]	0.084	0.858	1.533	2.119	2.494	2.762	2.948	3.116
Agric. output gap, % [l_y_agr_gap]	-1.116	0.034	0.482	0.589	0.582	0.567	0.565	0.598
Real exchng. rate gap, % [l_z_gap]	0.378	0.831	1.314	1.447	1.428	1.136	0.840	0.456
Exptd. RIR (lending) gap, 4-Q ahead av., % [r4_gap]	-0.248	-0.407	-0.688	-0.914	-0.941	-0.805	-0.602	-0.340
Cyc. govt. demand (G&S), % GDP [gdem_y_cyc]	-0.002	-0.020	-0.035	-0.049	-0.057	-0.064	-0.068	-0.072
Discr. govt. demand (G&S), % GDP [gdem_y_discr]	0.048	-0.085	-0.273	-0.431	-0.650	-0.878	-1.079	-1.237
Fiscal impulse, % of GDP [fisc_imp]	1.293	1.171	1.023	0.797	0.639	0.430	0.292	0.283
Lending premium gap, % [prem_d_gap]	-0.029	-0.105	-0.214	-0.323	-0.445	-0.557	-0.647	-0.699
Policy rate tnd (IB rate used), % [i_tnd]	0.062	0.062	0.063	0.065	0.066	0.066	0.064	0.061
RIR (policy) trend, % [r_tnd]	0.062	0.062	0.063	0.065	0.066	0.066	0.064	0.061
Inflation target, YY % [d4l_cpi_tar]	0.000	0.000	0.000	-0.000	-0.000	-0.000	0.000	-0.000
Risk premium, % [prem]	0.000	-0.000	-0.000	-0.000	-0.000	0.000	0.000	0.000
Exp. RER trend., ann. QQ % [e_dl_z_tnd]	0.062	0.062	0.063	0.065	0.066	0.066	0.064	0.061

Root-mean-square error compared to random walk,

	1q	2q	3q	4q	5q	6q	7q	8q
Consumption, ann. QQ % [dl_cons]	0.533	0.833	0.708	0.644	0.967	0.596	1.110	0.540
Investment, ann. QQ % [dl_inv]	0.531	0.704	0.615	0.565	0.639	0.704	0.631	0.657
Gov. demand, ann. QQ % [dl_gdem]	0.598	0.843	0.693	0.596	0.962	0.644	0.698	0.931
Export, ann. QQ % [dl_exp]	0.478	0.748	0.744	0.600	0.658	0.631	0.559	0.599
Import, ann. QQ % [dl_imp]	0.401	0.748	0.657	0.616	0.685	0.557	0.641	0.565
GDP, ann. QQ % [dl_y]	0.721	0.736	0.650	0.579	0.730	0.613	0.633	0.607
Agric. GDP, ann. QQ % [dl_y_agr]	2.160	1.127	0.809	0.717	0.831	0.877	0.946	0.821
Core CPI, ann. QQ % [dl_cpi_core]	1.051	0.918	0.918	0.774	0.716	0.700	0.760	0.765
Food CPI, ann. QQ % [dl_cpi_food]	0.863	0.740	0.758	0.585	0.608	0.748	0.657	0.714
Energy CPI, ann. QQ % [dl_cpi_ener]	0.852	0.755	0.674	0.588	0.729	0.773	0.821	1.074
Policy rate (IB rate used), % [i]	1.683	1.971	2.149	1.997	2.165	2.159	2.270	2.334
Exchng. rate, 100*log [l_s]	0.522	0.522	0.499	0.419	0.359	0.313	0.271	0.234
Exchng. rate, ann. QQ % [dl_s]	1.213	0.927	0.956	1.603	1.279	1.024	1.057	1.552
Budget deficit, % of GDP [def_y]	0.882	0.908	0.958	0.734	0.898	0.881	0.683	0.679
Fiscal grants, % of GDP [grants_y]	0.819	0.732	0.859	0.810	0.853	0.772	0.760	0.676
Real money, ann. QQ % [dl_rmd]	0.886	0.910	0.820	0.787	0.784	0.747	0.739	0.741
Consumption gap, % [l_cons_gap]	0.922	0.932	0.961	0.973	1.091	0.969	1.071	0.803
Investment gap, % [l_inv_gap]	0.856	0.781	0.683	0.621	0.625	0.651	0.620	0.635
Gov. demand gap, % [l_gdem_gap]	0.956	0.961	0.881	0.829	0.921	0.720	0.664	0.683
Export gap, % [l_exp_gap]	0.838	0.779	0.759	0.668	0.659	0.615	0.557	0.566
Import gap, % [l_imp_gap]	0.705	0.716	0.680	0.658	0.617	0.576	0.598	0.588
Output gap, % [l_y_gap]	1.076	0.912	0.798	0.764	0.757	0.739	0.721	0.708
Agric. output gap, % [l_y_agr_gap]	1.509	0.960	0.839	0.753	0.801	0.842	0.866	0.864
Real exchng. rate gap, % [l_z_gap]	0.594	0.538	0.598	0.579	0.611	0.626	0.721	0.823
Exptd. RIR (lending) gap, 4-Q ahead av., % [r4_gap]	0.980	0.906	0.800	0.688	0.756	0.680	0.753	0.558
Cyc. govt. demand (G&S), % GDP [gdem_y_cyc]	1.076	0.912	0.798	0.764	0.757	0.739	0.721	0.708
Discr. govt. demand (G&S), % GDP [gdem_y_discr]	0.936	0.987	0.895	0.895	0.918	0.782	0.692	0.647
Fiscal impulse, % of GDP [fisc_imp]	0.870	0.911	0.964	0.724	0.865	0.822	0.664	0.663
Lending premium gap, % [prem_d_gap]	1.050	1.102	1.147	1.230	1.390	1.625	1.493	1.433
Policy rate tnd (IB rate used), % [i_tnd]	0.690	0.404	0.304	0.235	0.200	0.190	0.212	0.259
RIR (policy) trend, % [r_tnd]	0.850	0.537	0.406	0.329	0.280	0.247	0.226	0.199
Inflation target, YY % [d4l_cpi_tar]	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
Risk premium, % [prem]	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
Exp. RER trend., ann. QQ % [e_dl_z_tnd]	1.833	0.950	0.682	0.557	0.507	0.517	0.598	0.834