

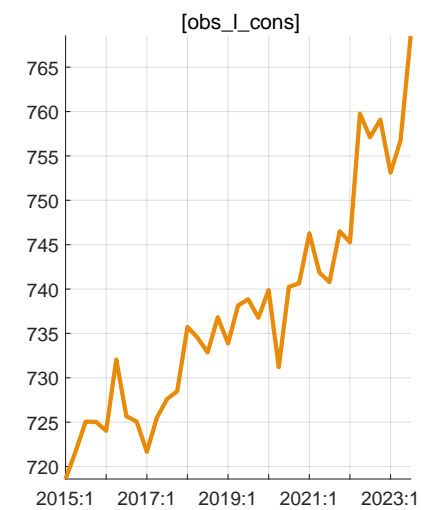
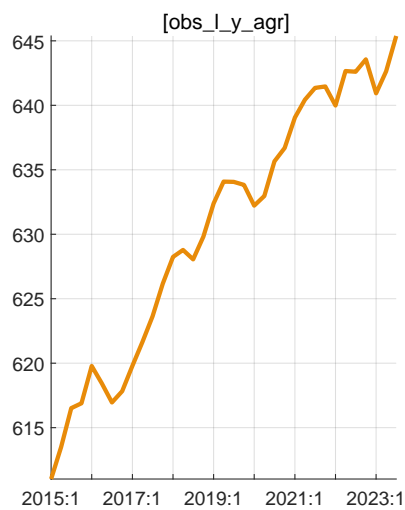
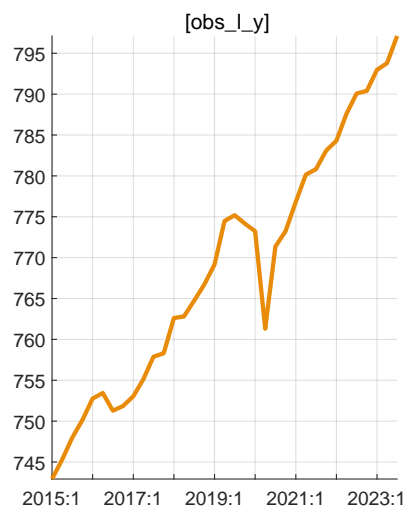
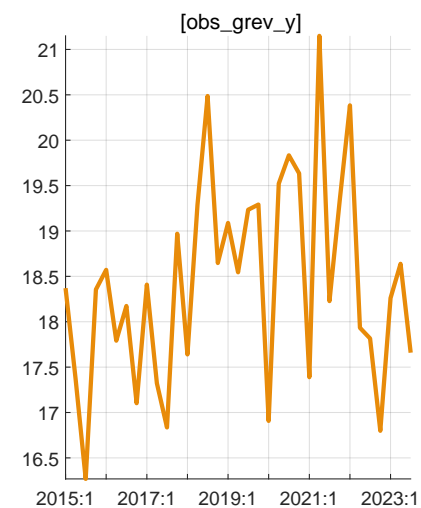
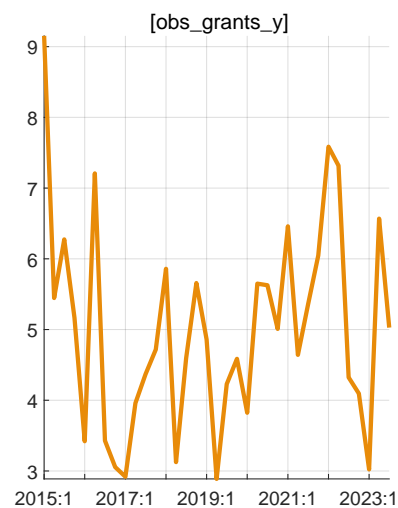
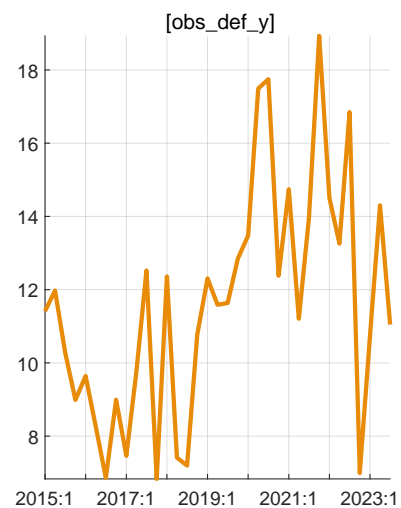
## Observed and filtered data

Round: 2024 March main round, time: 11-Jun-2024 15:42:26.

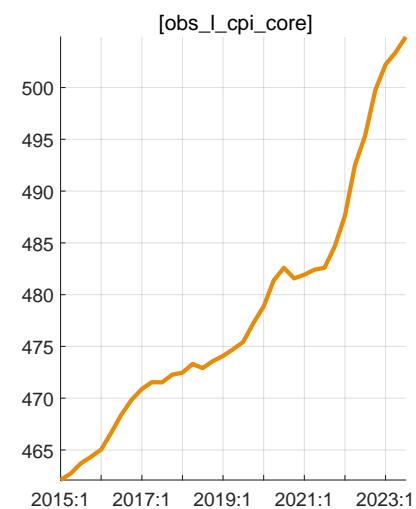
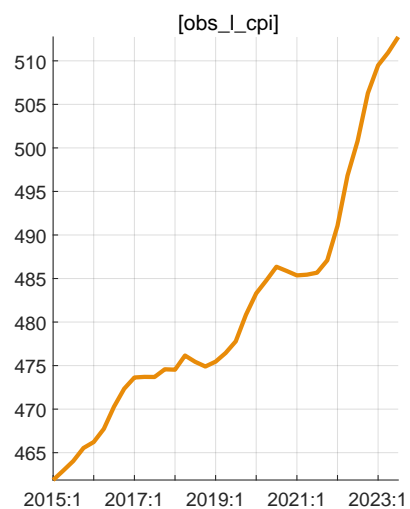
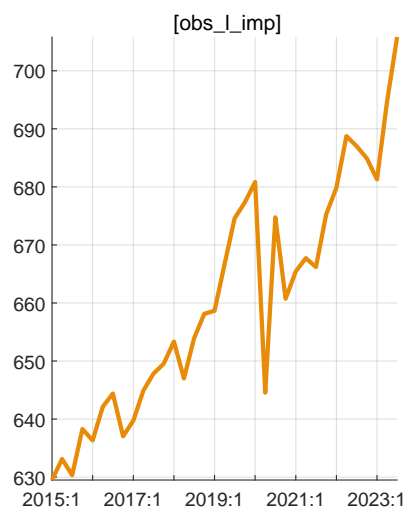
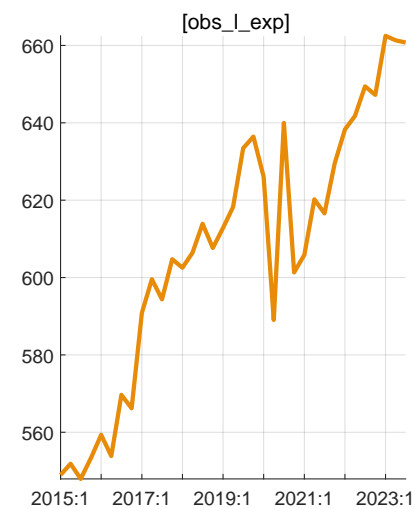
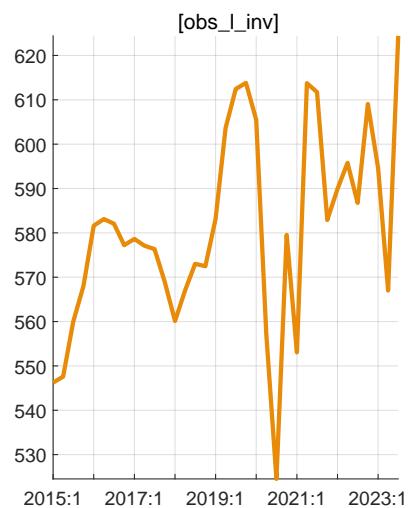
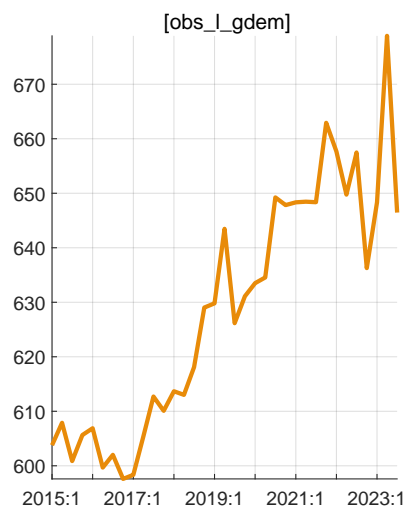
## 1 Observed data



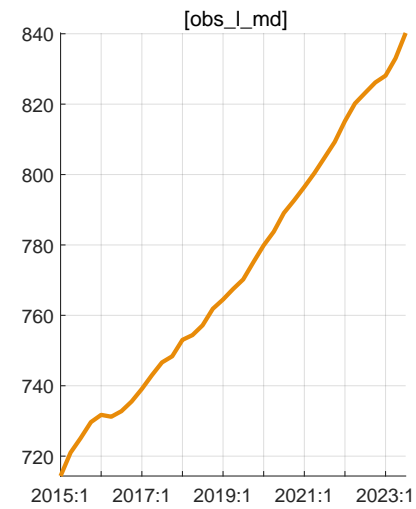
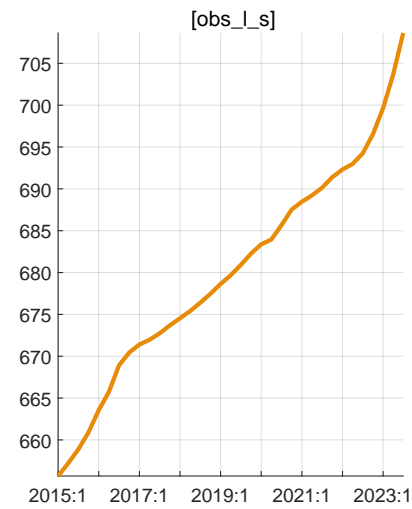
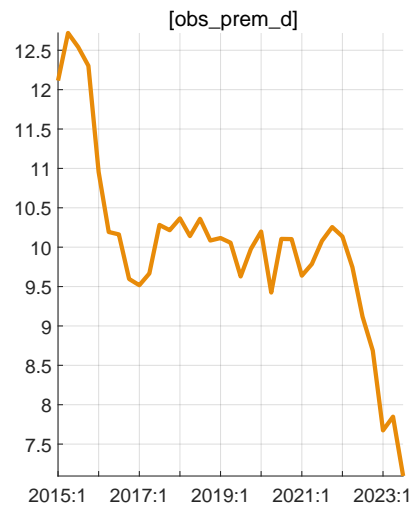
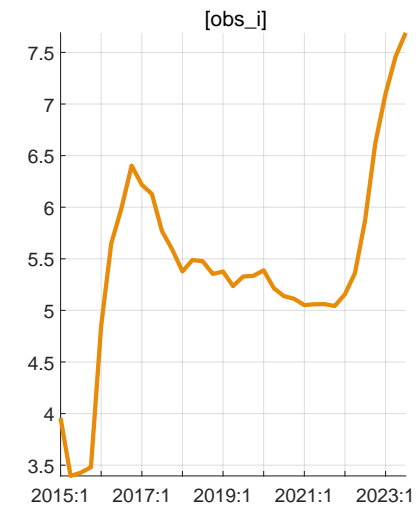
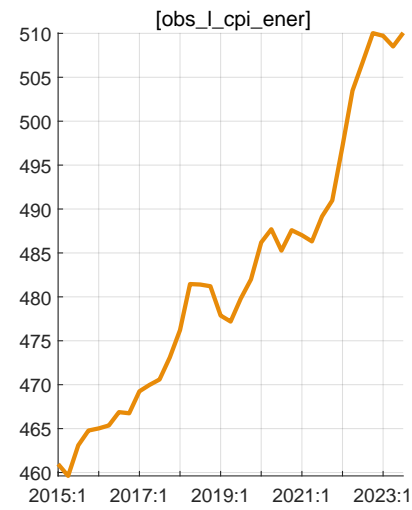
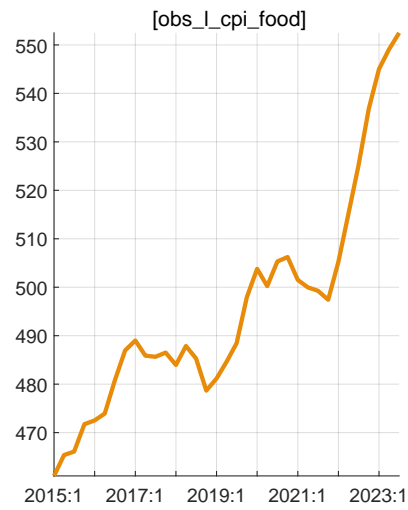
## Observed data (page 1)



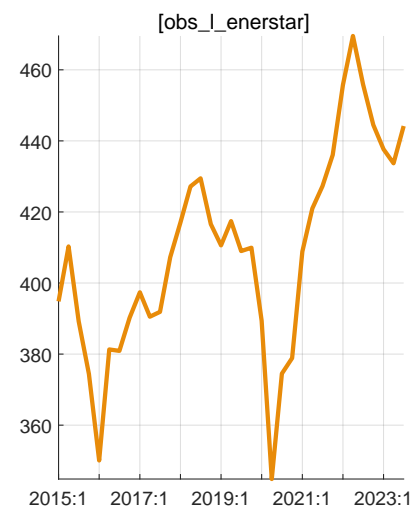
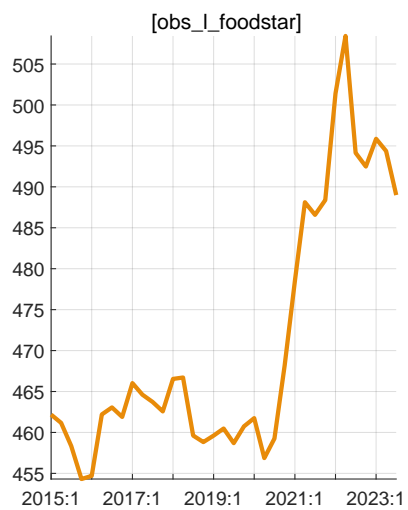
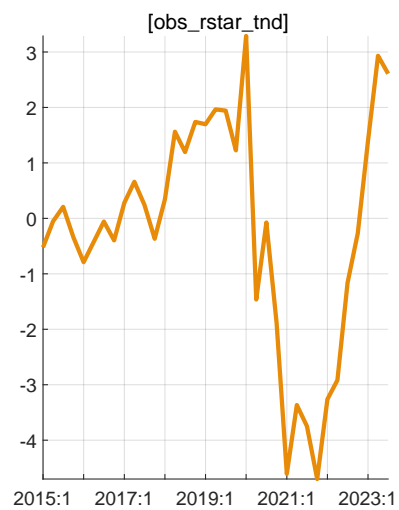
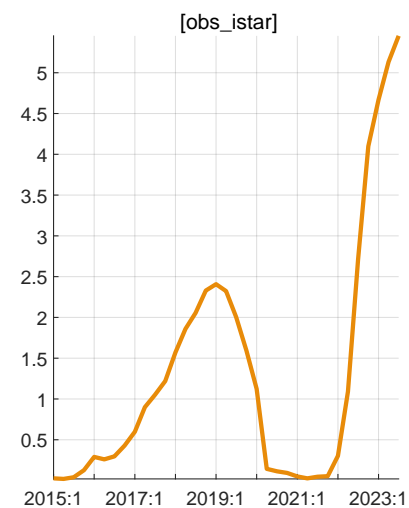
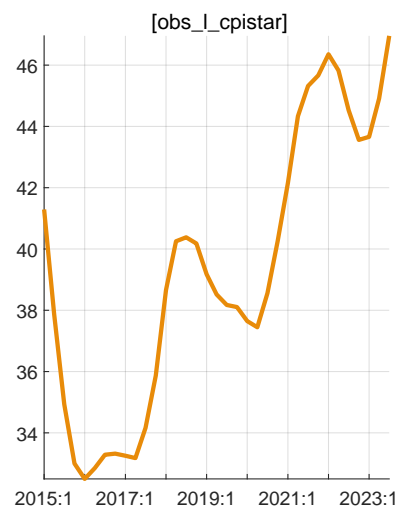
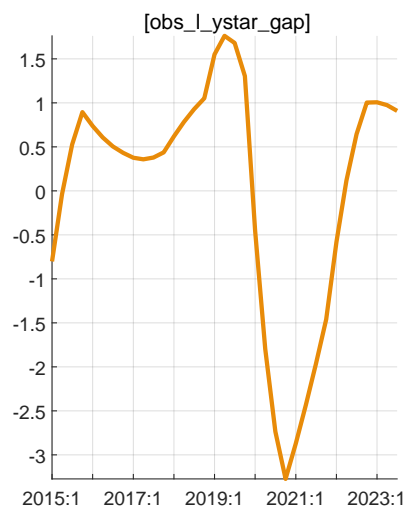
## Observed data (page 2)



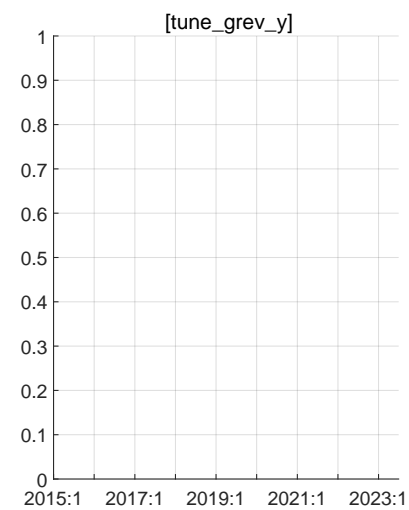
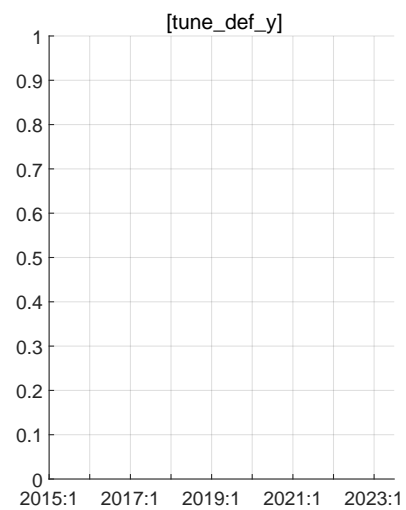
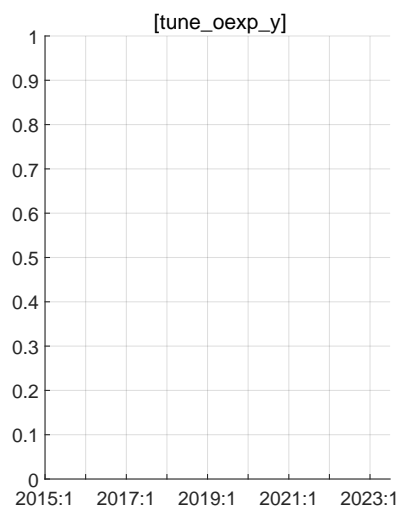
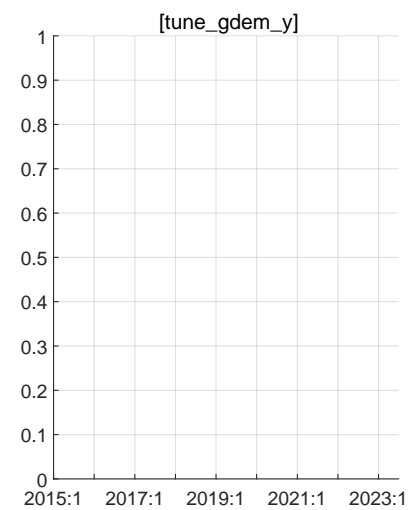
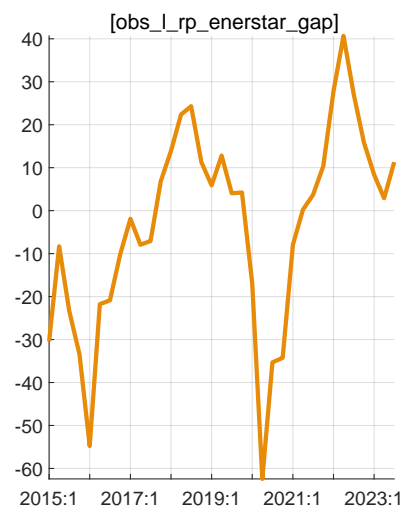
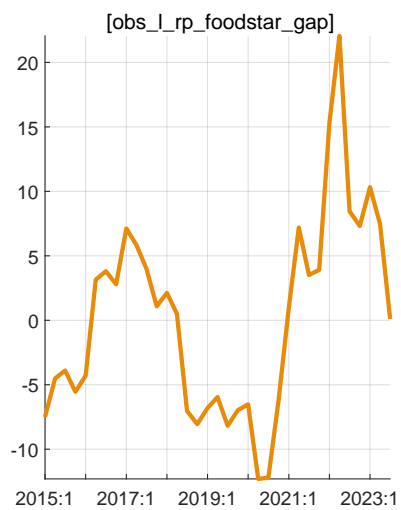
## Observed data (page 3)



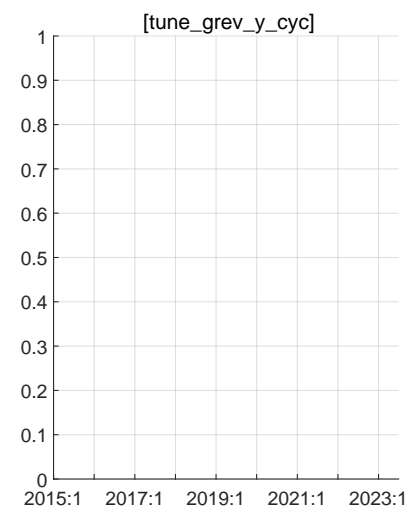
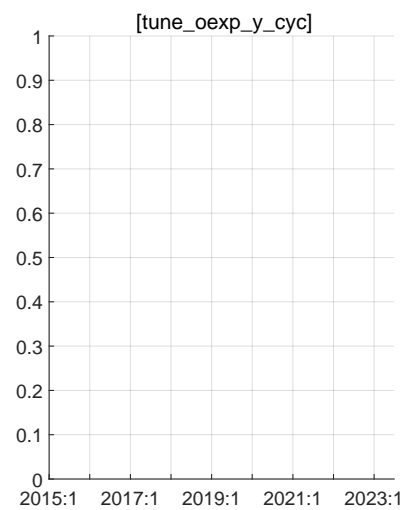
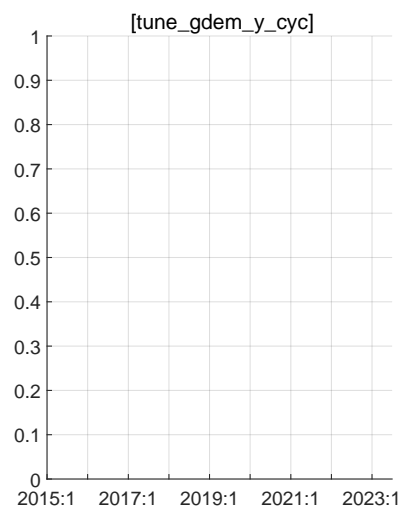
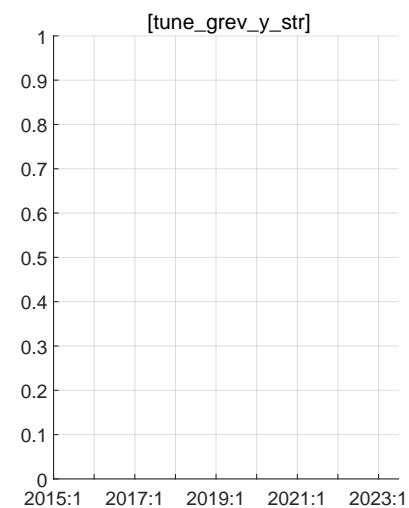
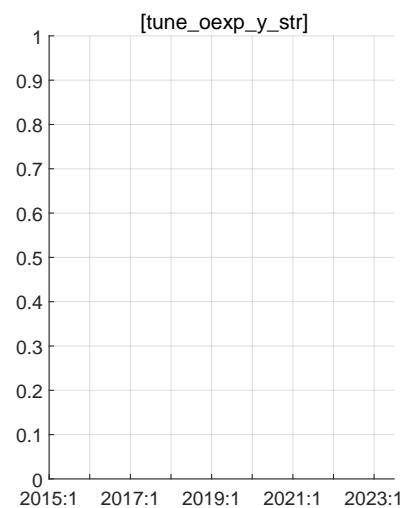
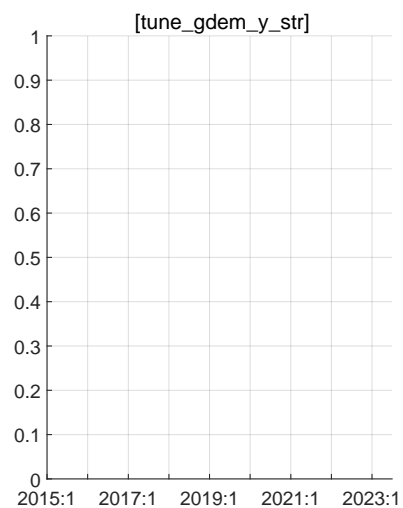
## Observed data (page 4)

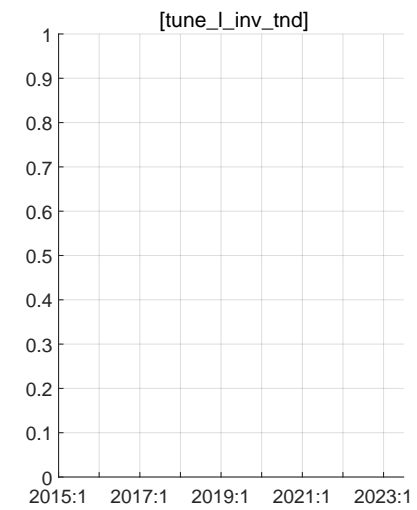
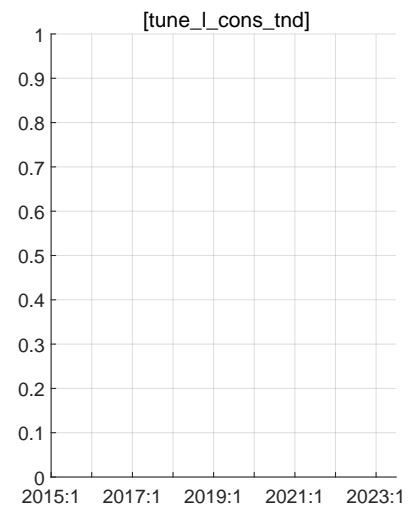
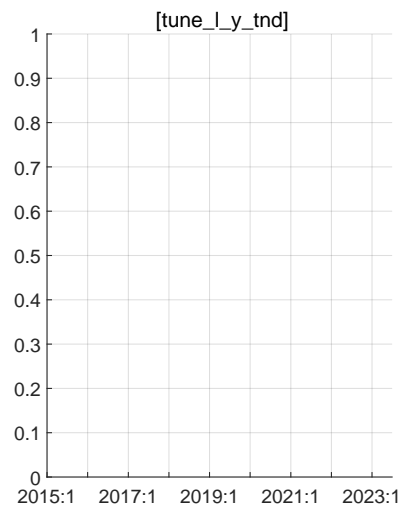
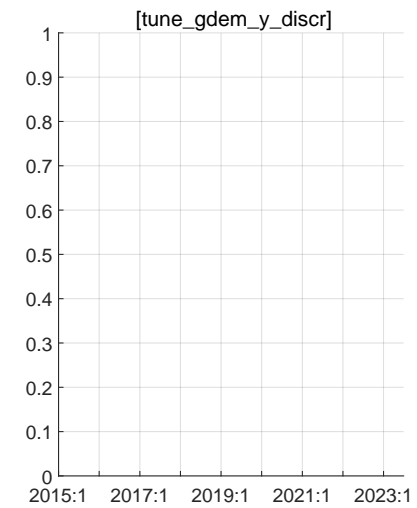
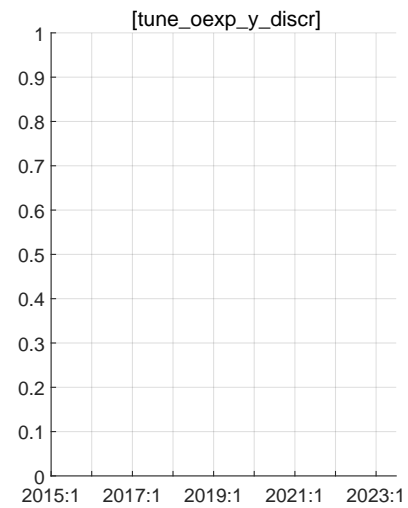
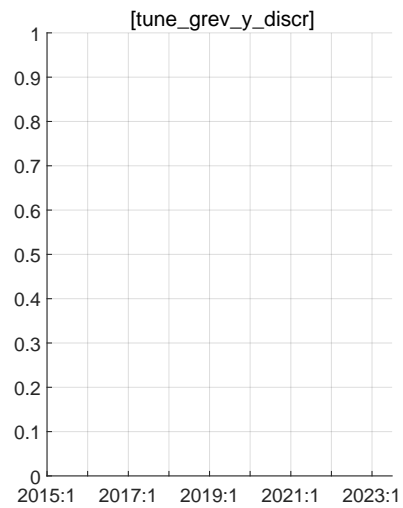


## Observed data (page 5)

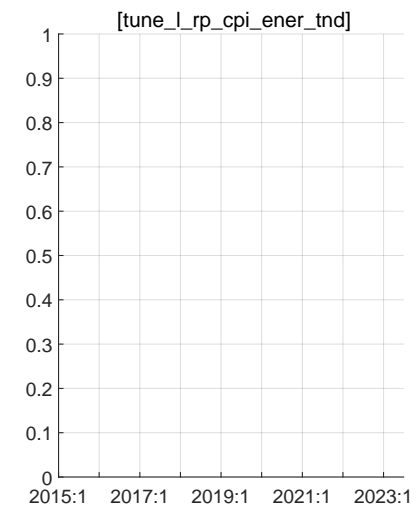
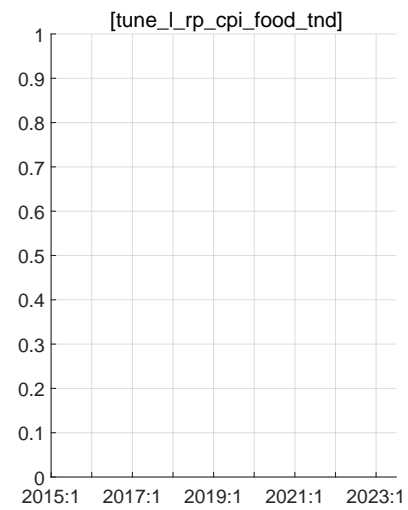
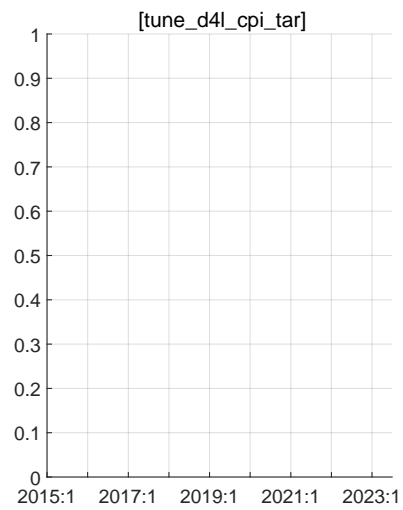
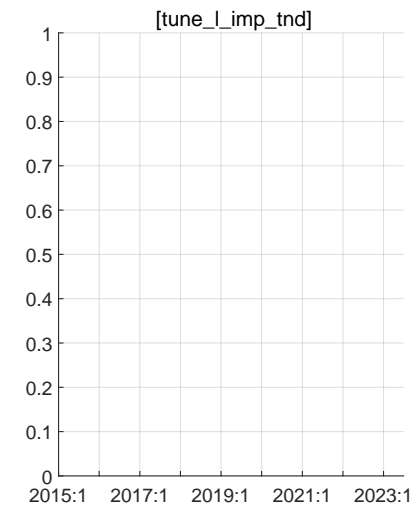
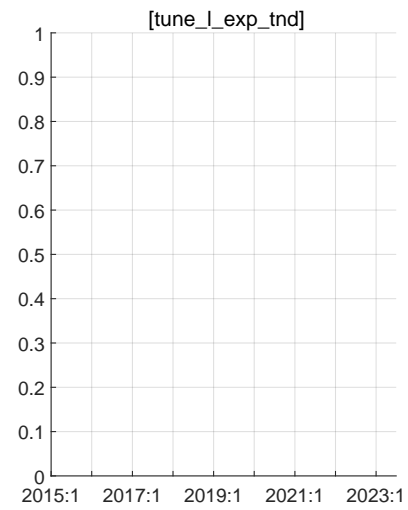
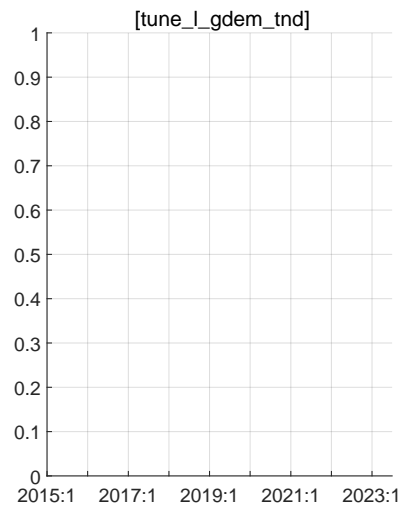


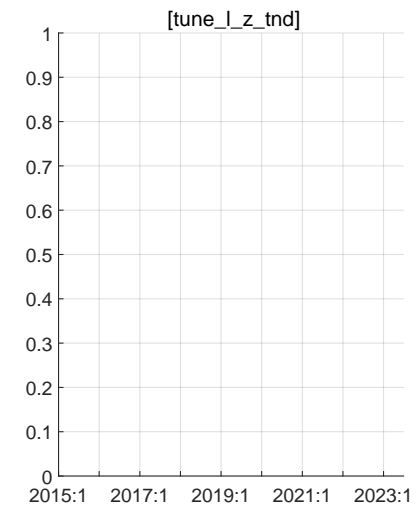
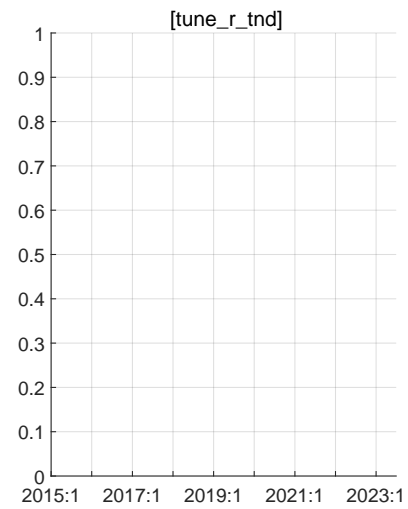
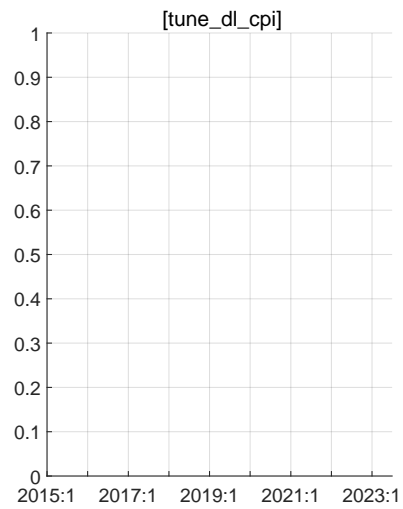
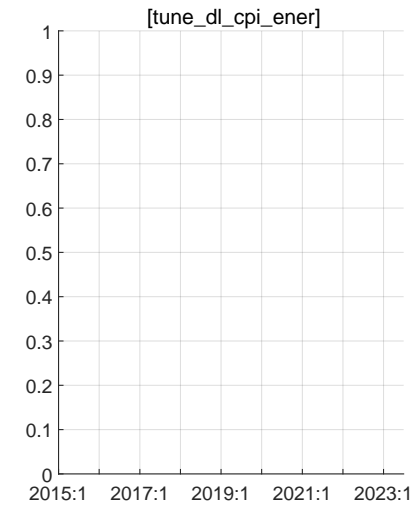
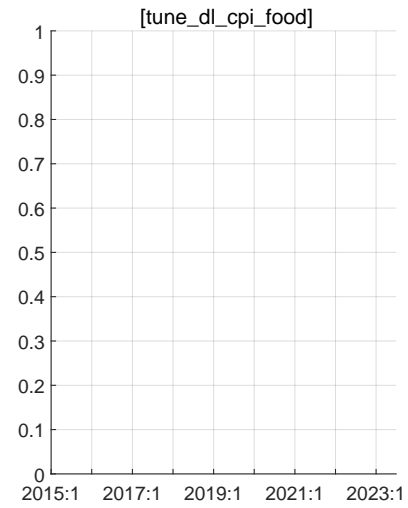
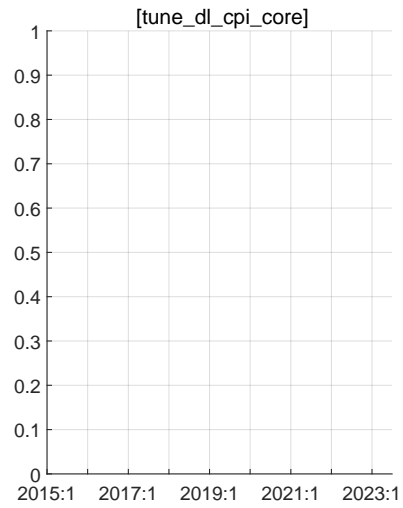


**Observed data (page 6)**

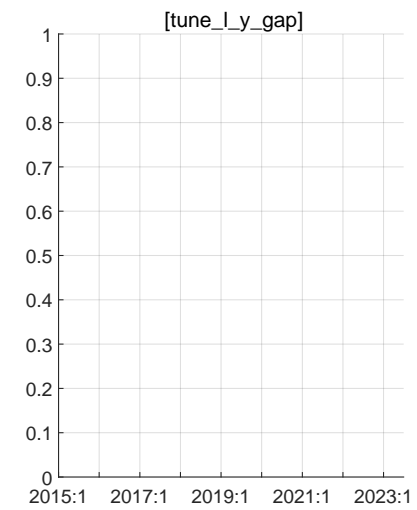
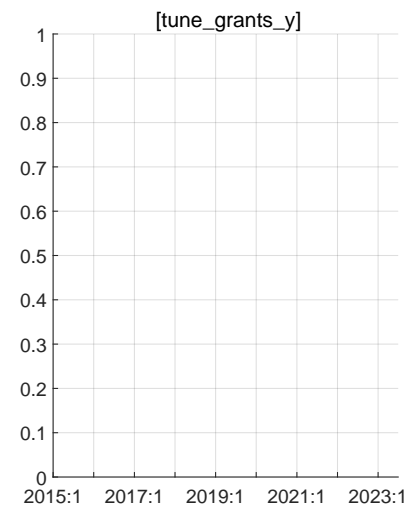
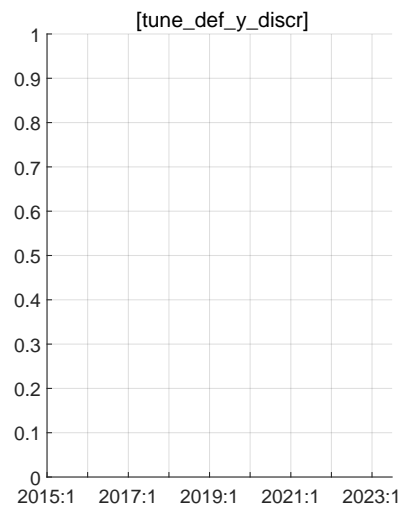
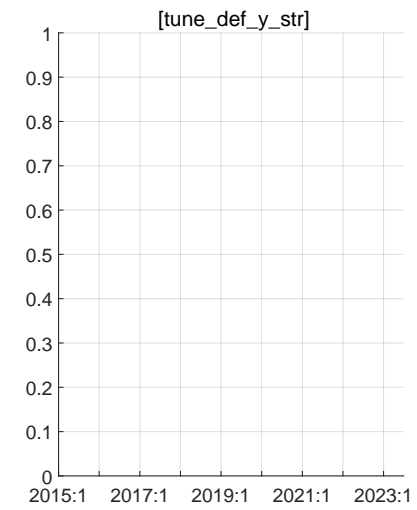
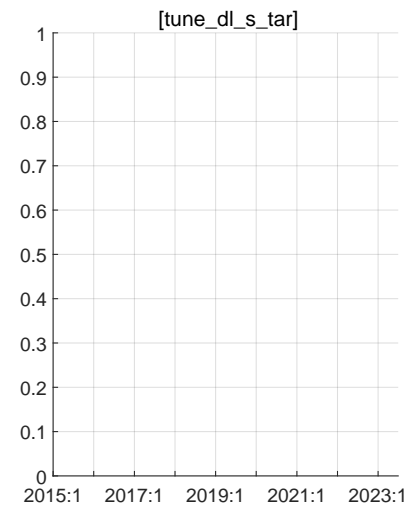
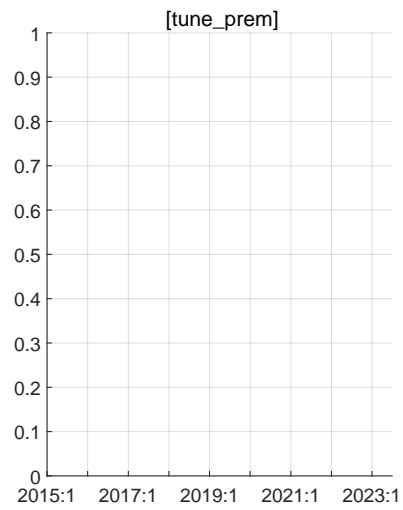
**Observed data (page 7)**

## Observed data (page 8)

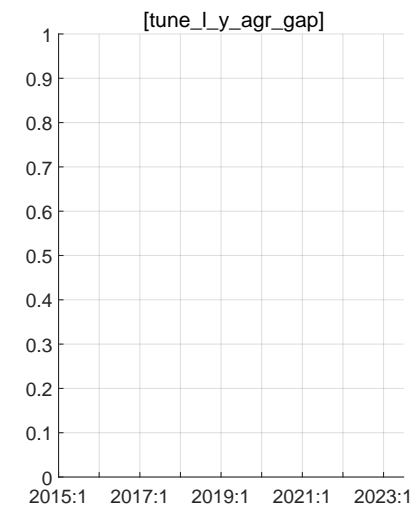
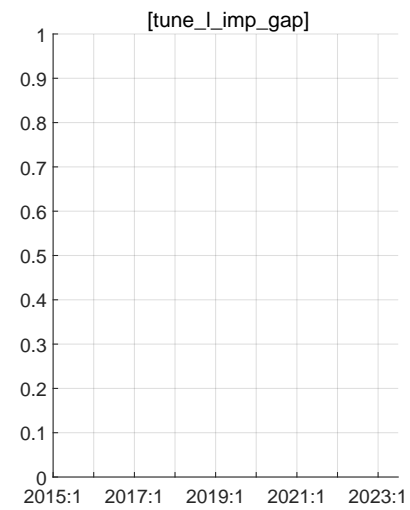
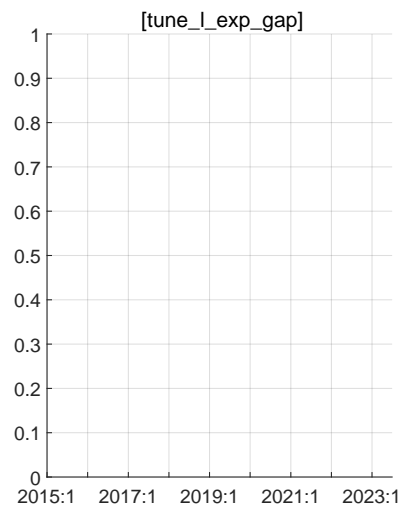
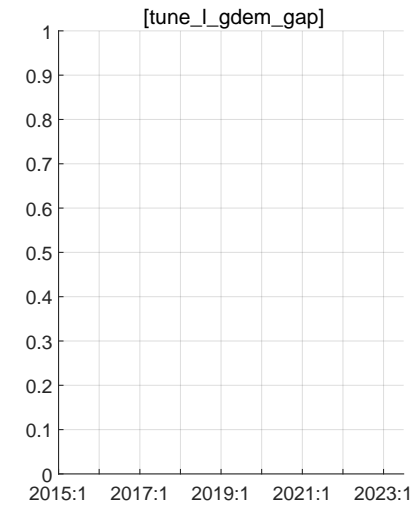
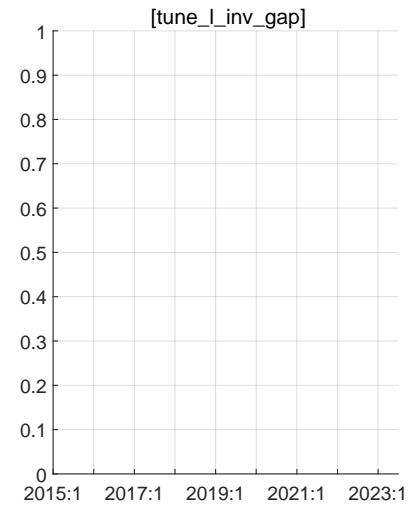
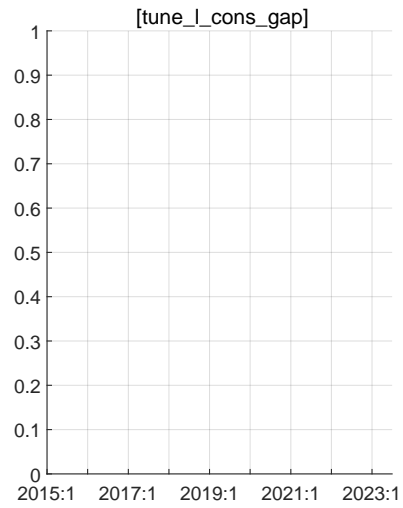


**Observed data (page 9)**

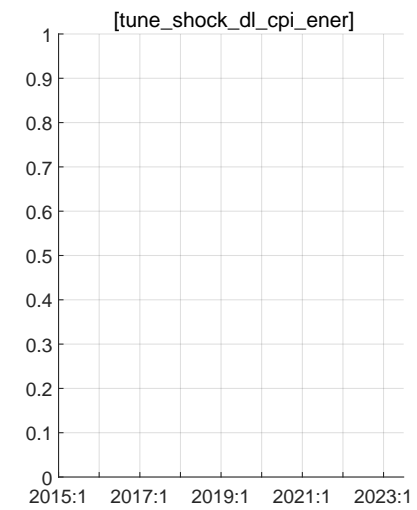
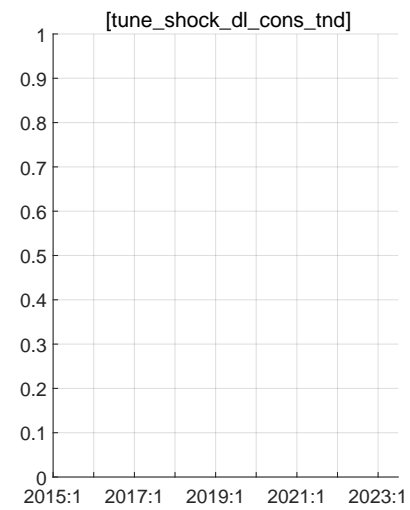
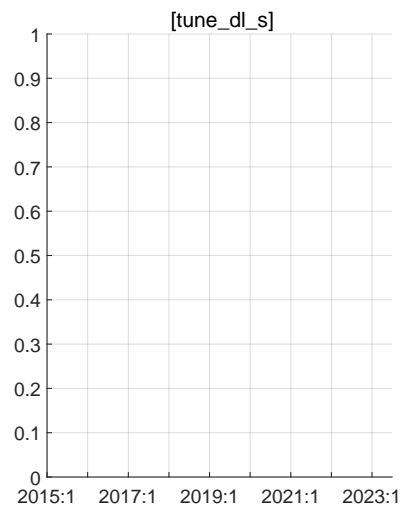
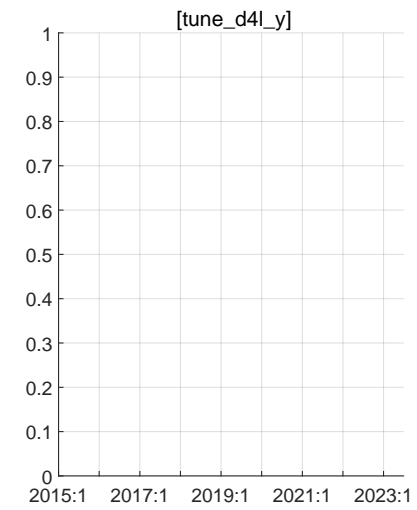
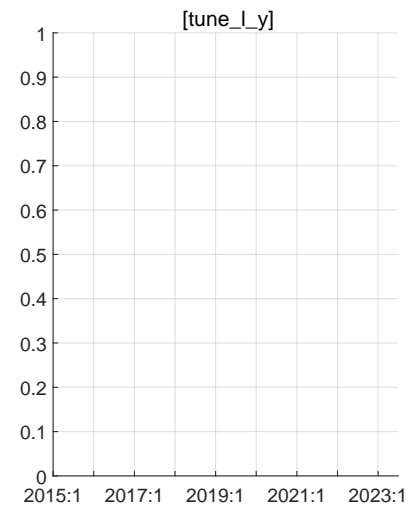
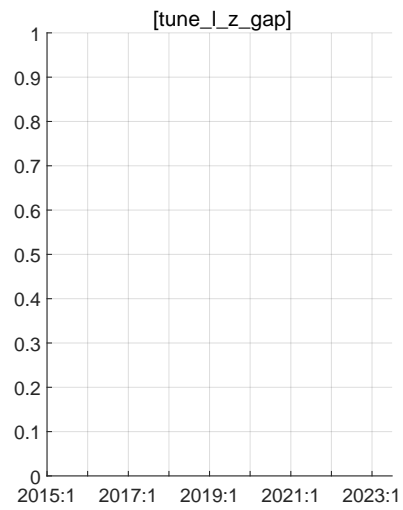
## Observed data (page 10)



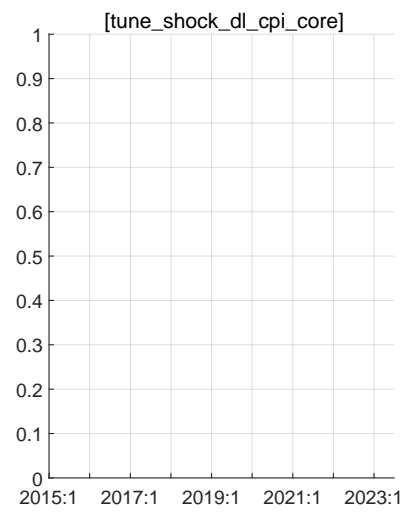
## Observed data (page 11)



## Observed data (page 12)



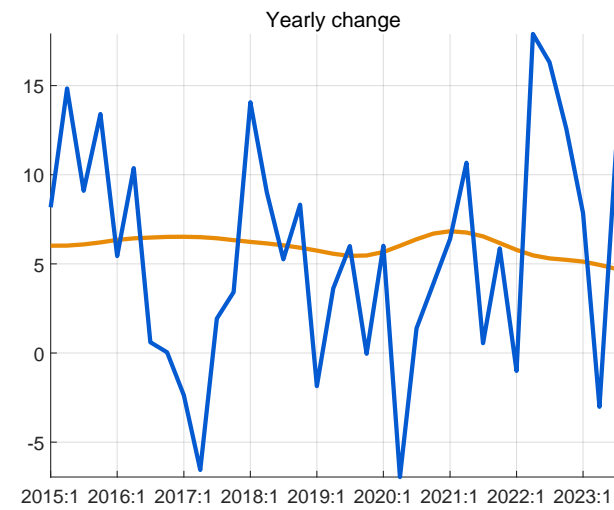
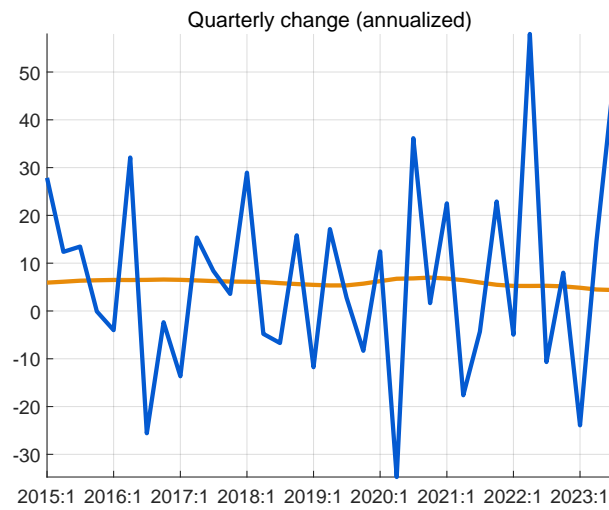
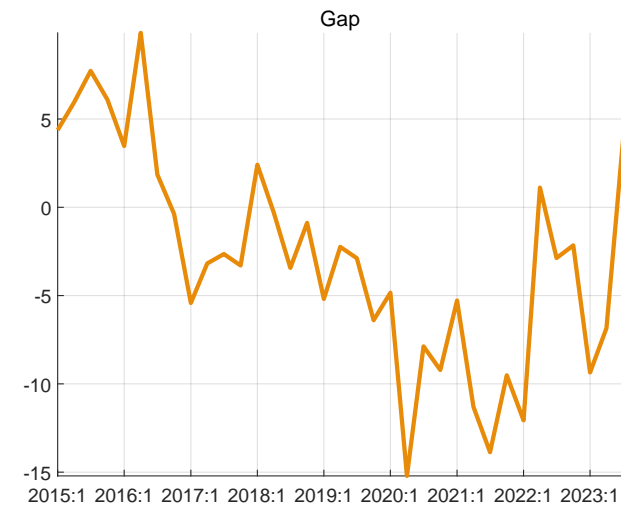
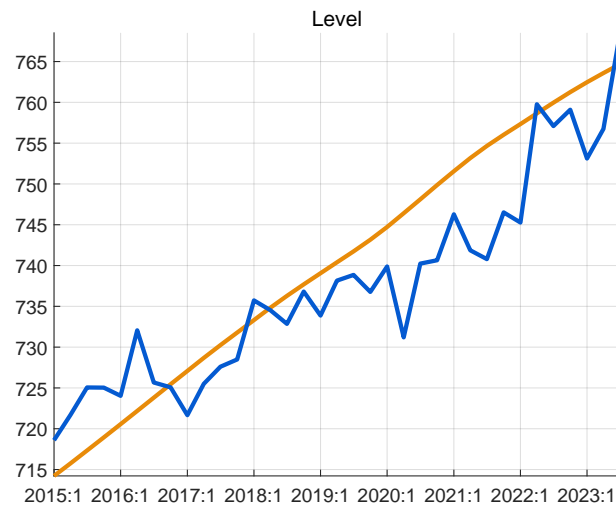
### Observed data (page 13)

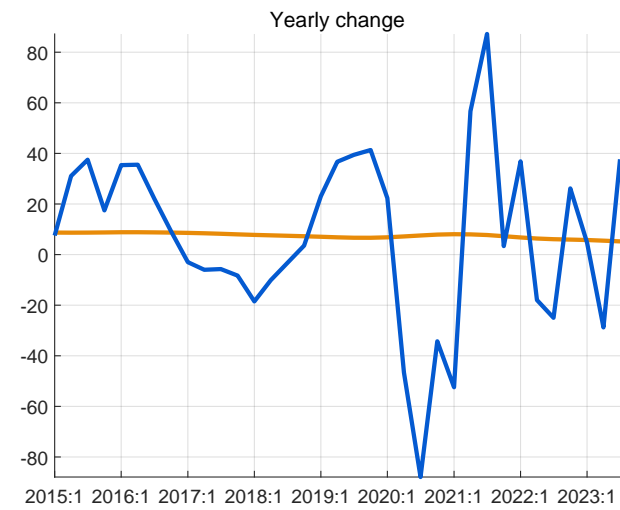
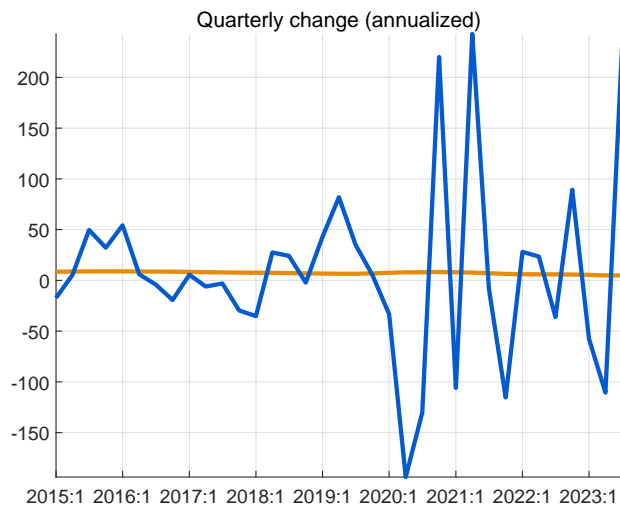
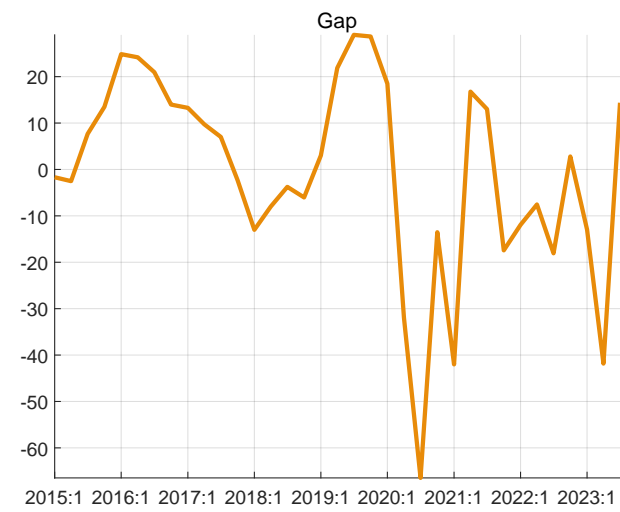
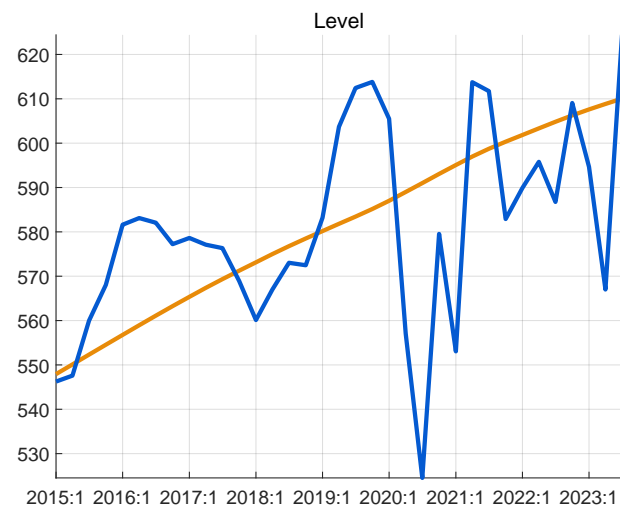


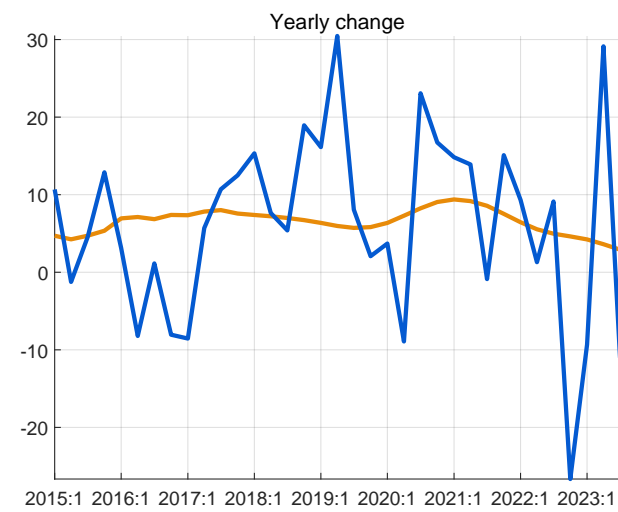
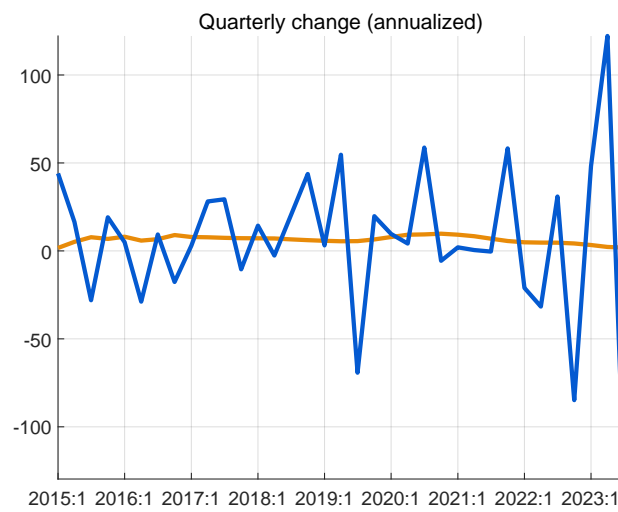
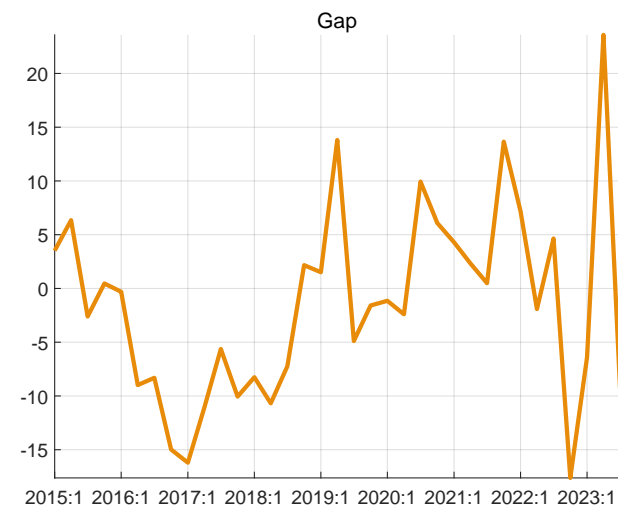
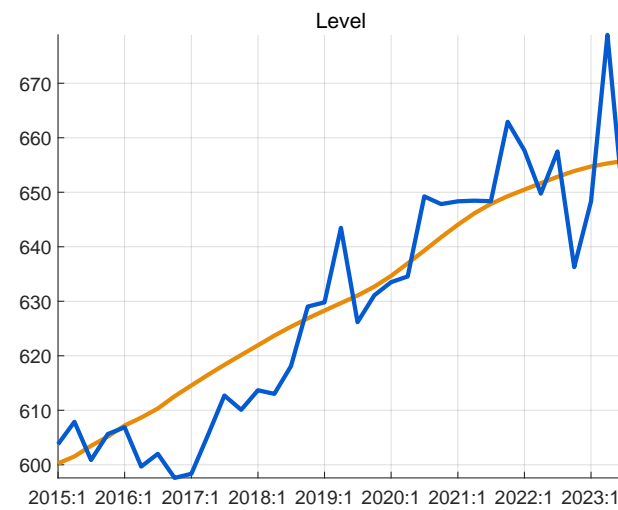


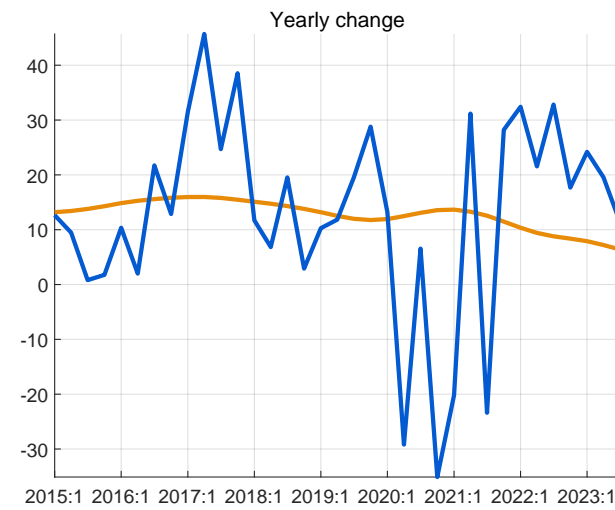
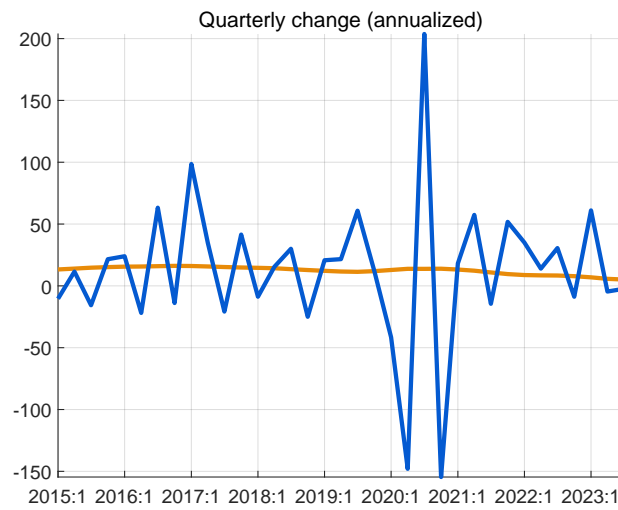
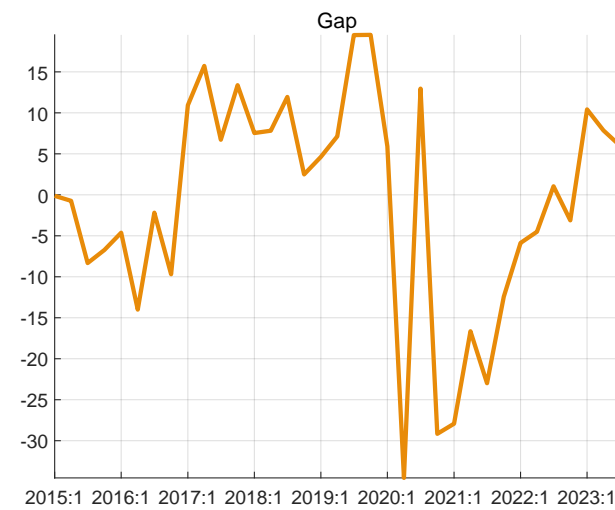
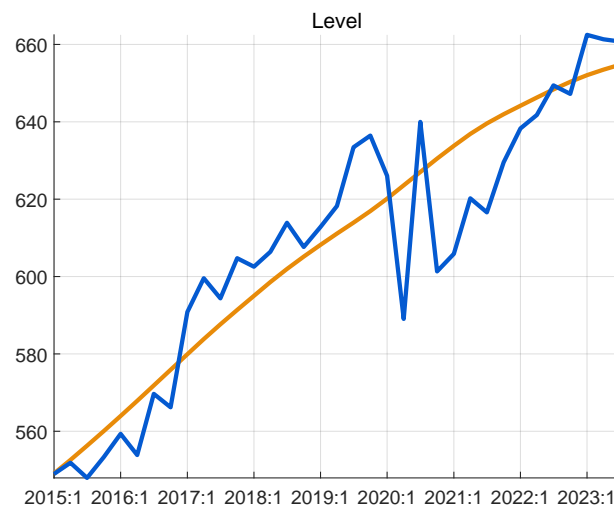
## 2 Trends and gaps

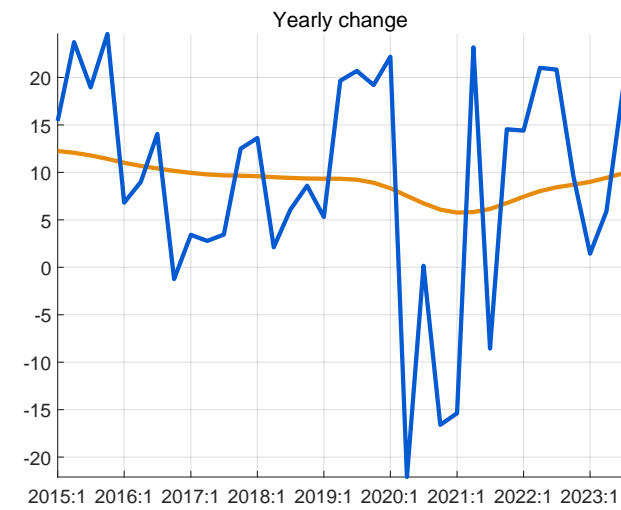
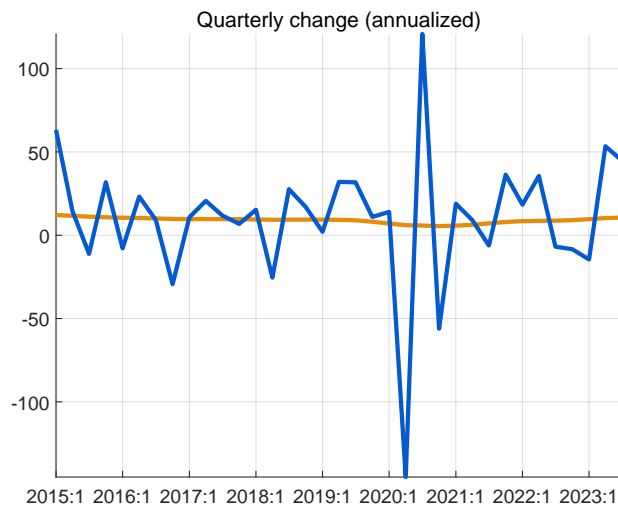
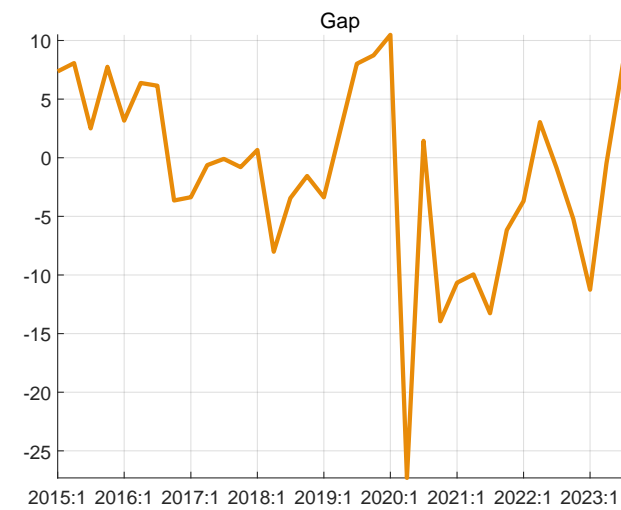
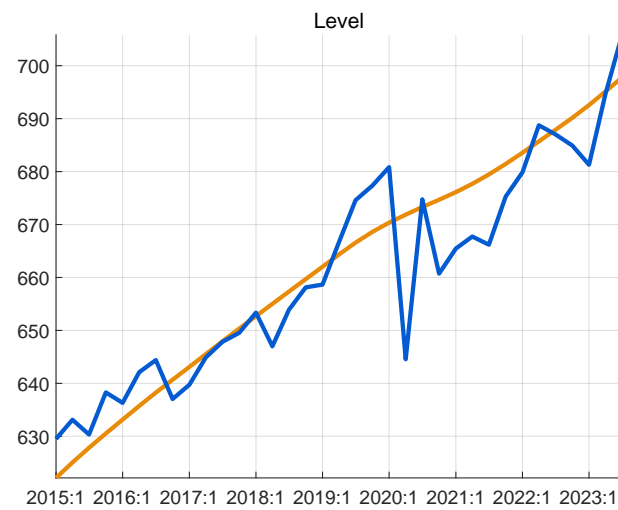


Consumption,  $100 \cdot \log [l\_cons]$ 

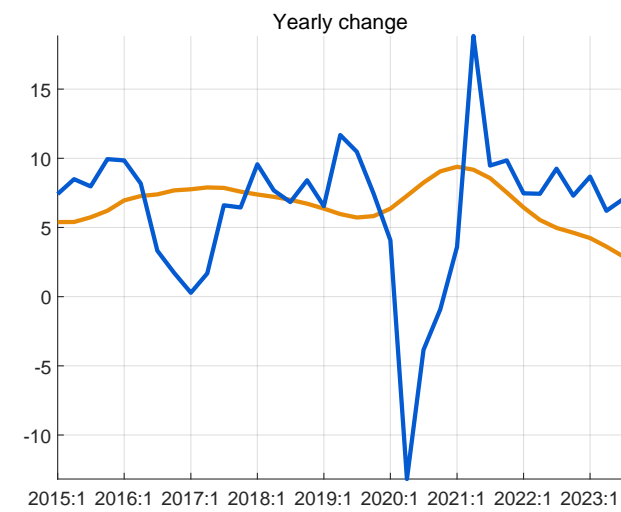
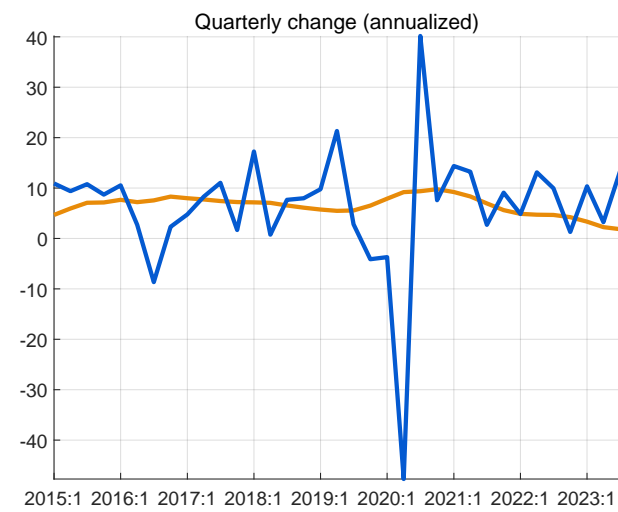
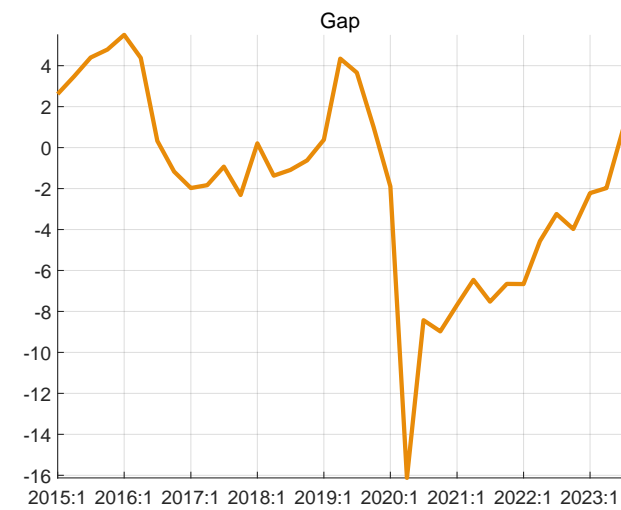
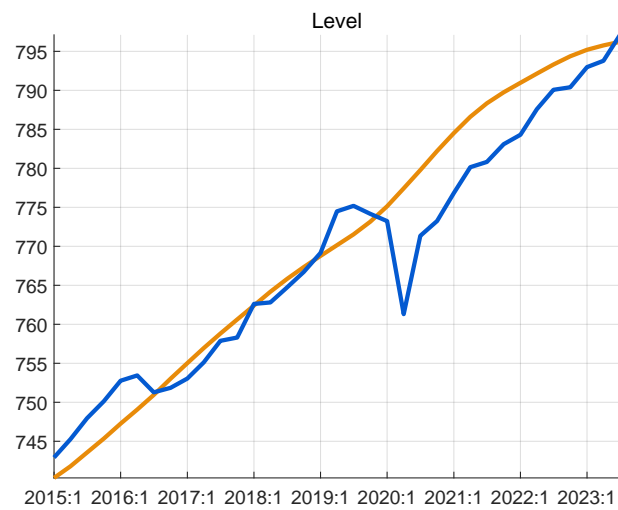
Investment,  $100 \cdot \log [I_{inv}]$ 

Gov. demand,  $100 \cdot \log [l\_gdem]$ 

Export,  $100 \cdot \log [l\_exp]$ 

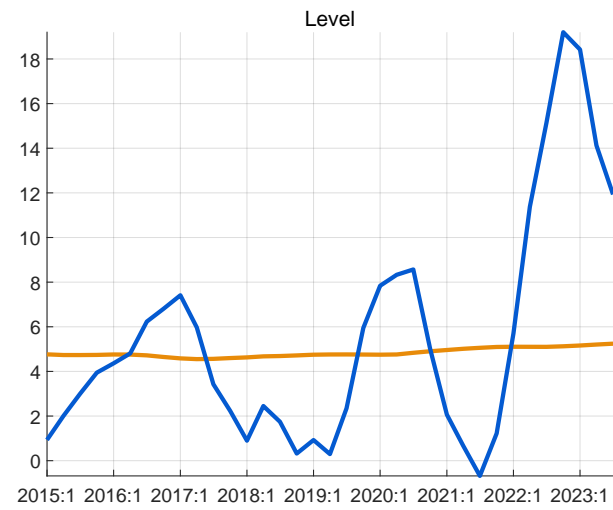
Import,  $100 \cdot \log [I_{\text{imp}}]$ 

## GDP, 100\*log [l\_y]

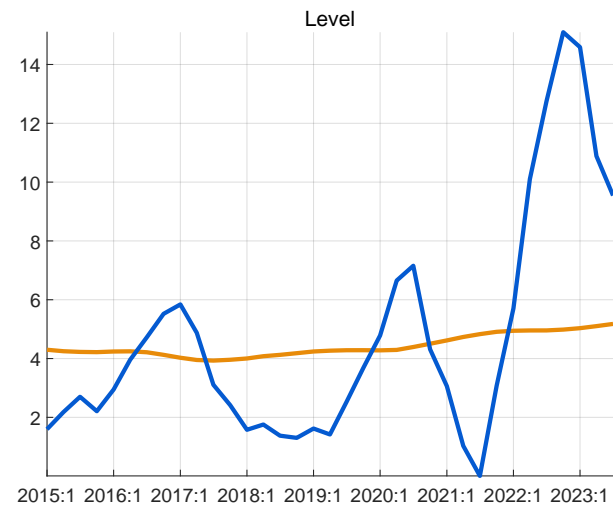




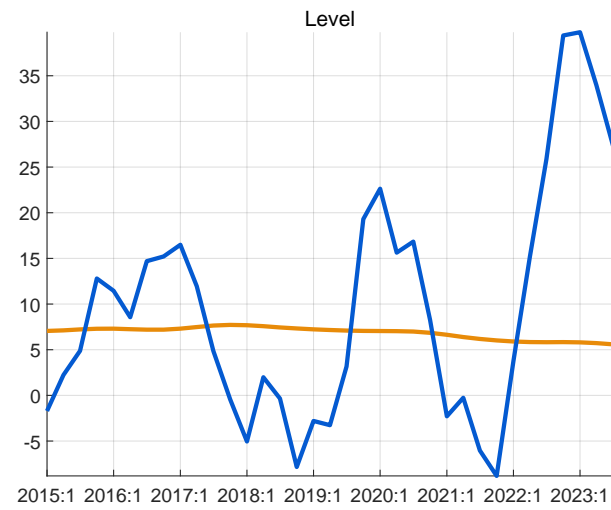
### Headline CPI, YY % [d4l\_cpi]



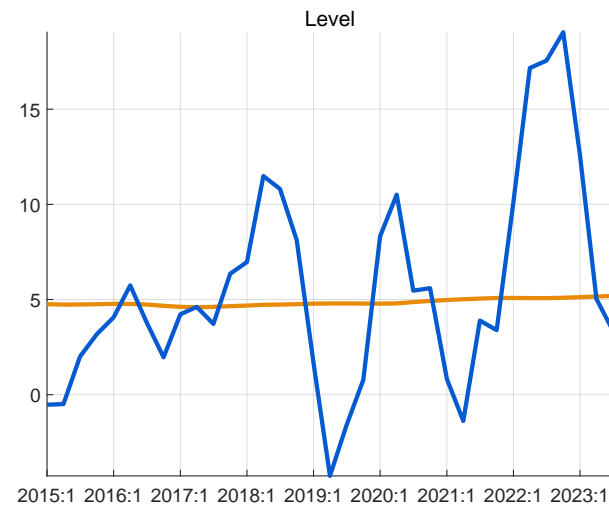
### Core CPI, YY % [d4l\_cpi\_core]

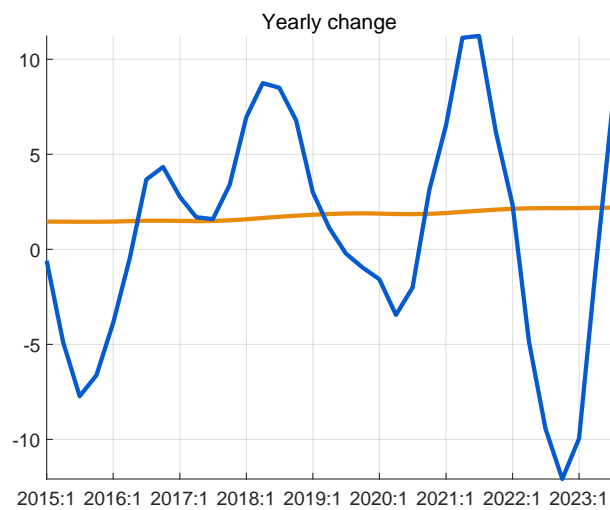
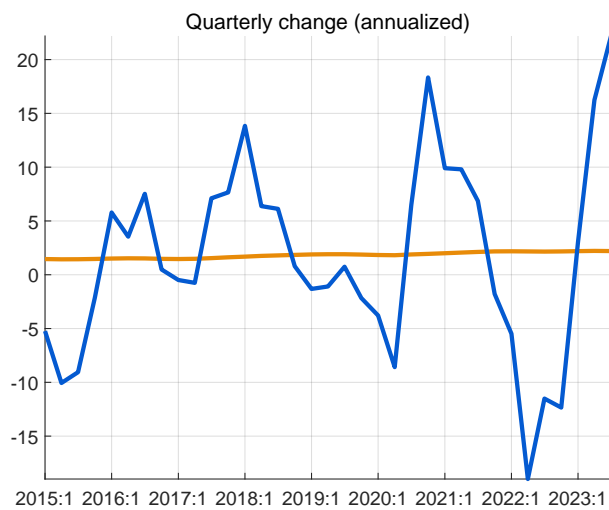
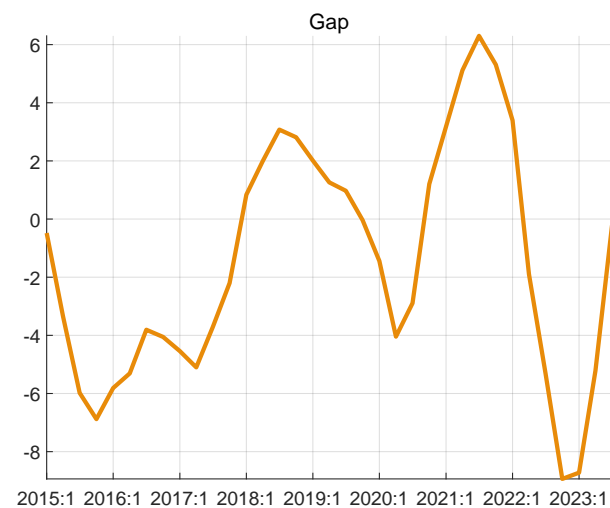
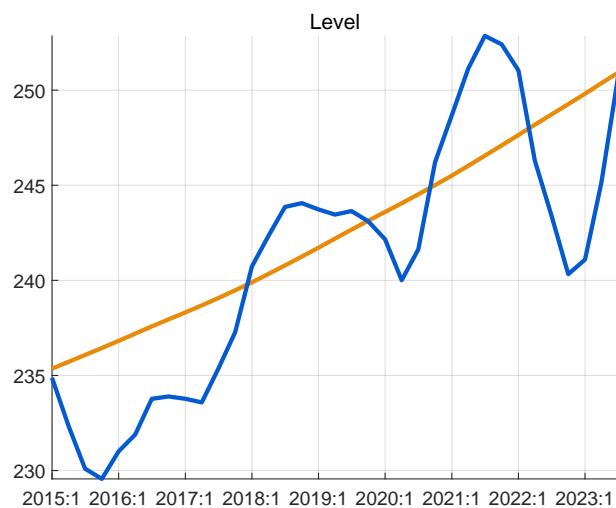


### Food CPI, YY % [d4l\_cpi\_food]

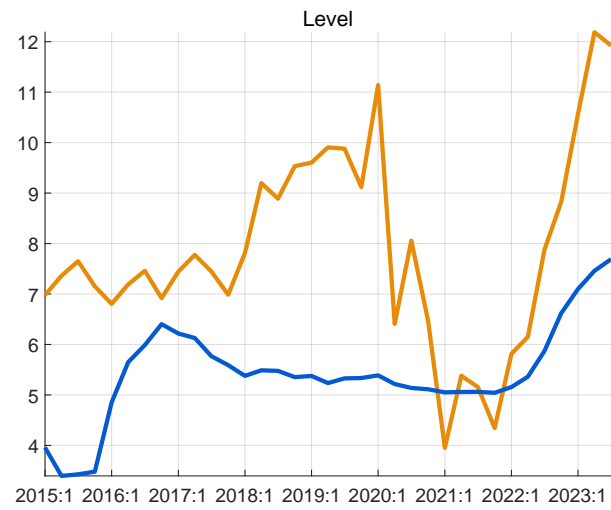


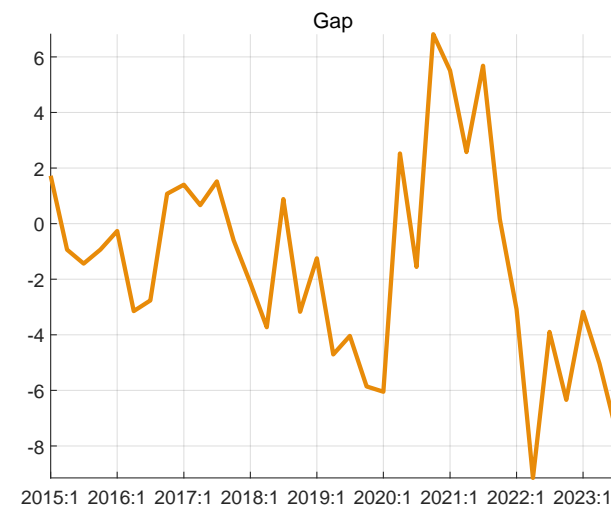
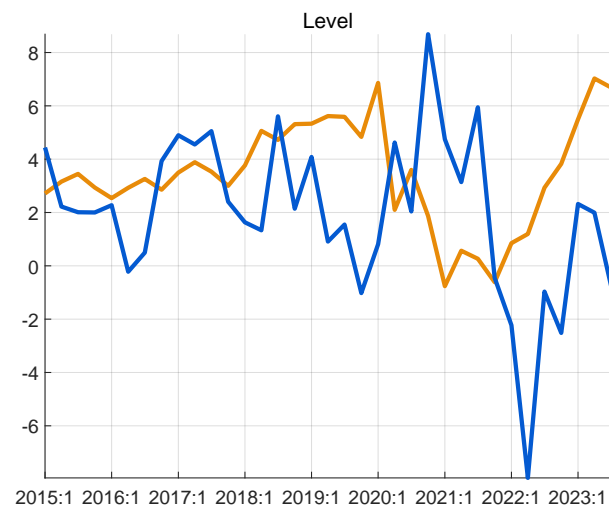
### Energy CPI, YY % [d4l\_cpi\_ener]

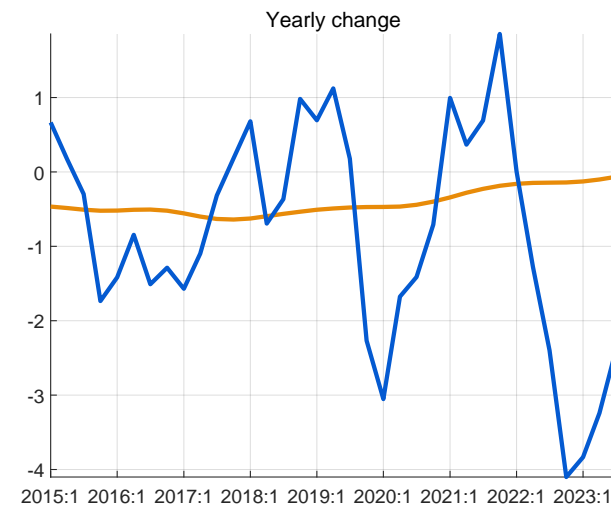
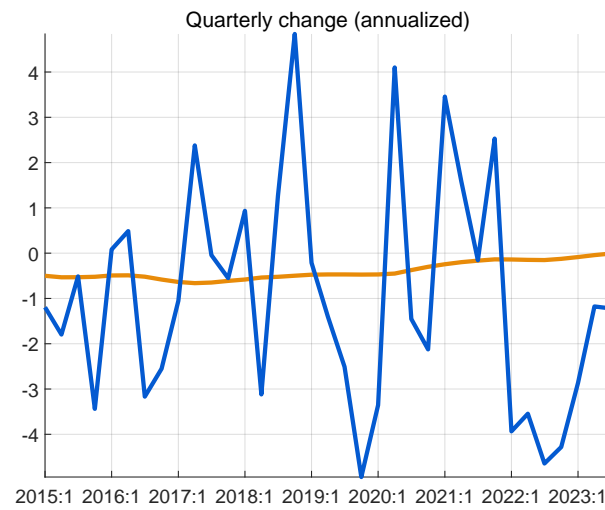
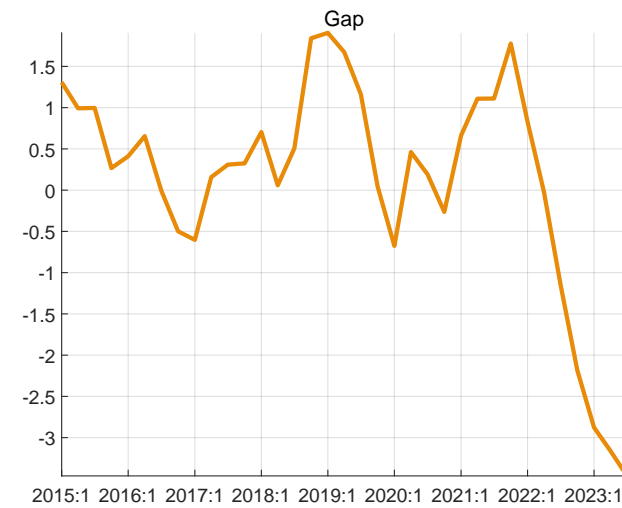
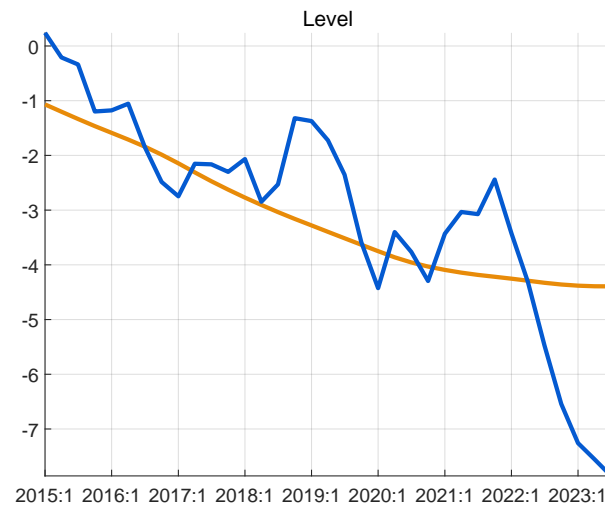


Real exchn. rate,  $100 \cdot \log [l\_z]$ 

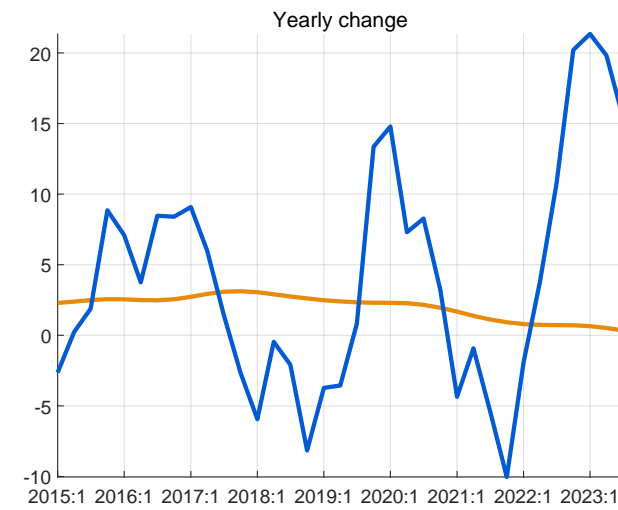
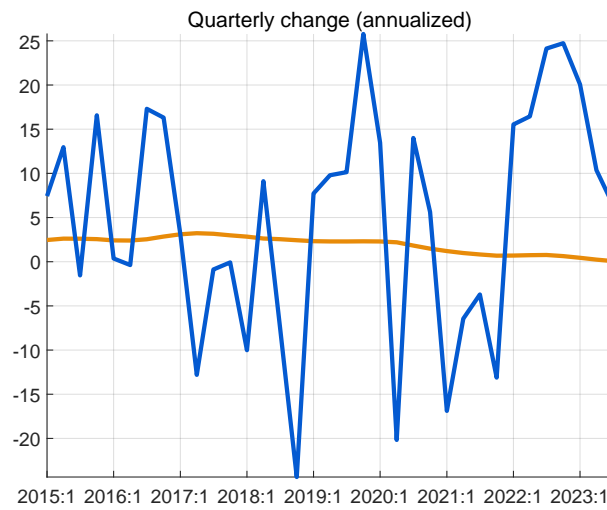
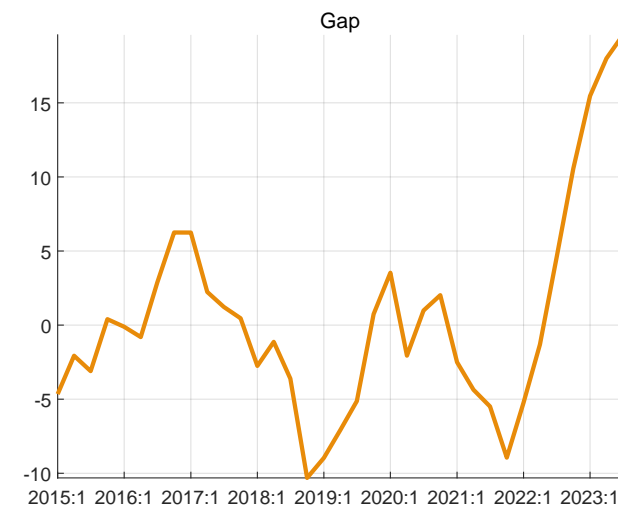
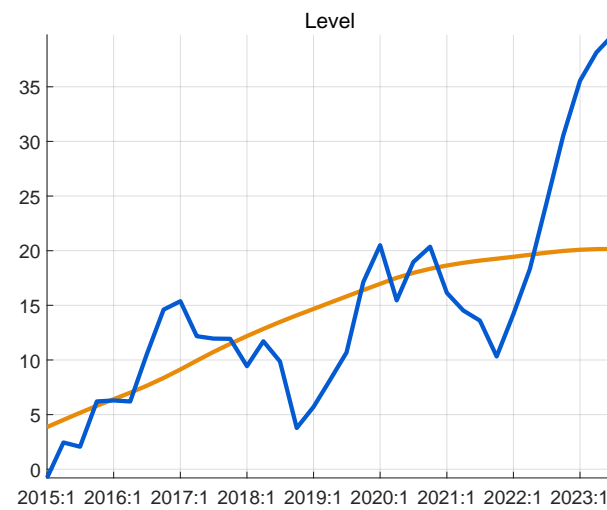
### Policy rate (IB rate used), % [i]

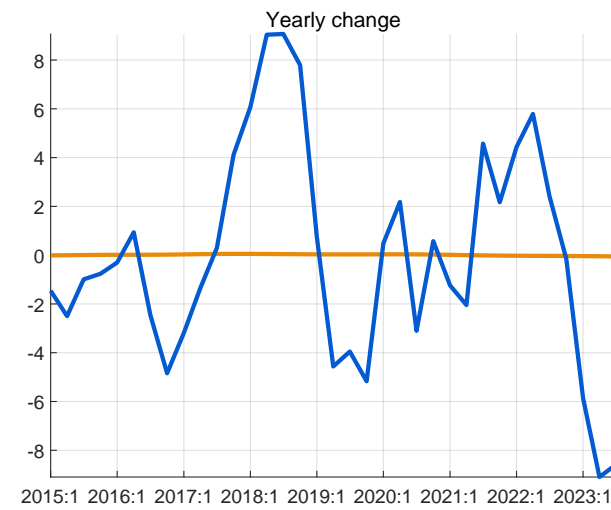
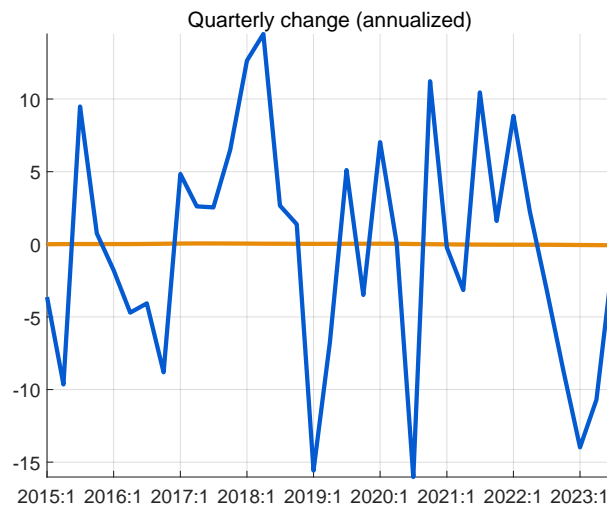
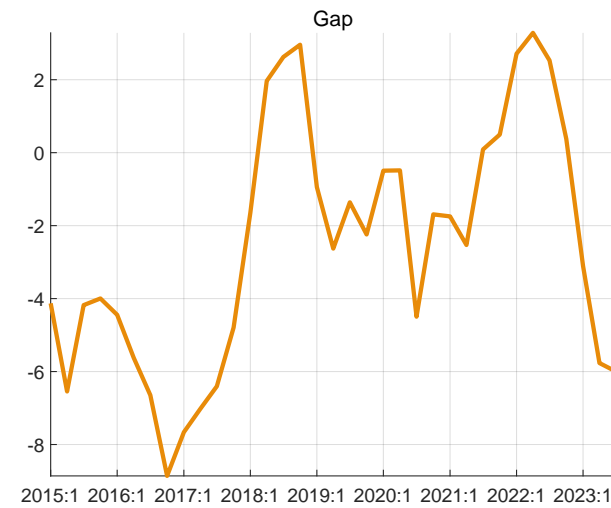
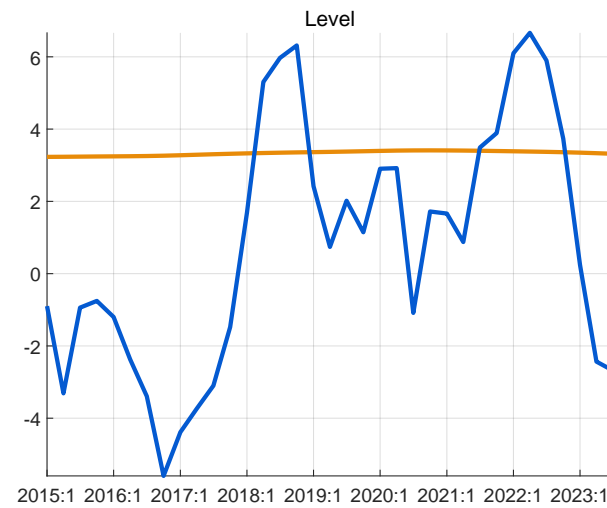


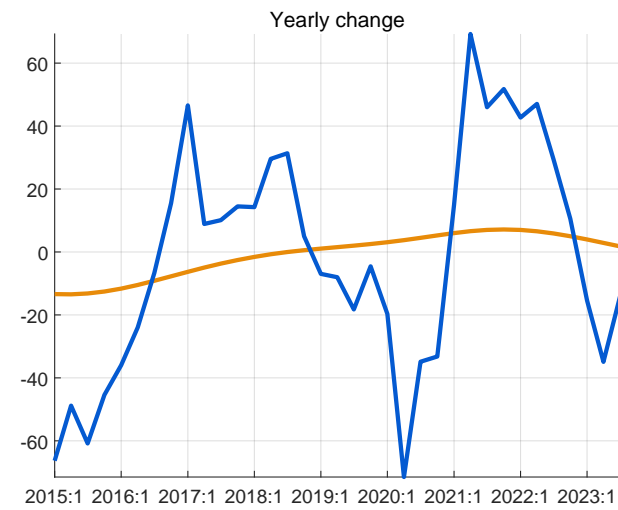
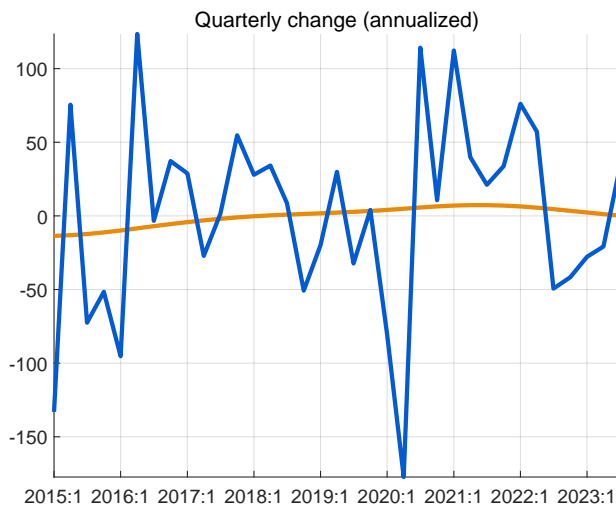
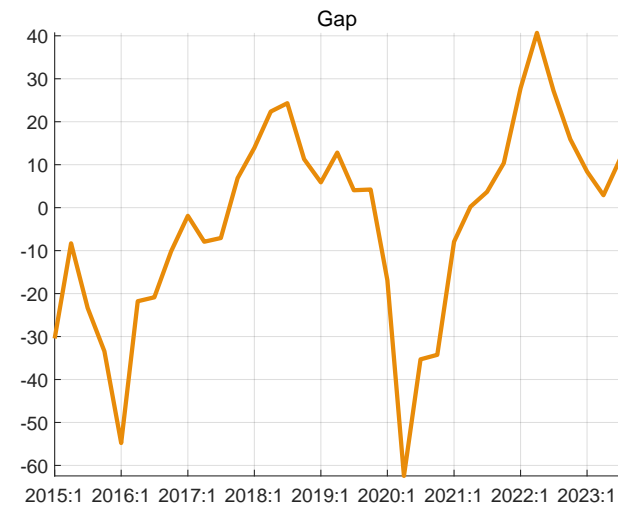
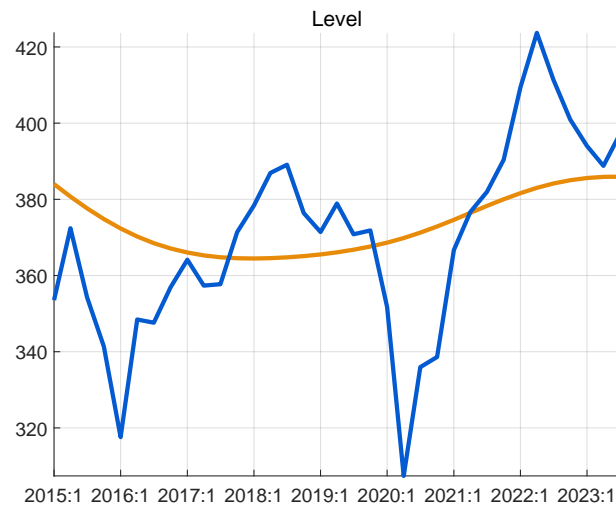
**Real interest (policy) rate, % [r]**

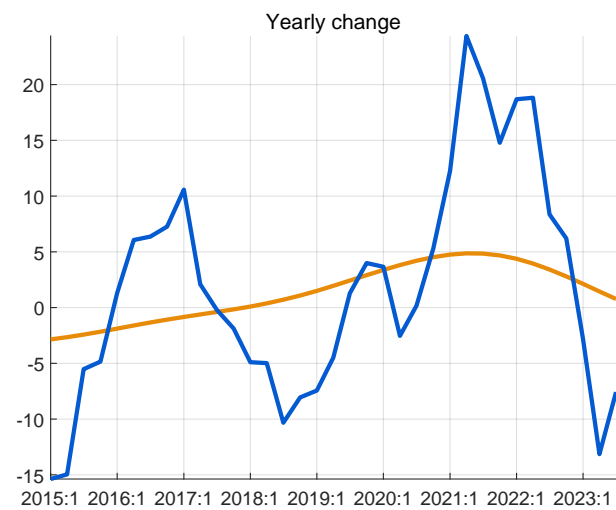
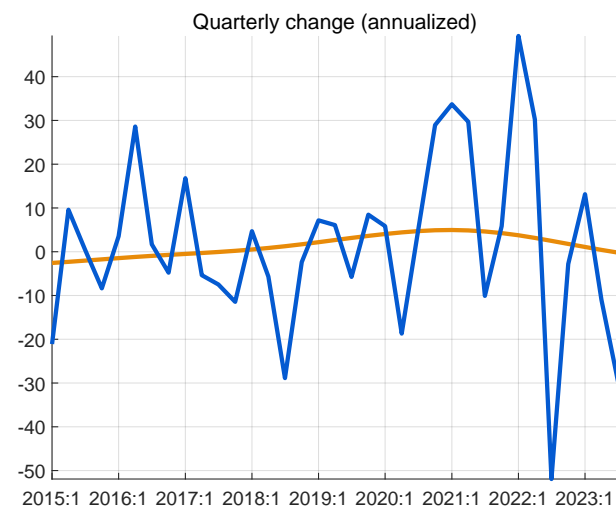
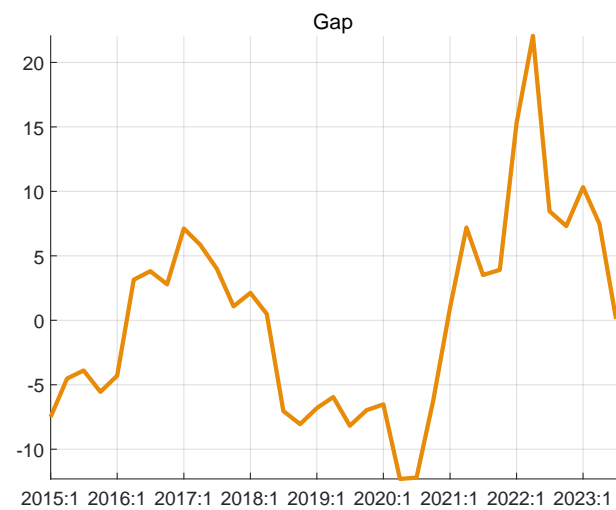
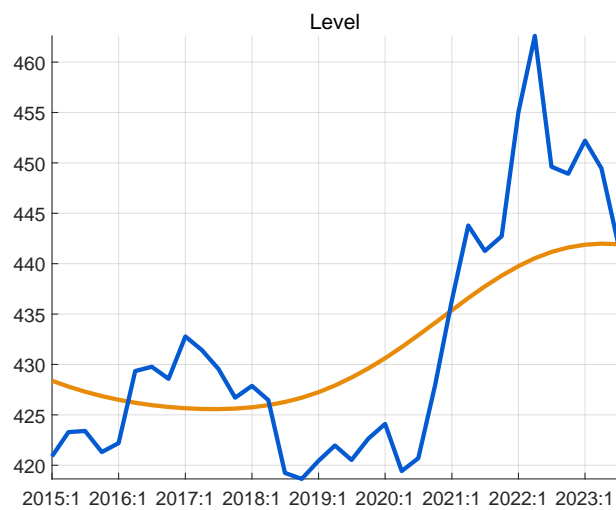
Core rel. price,  $100 \cdot \log [l\_rp\_cpi\_core]$ 



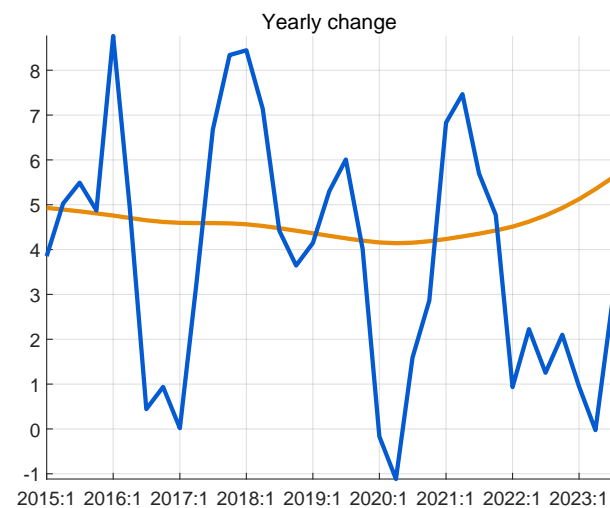
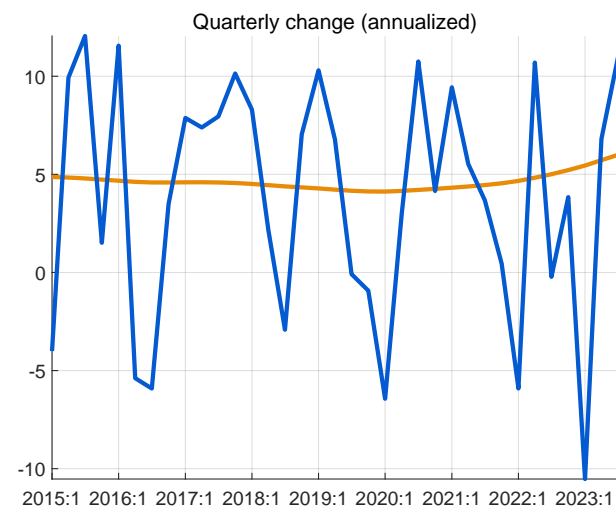
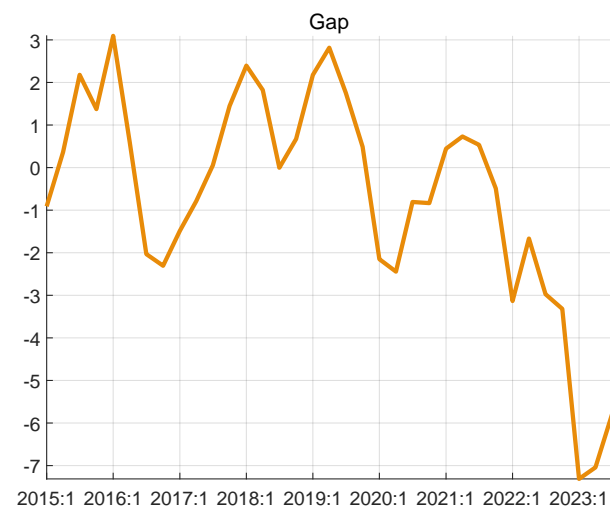
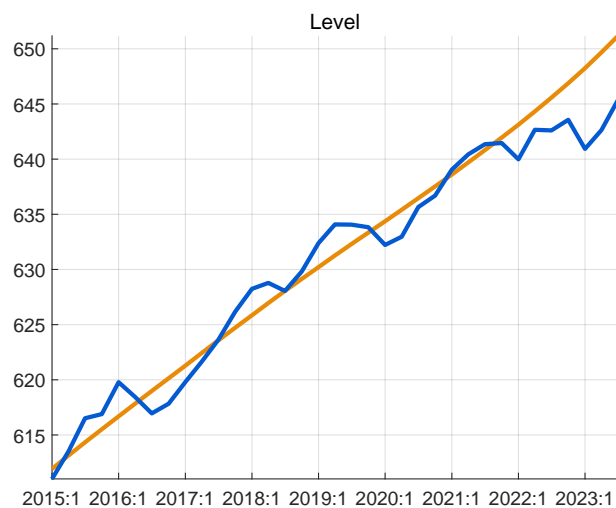
Food rel. price,  $100 \cdot \log [l\_rp\_cpi\_food]$ 

Energy rel. price,  $100 \cdot \log [l\_rp\_cpi\_ener]$ 

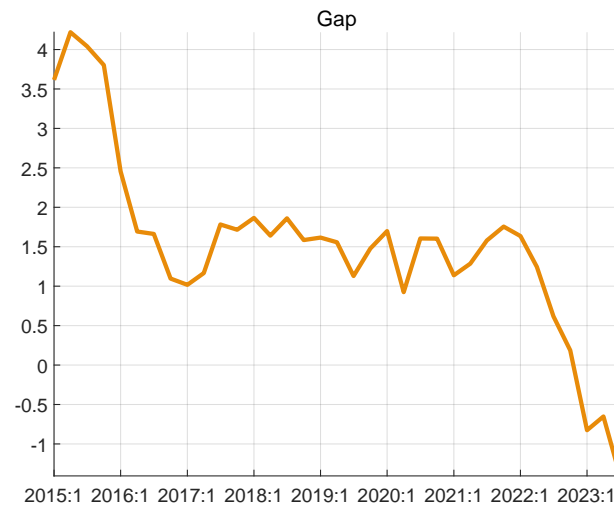
Foreign rel. ener. price,  $100 \cdot \log [l\_rp\_enerstar]$ 

**Foreign rel. food price,  $100 \cdot \log [l\_rp\_foodstar]$** 

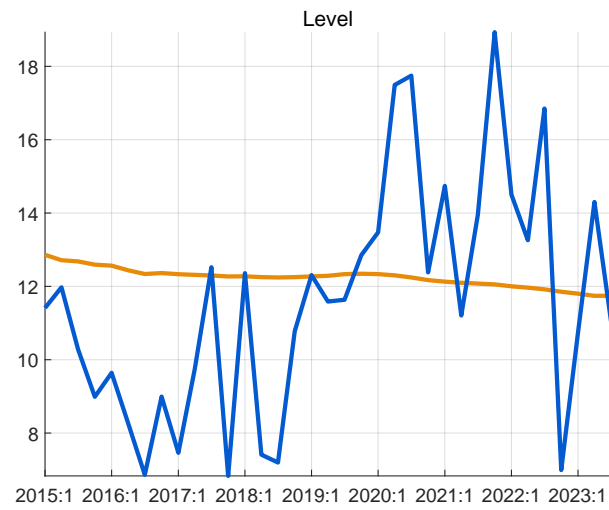
## Agric. GDP, 100\*log [l\_y\_agr]



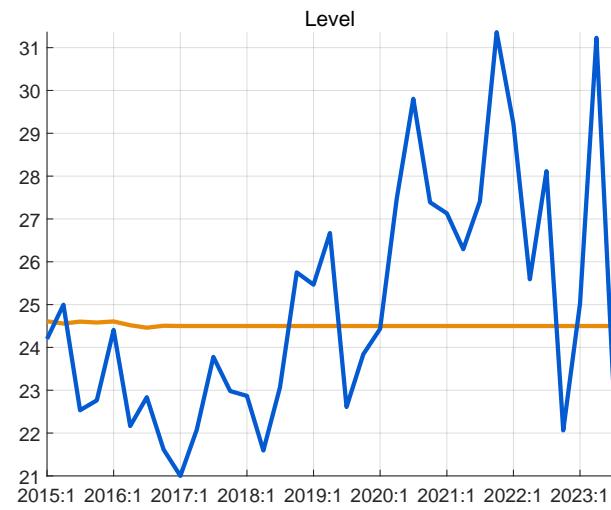
### Lending premium, % [prem\_d]



### Budget deficit, % of GDP [def\_y]

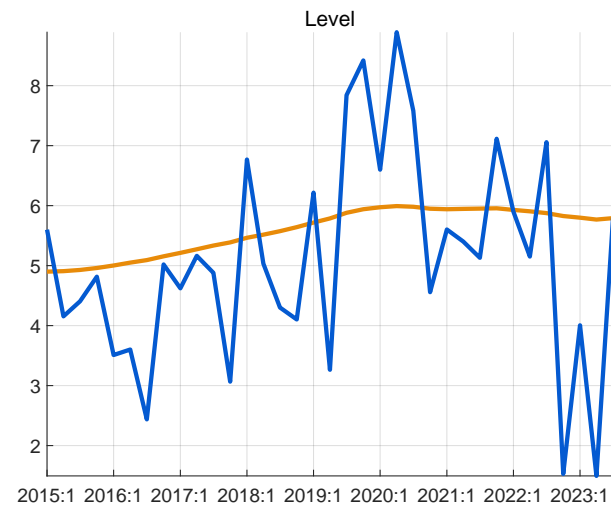


### Govt. demand (G&S), % GDP [gdem\_y]

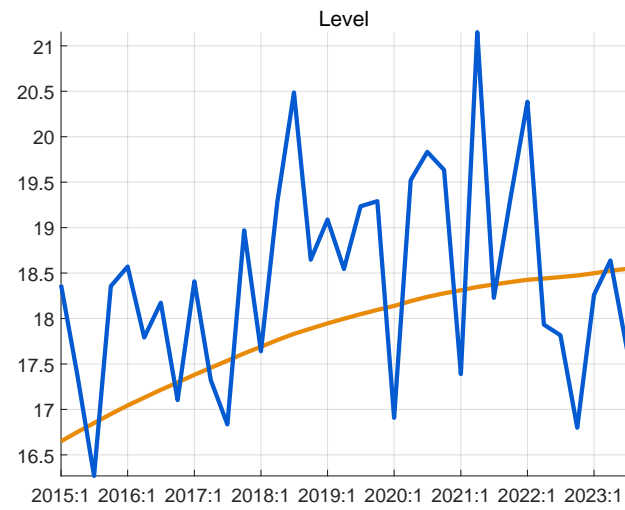




### Other govt. exp., % to GDP [oexp\_y]

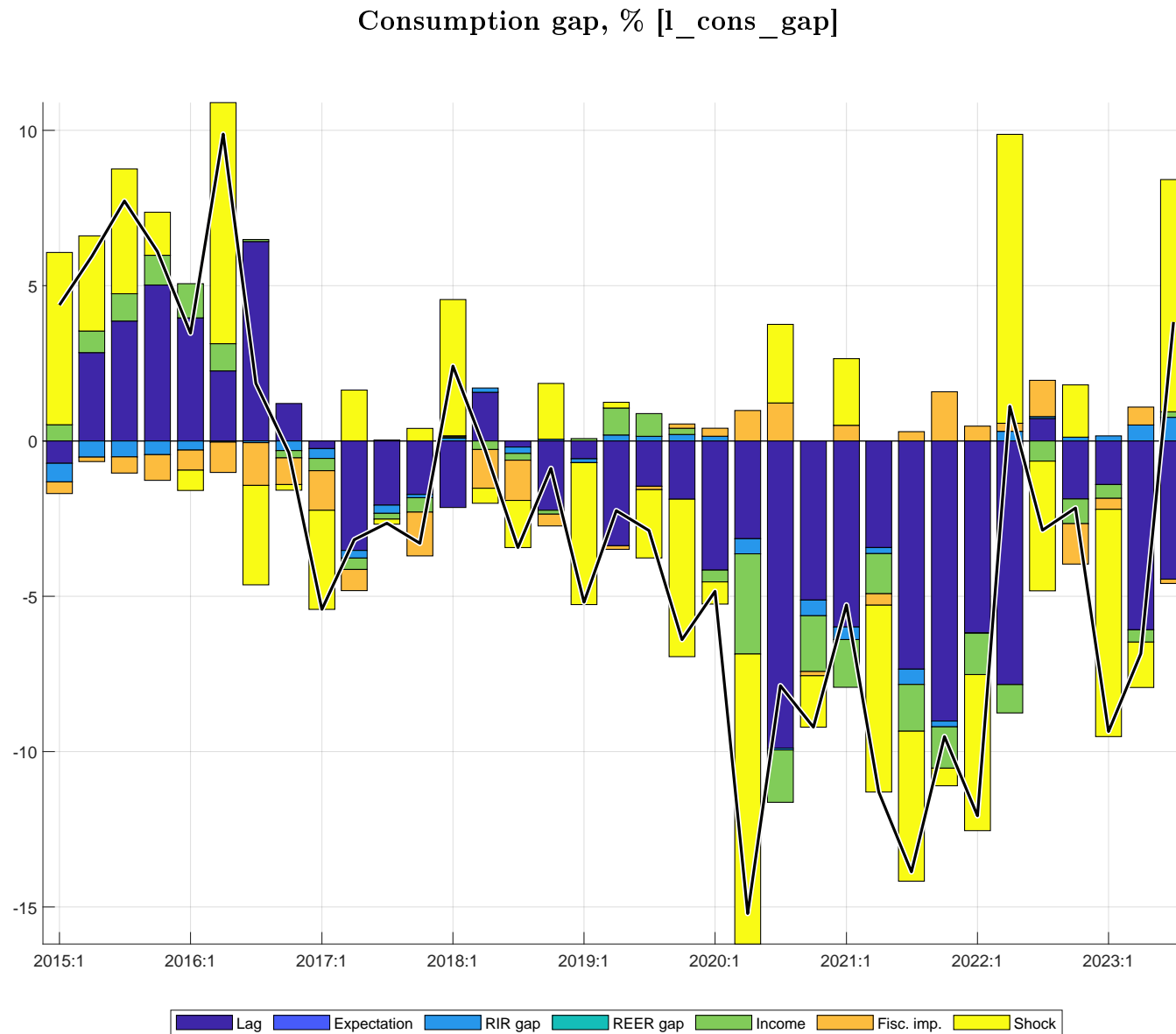


### Govt. rev., % of GDP [grev\_y]

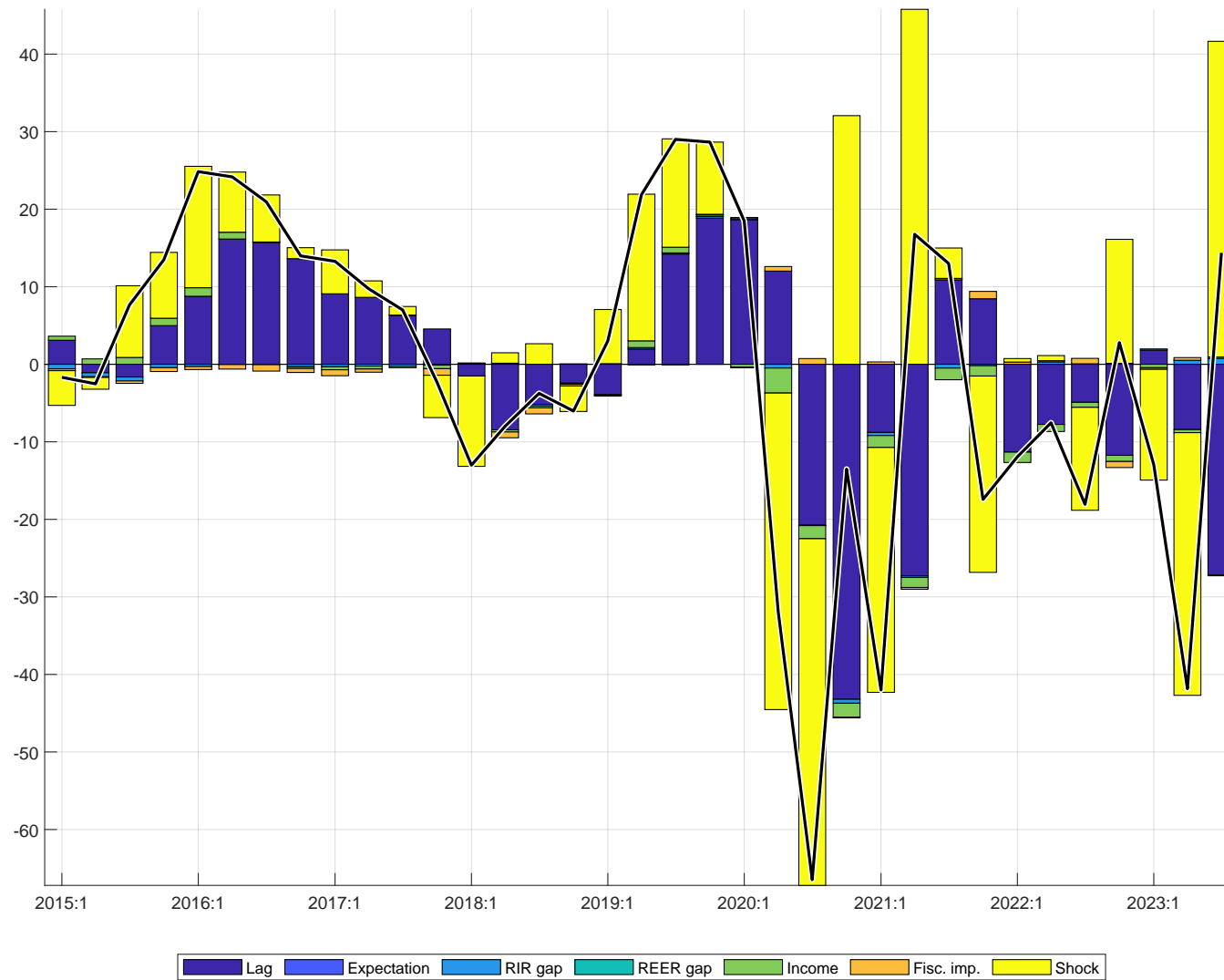


### 3 Decomposition of equations: charts

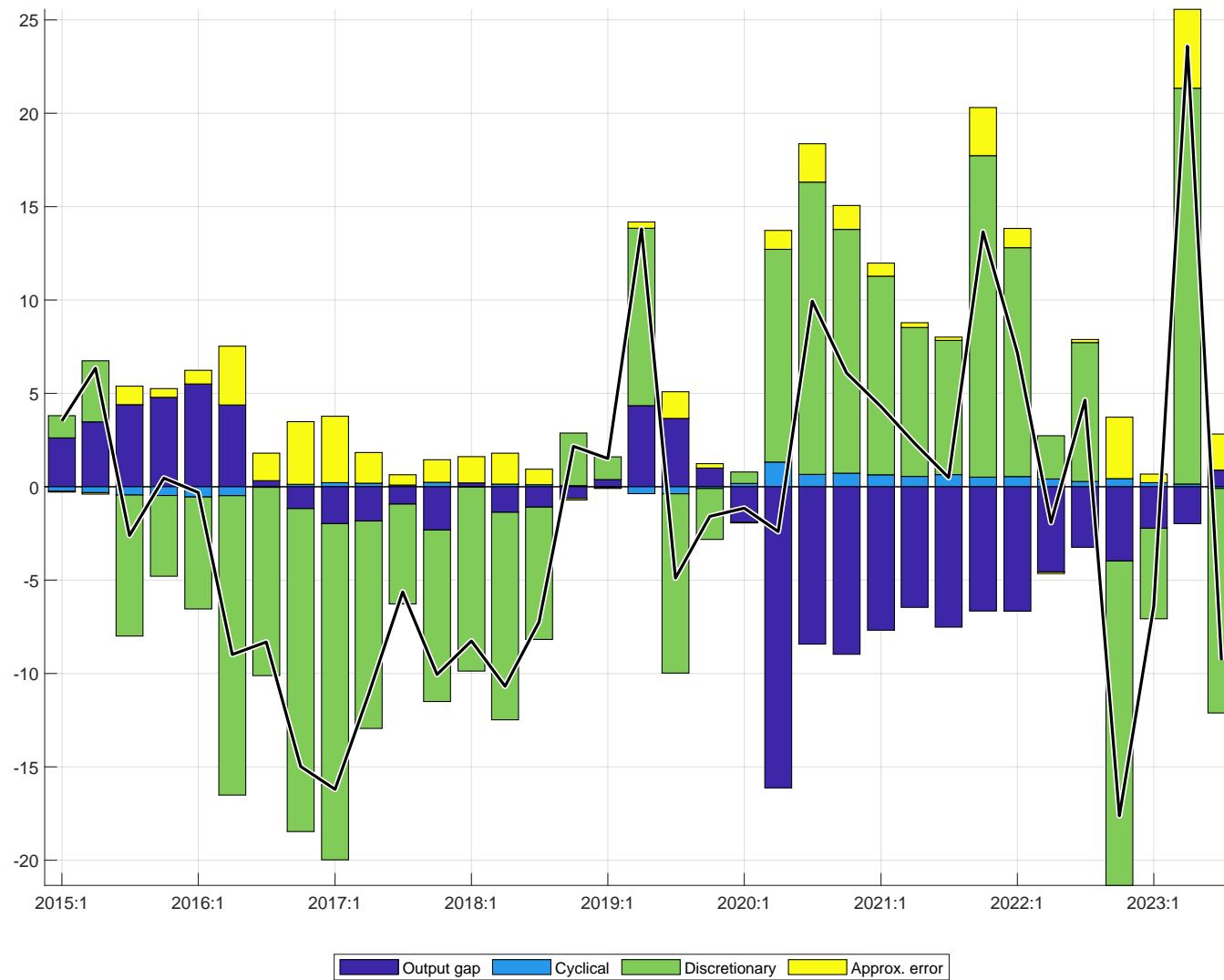


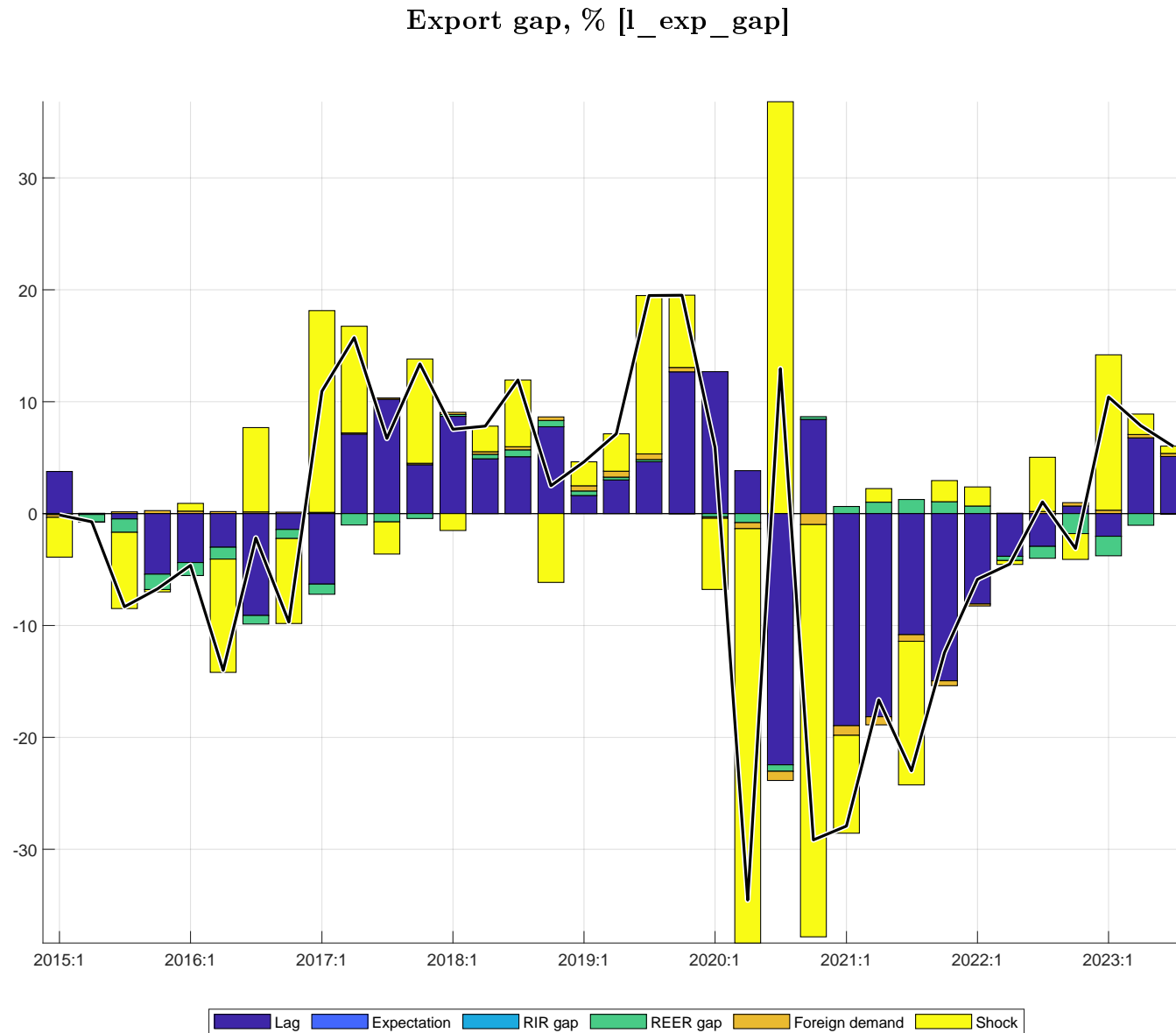


## Investment gap, % [l\_inv\_gap]

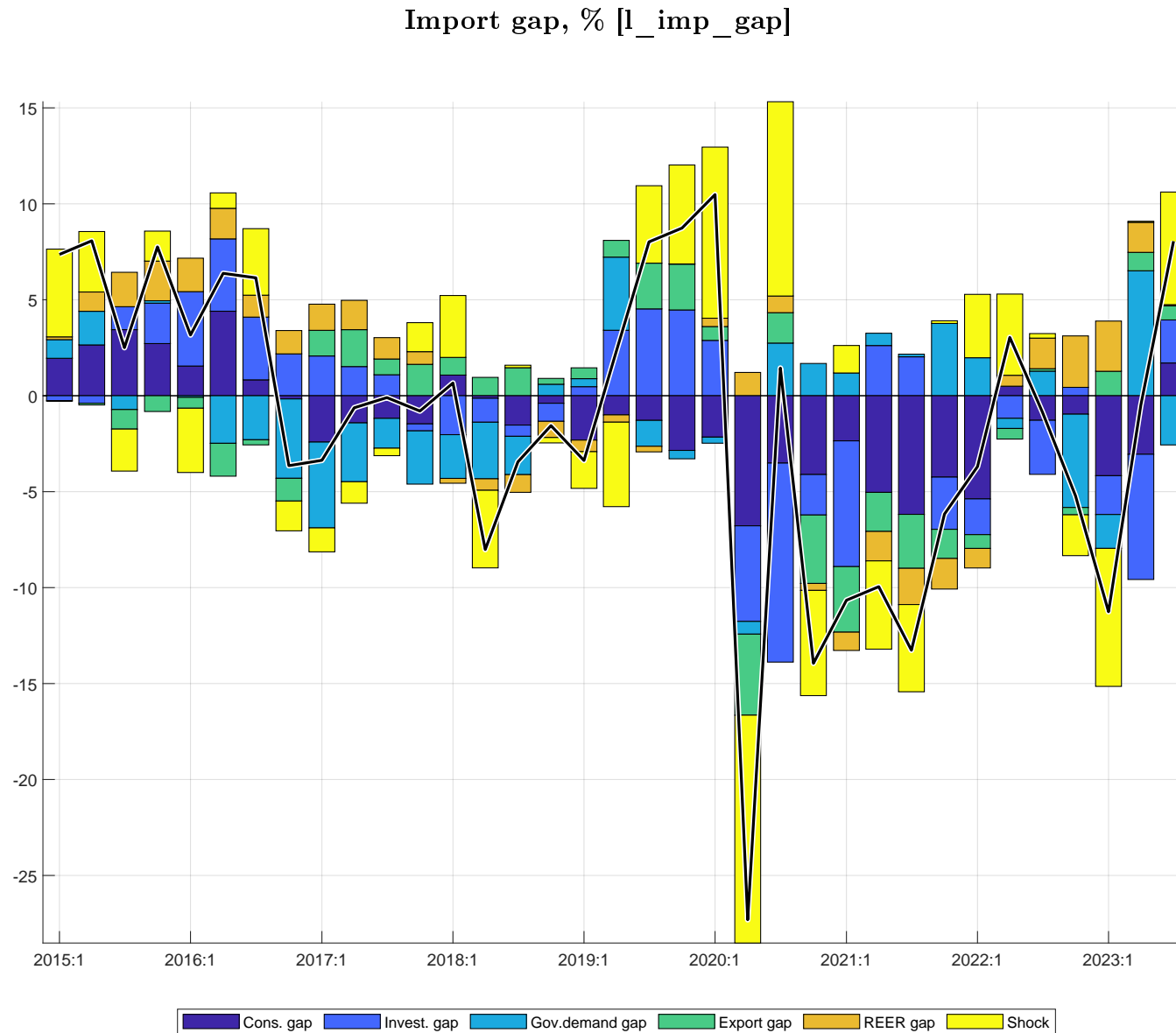


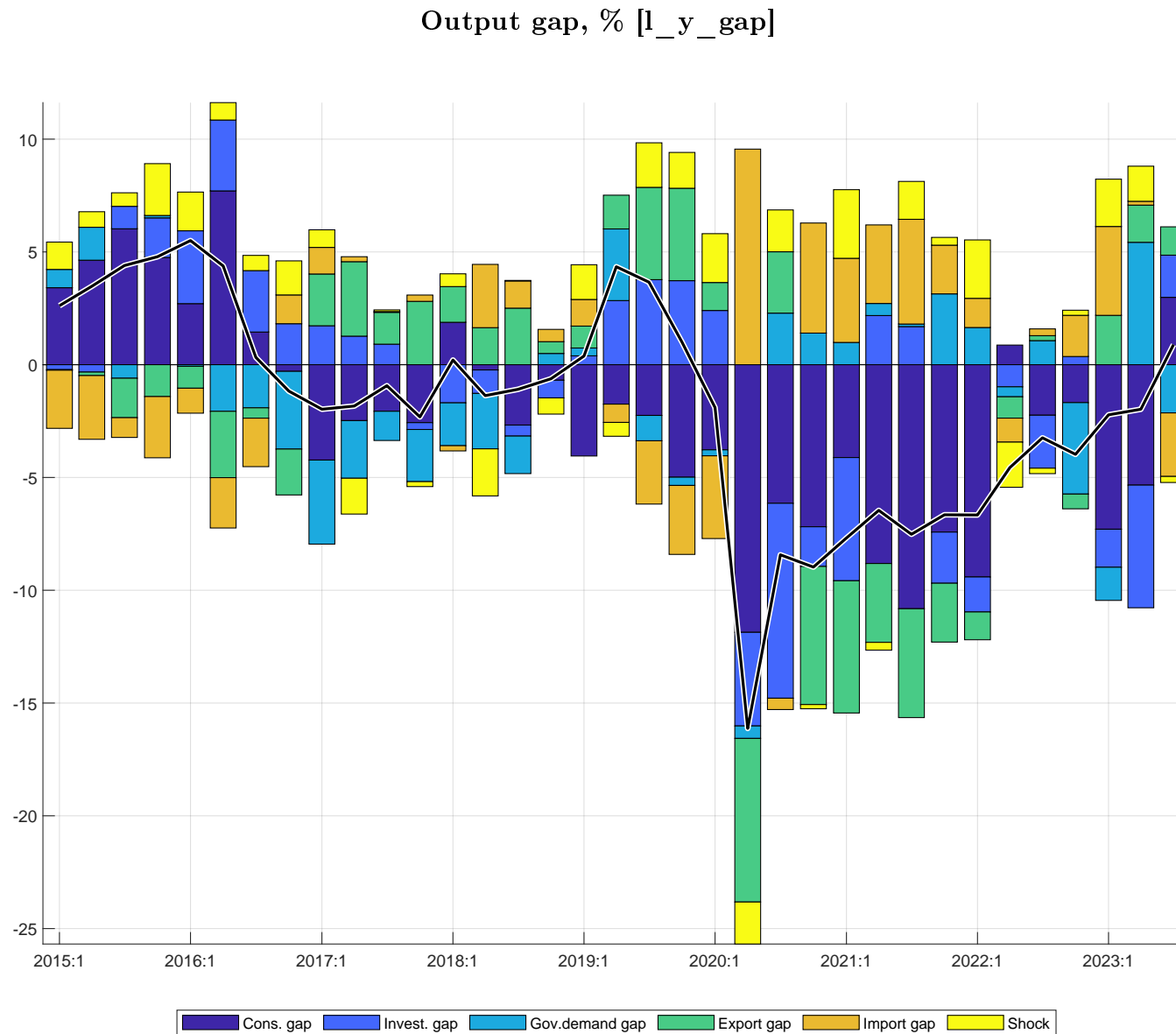
## Gov. demand gap, % [l\_gdem\_gap]



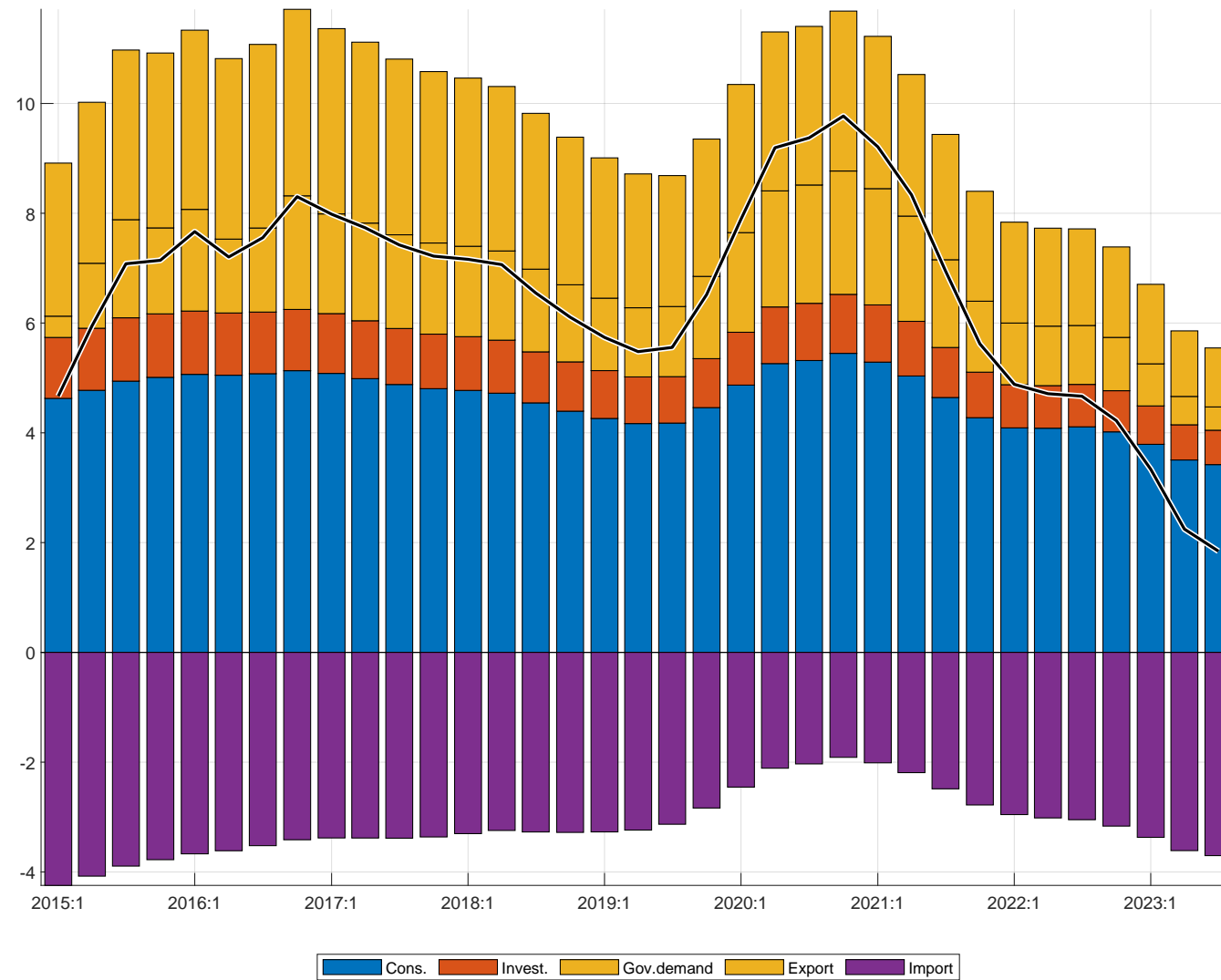




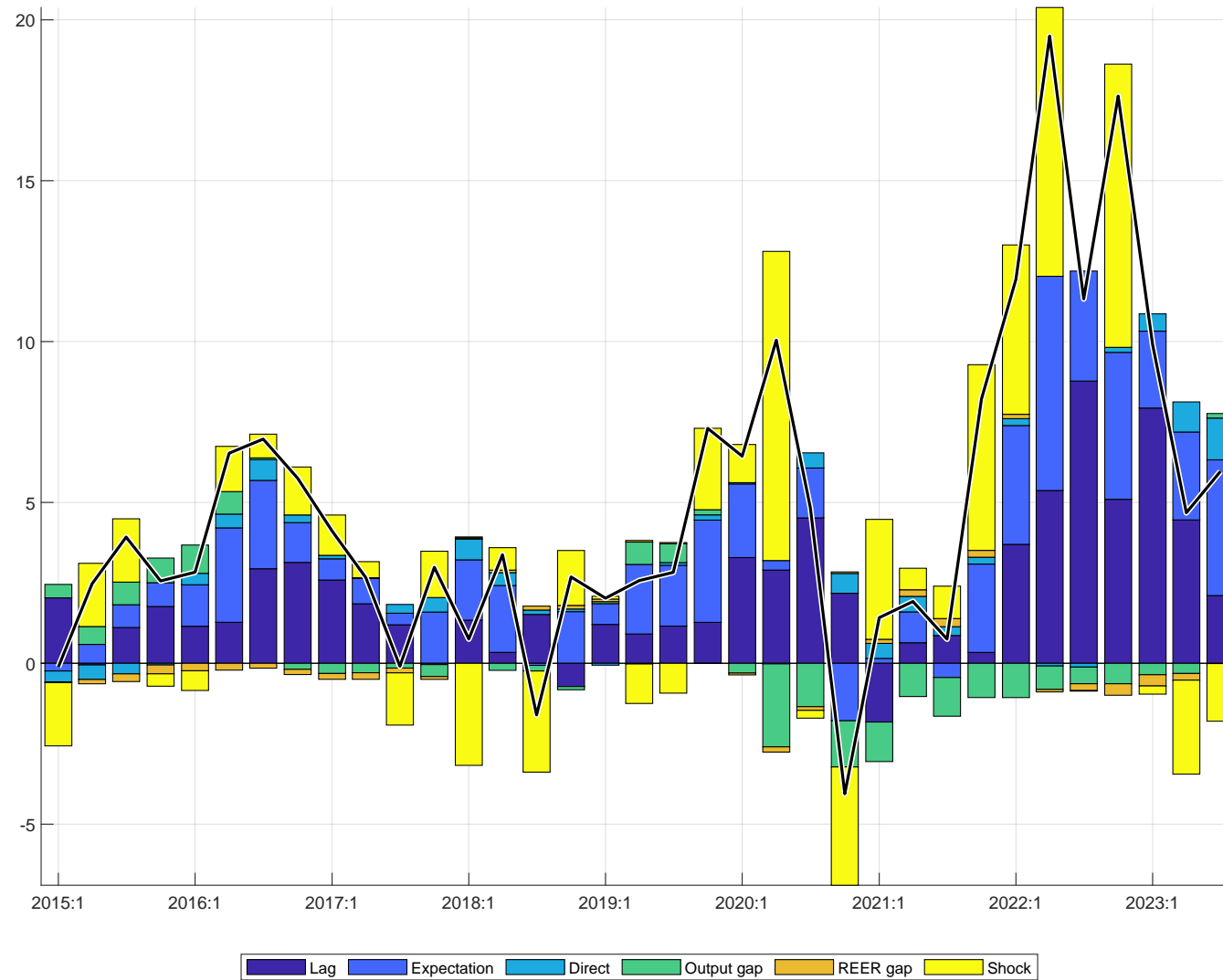




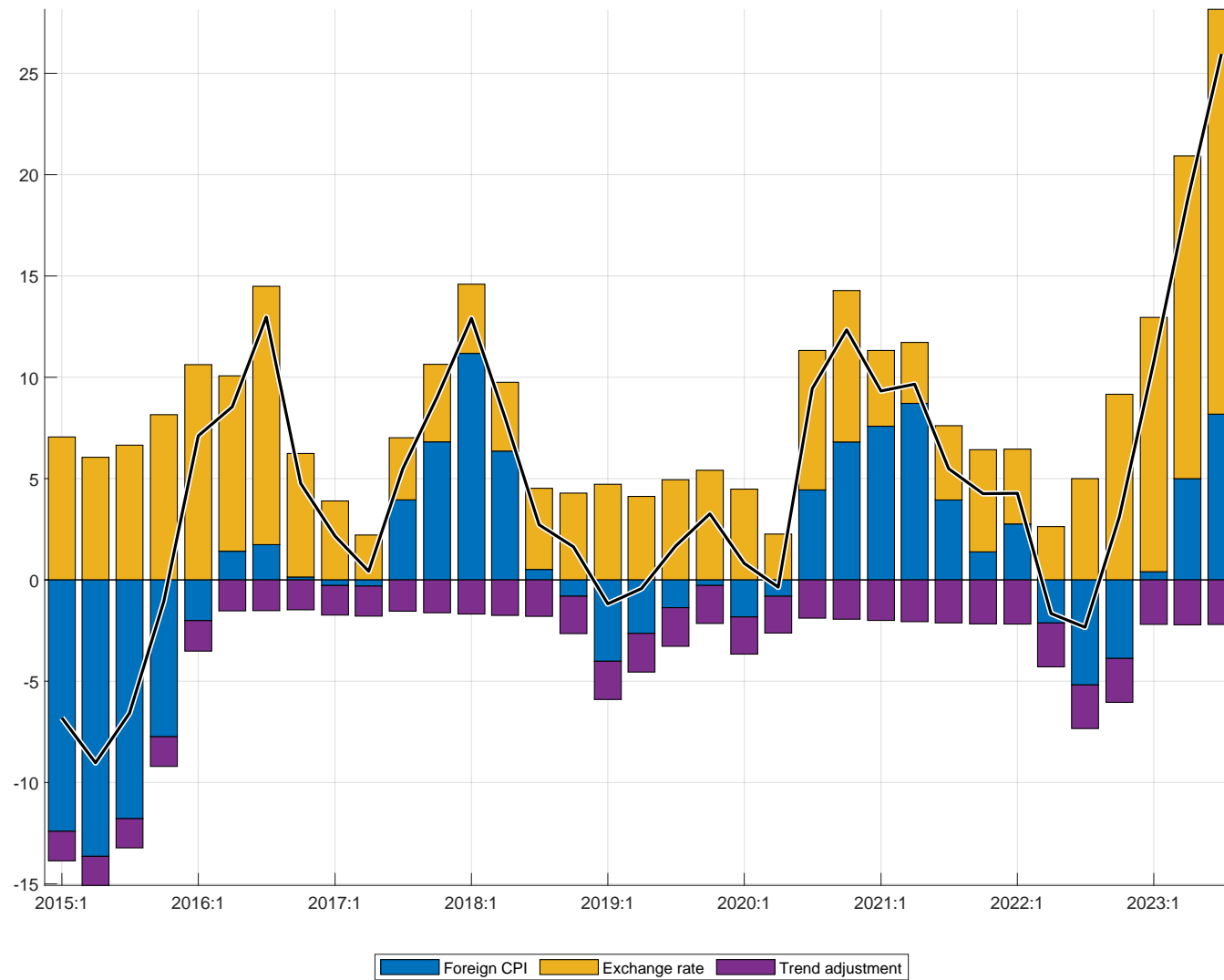
GDP tnd., ann. QQ % [dl\_y\_tnd]



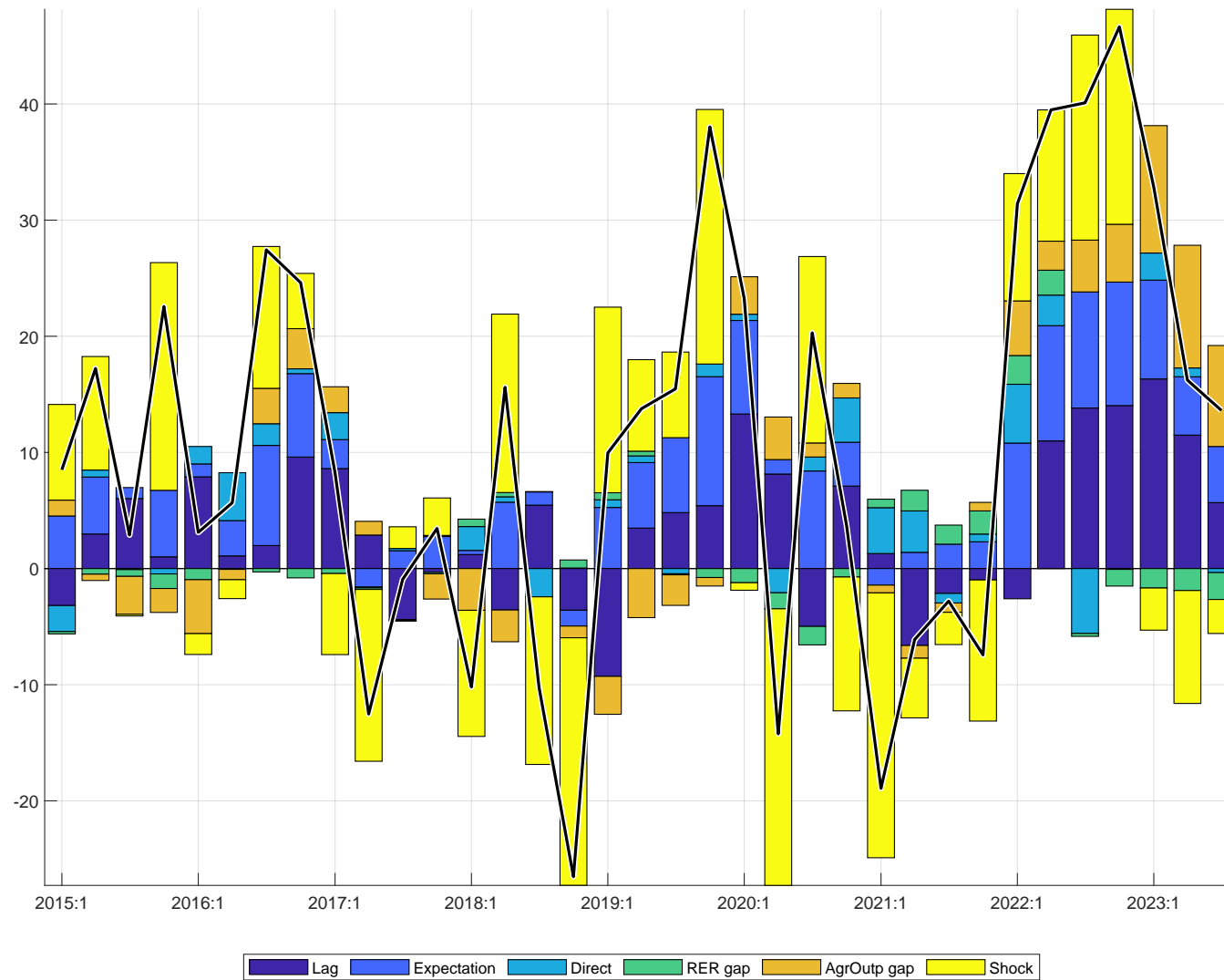
## Core CPI, ann. QQ % [dl\_cpi\_core]



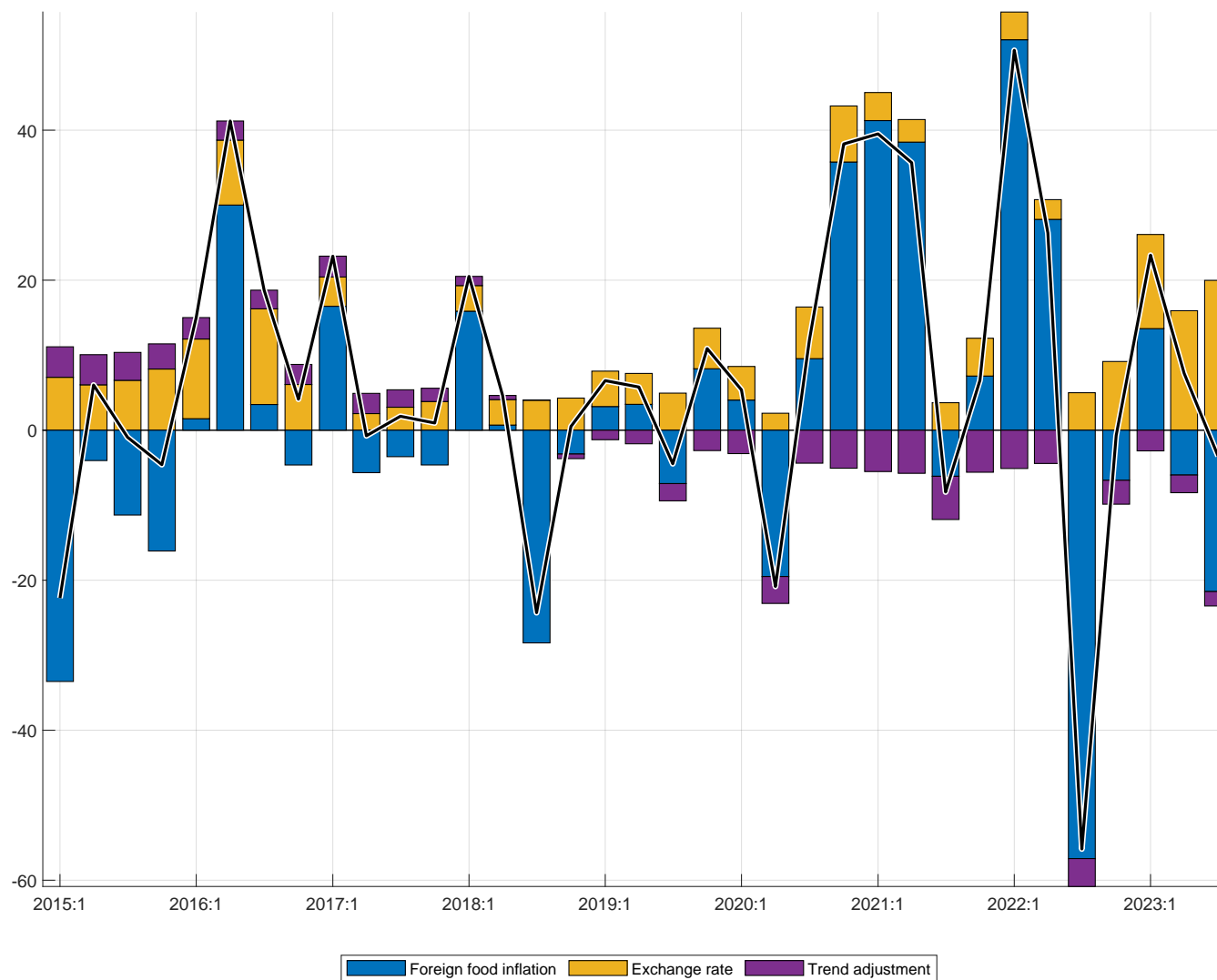
## Dir. ext. eff. in core, ann. QQ % [dl\_cpi\_core\_direct]



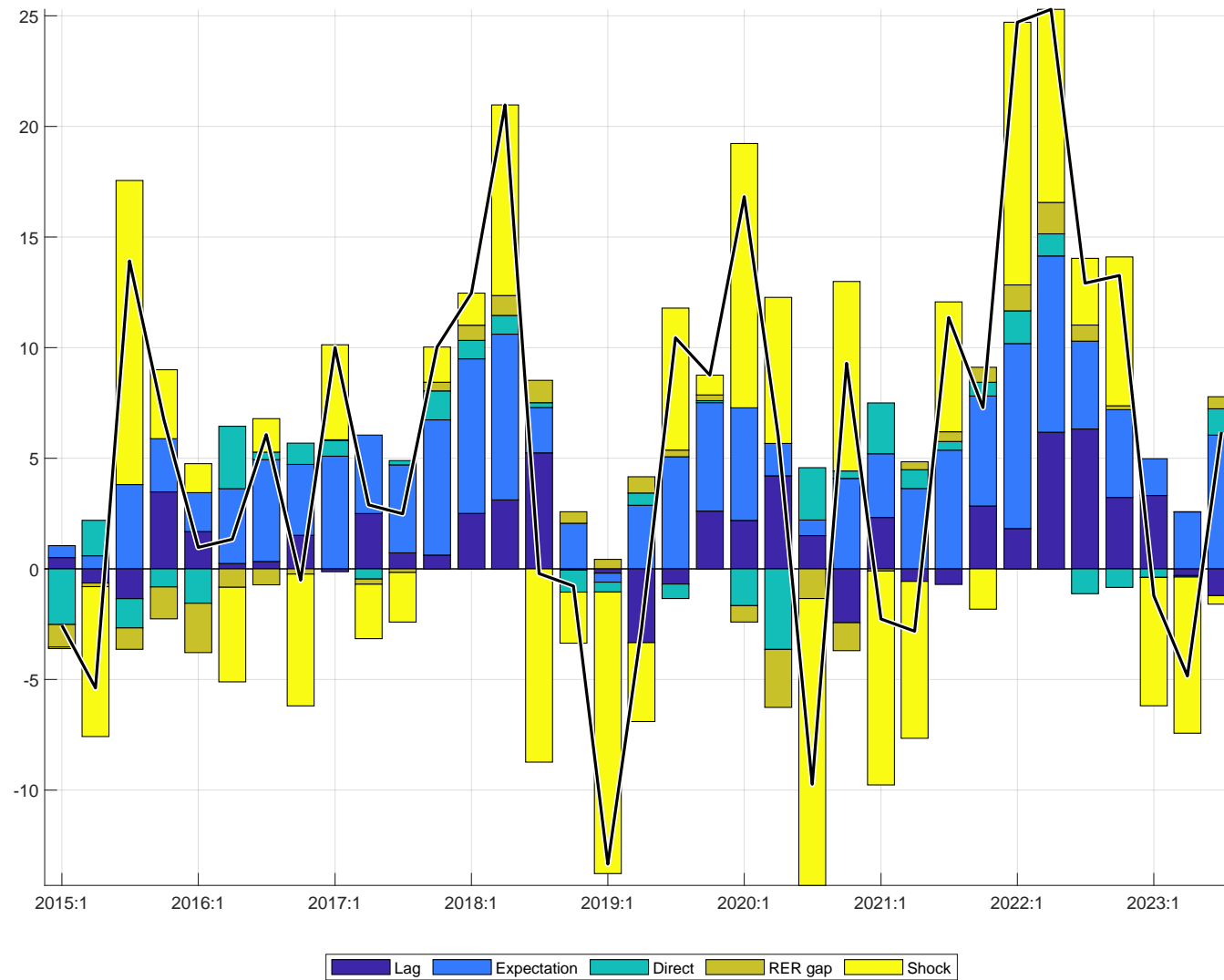
## Food CPI, ann. QQ % [dl\_cpi\_food]



## Dir. ext. eff. in food, ann. QQ % [dl\_cpi\_food\_direct]

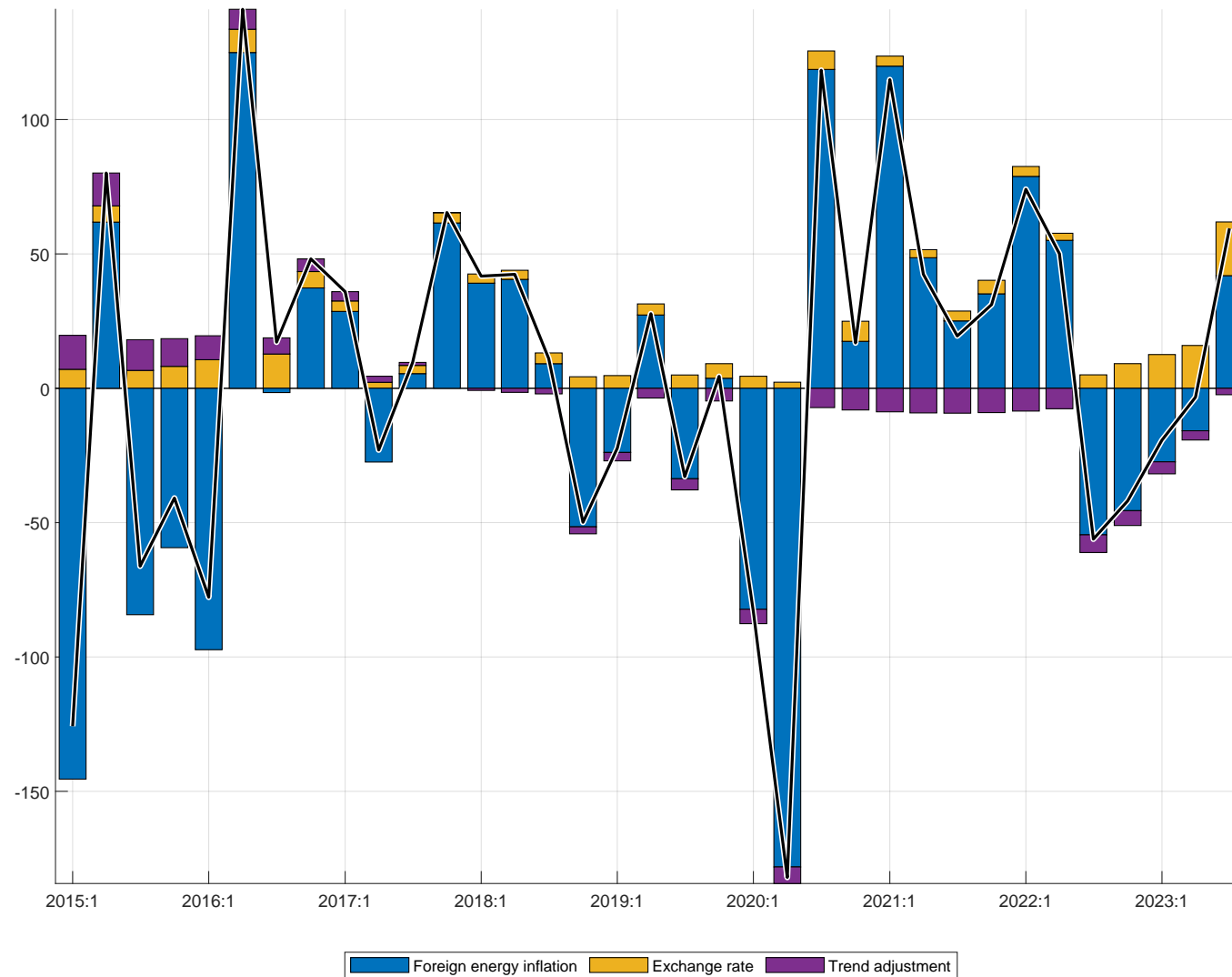


## Energy CPI, ann. QQ % [dl\_cpi\_ener]

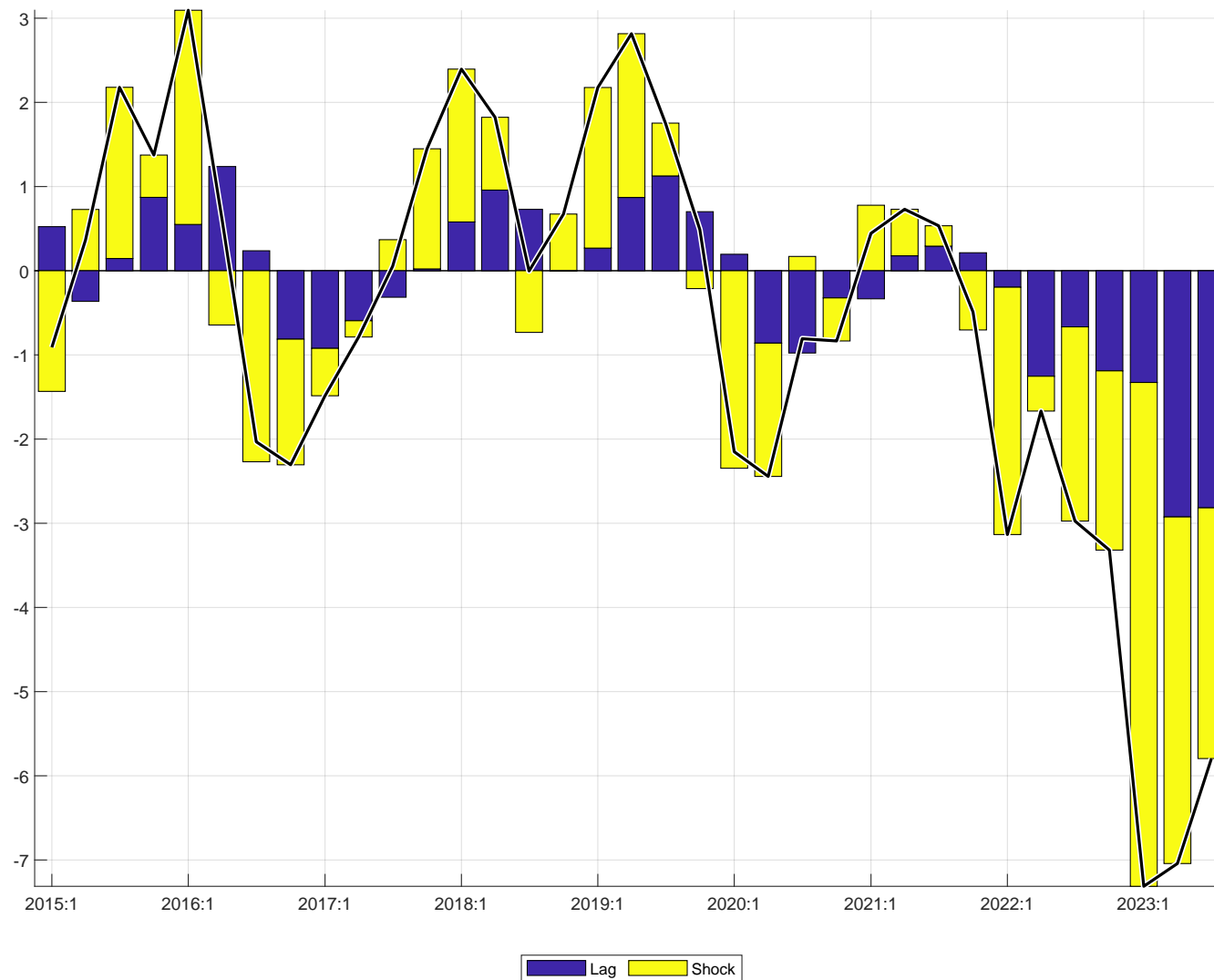




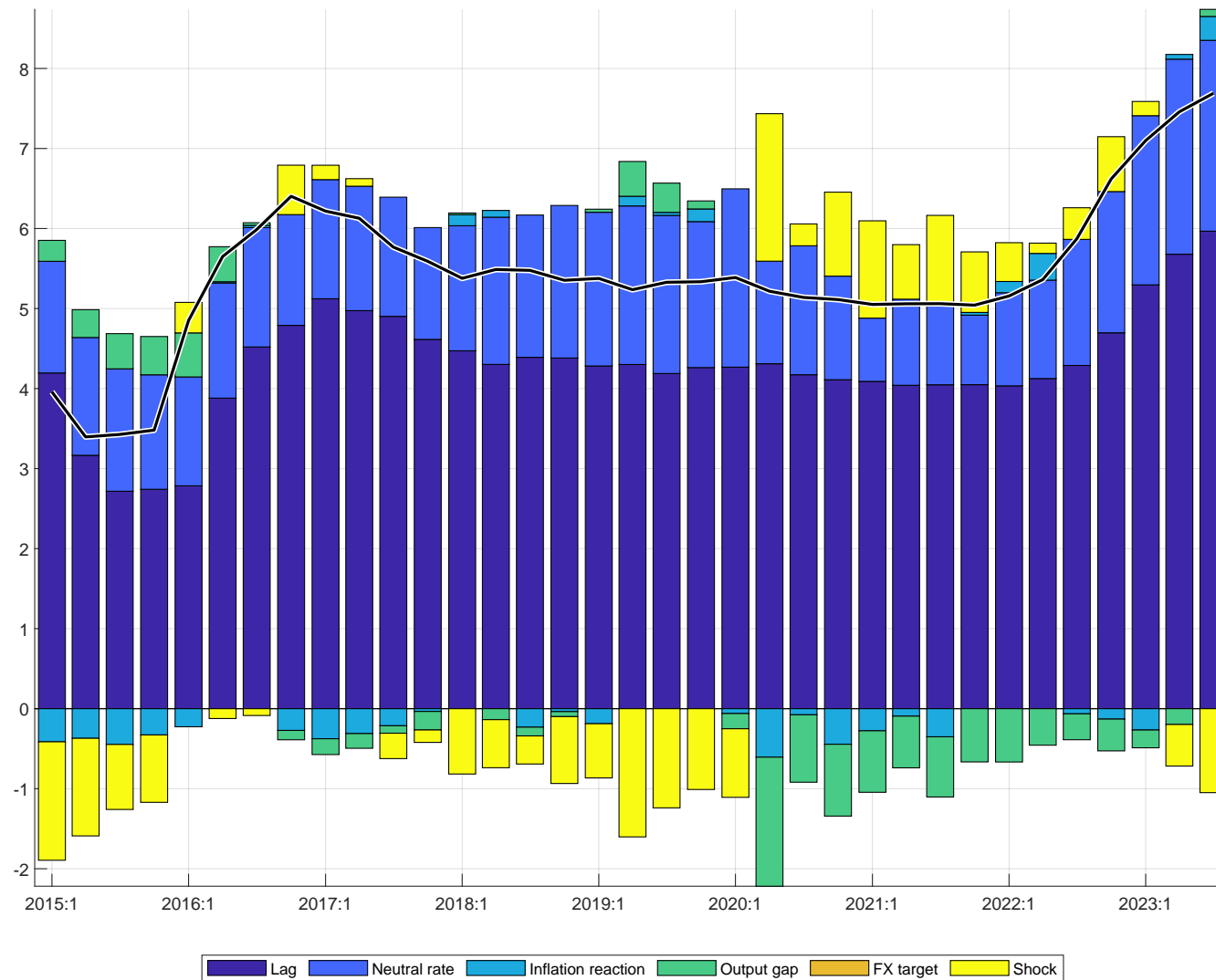
## Dir. ext. eff. in energy, ann. QQ % [dl\_cpi\_ener\_direct]



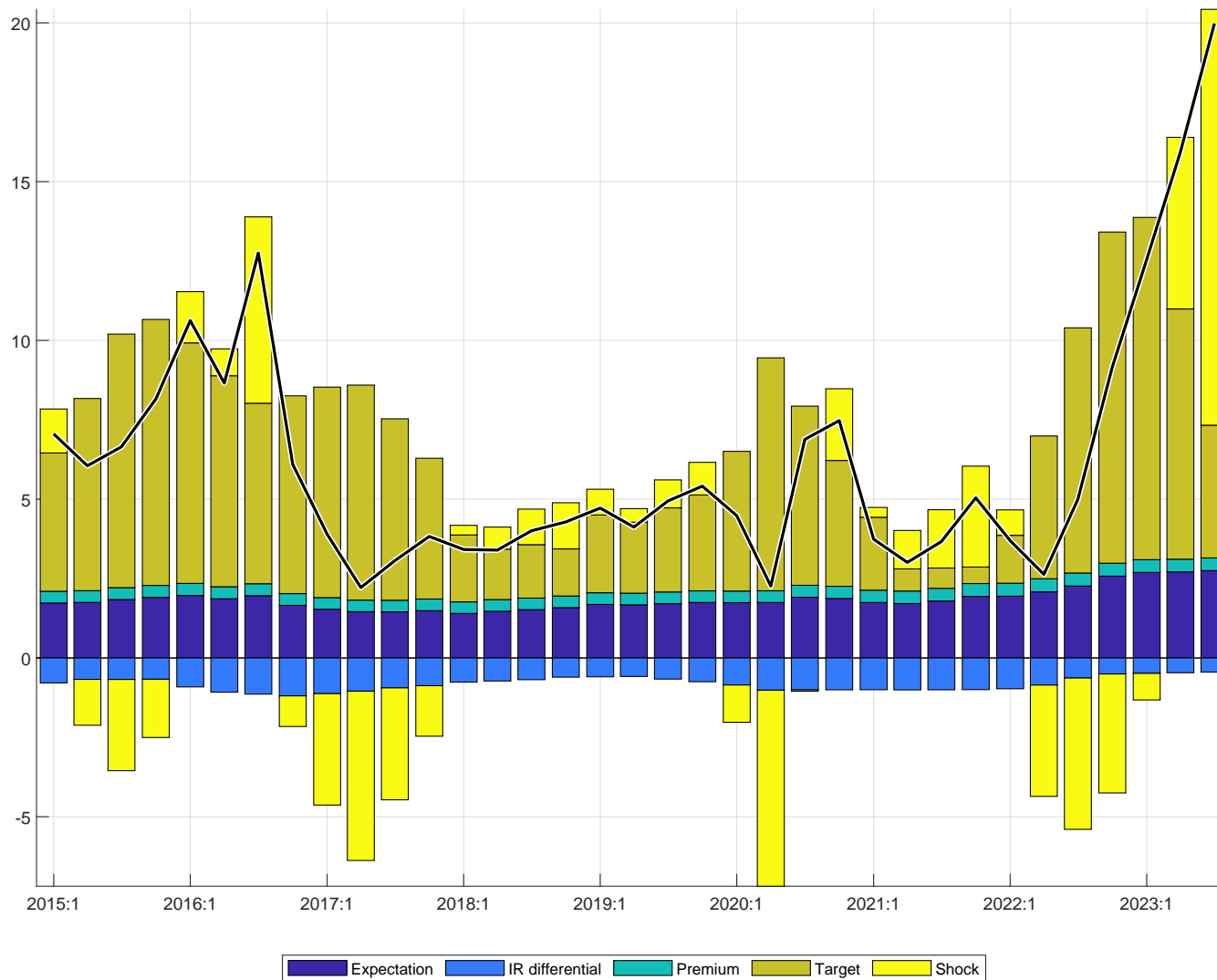
Agric. output gap, % [l\_y\_agr\_gap]



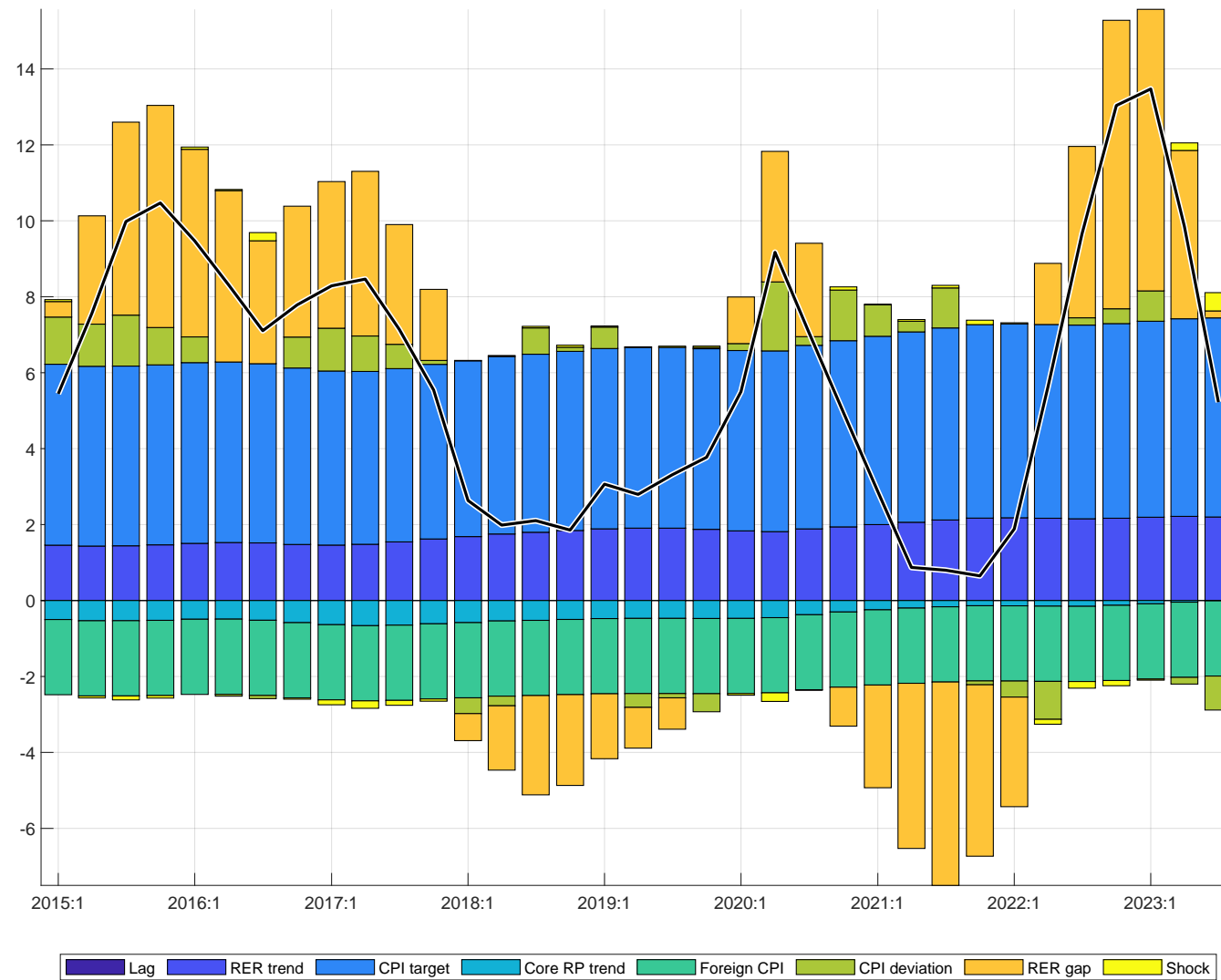
## Policy rate (IB rate used), % [i]



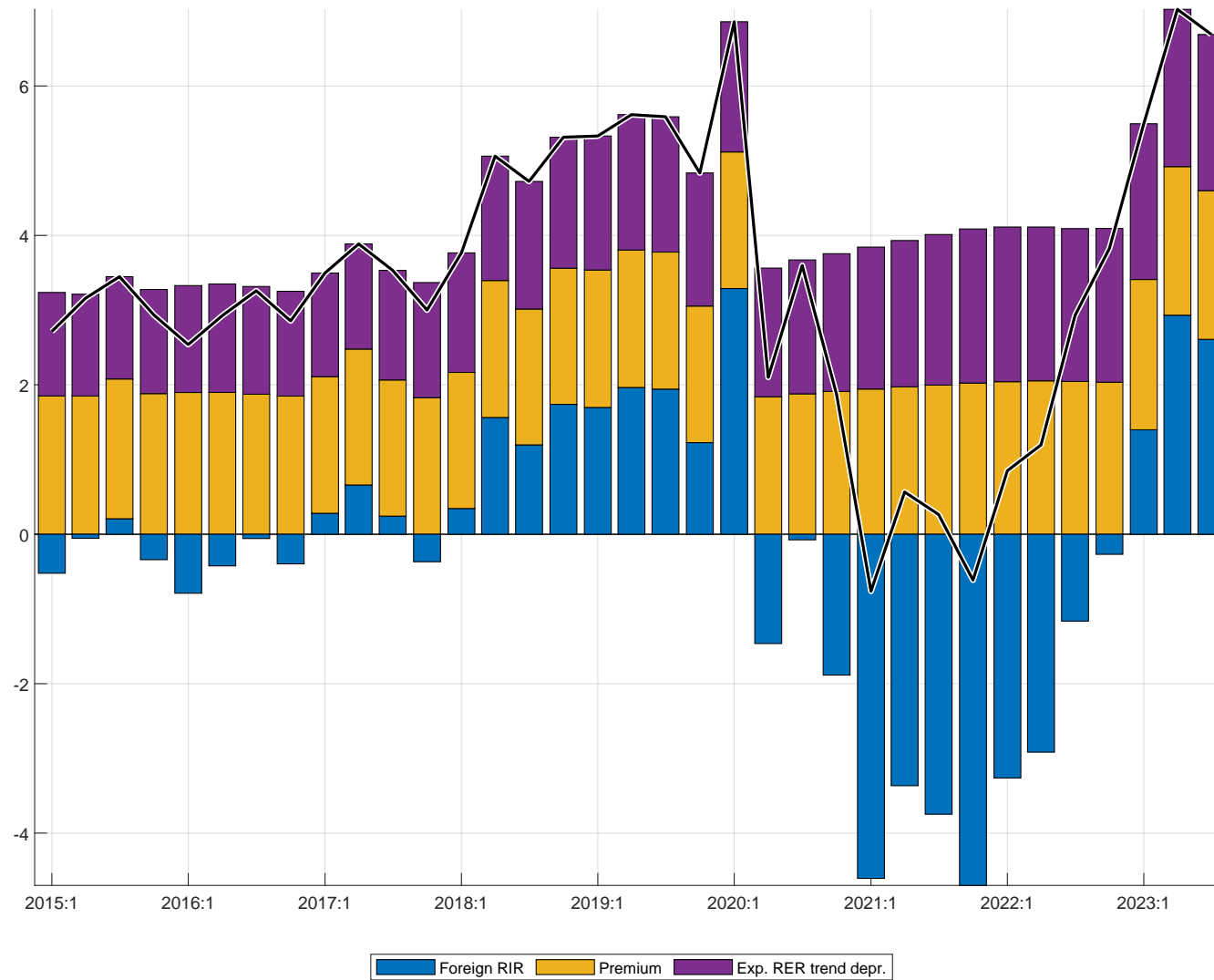
## Exchange rate, QQ annualized % [dl\_s]



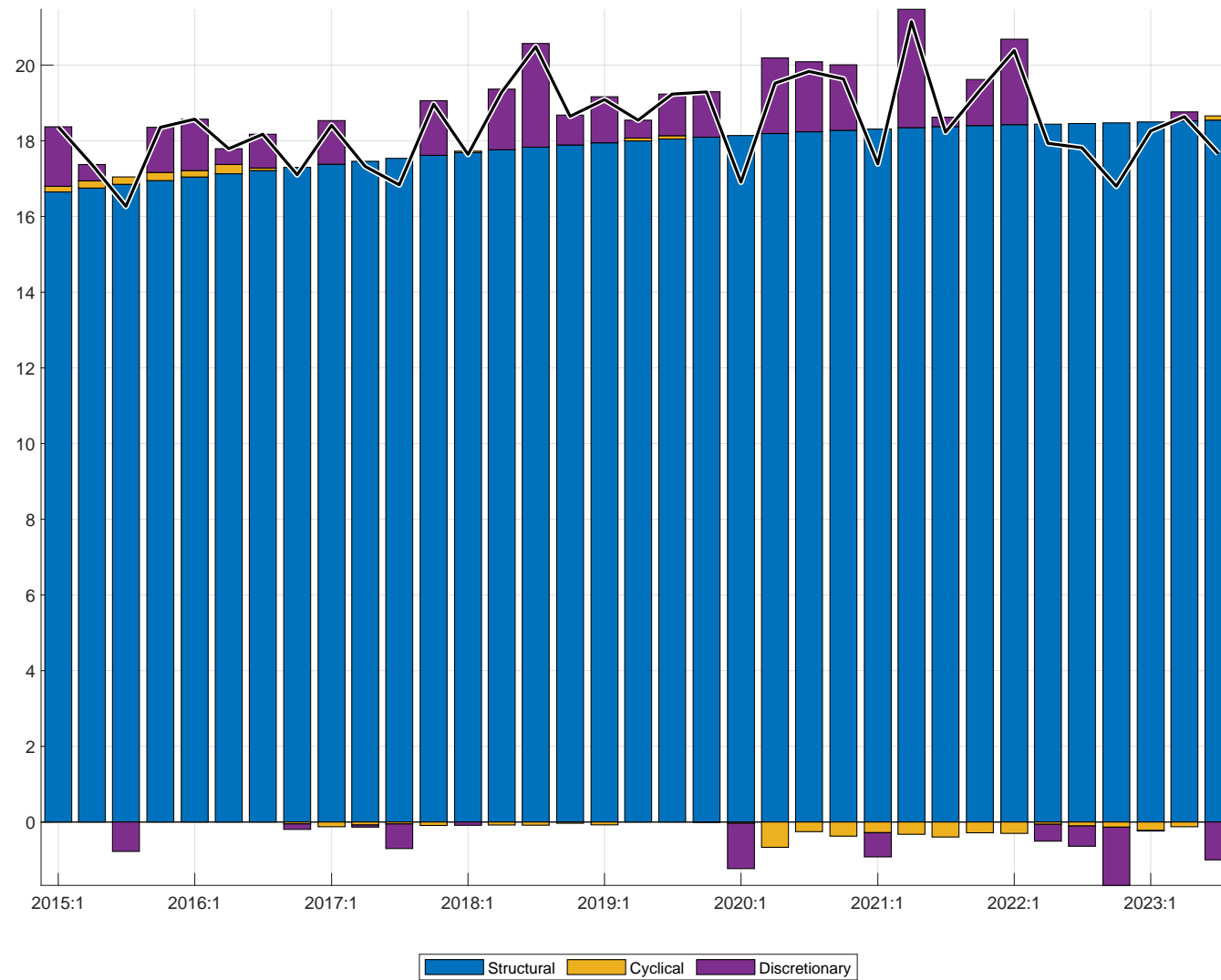
## Exchange rate target, QQ % [dl\_s\_tar]



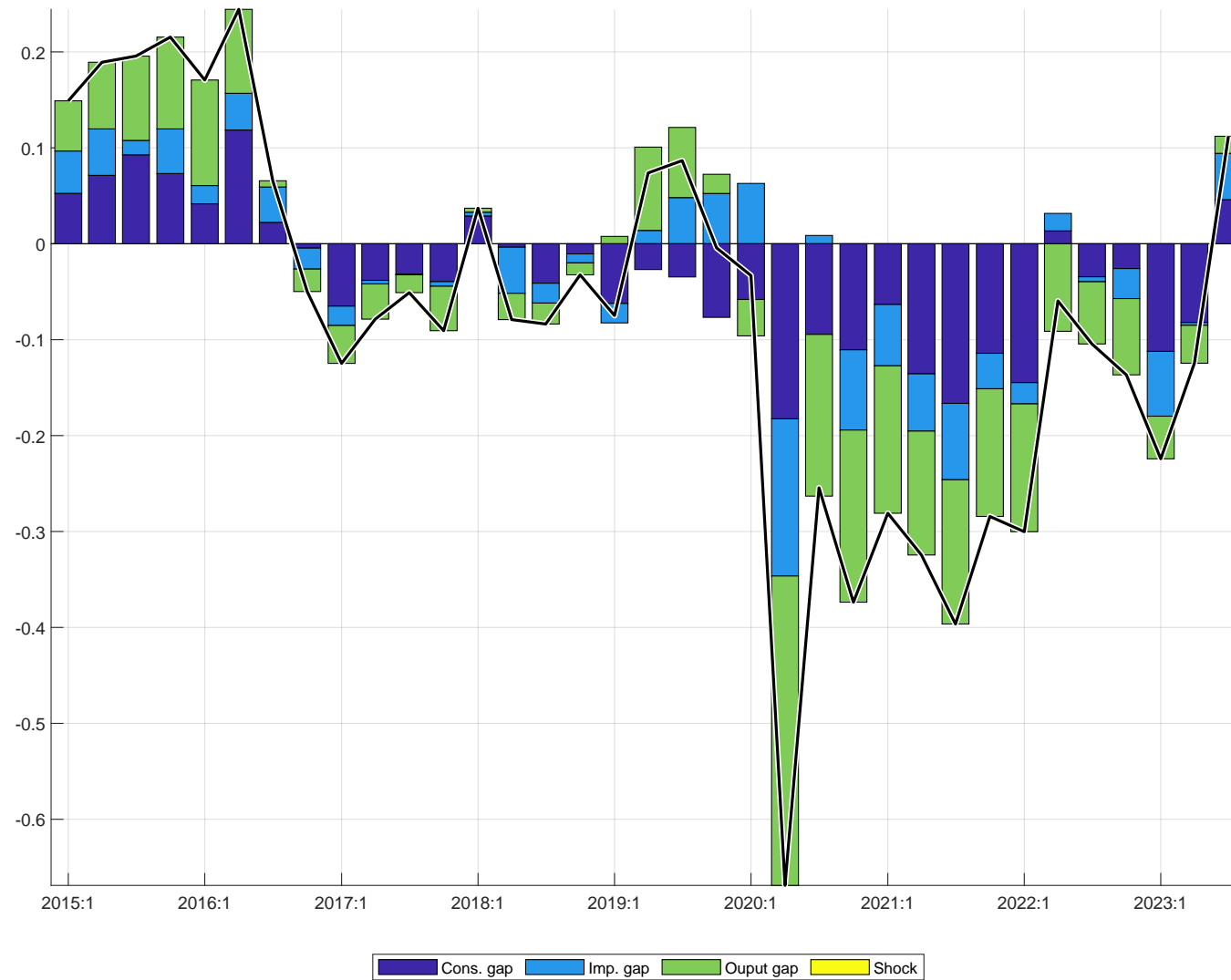
## RIR (policy) trend, % [r\_tnd]



## Govt. rev., % of GDP [grev\_y]

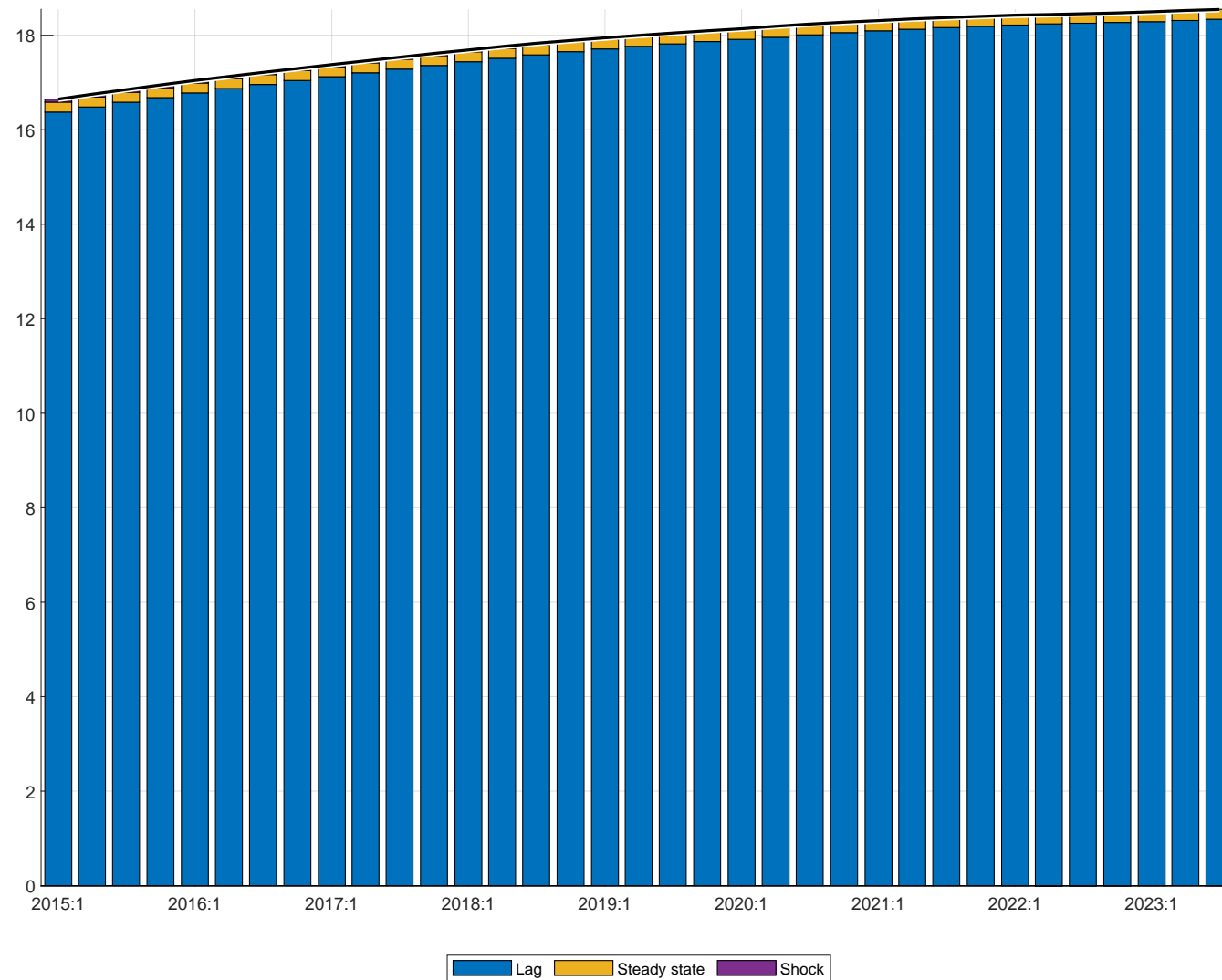


## Cyc. govt. rev., % of GDP [grev\_y\_cyc]

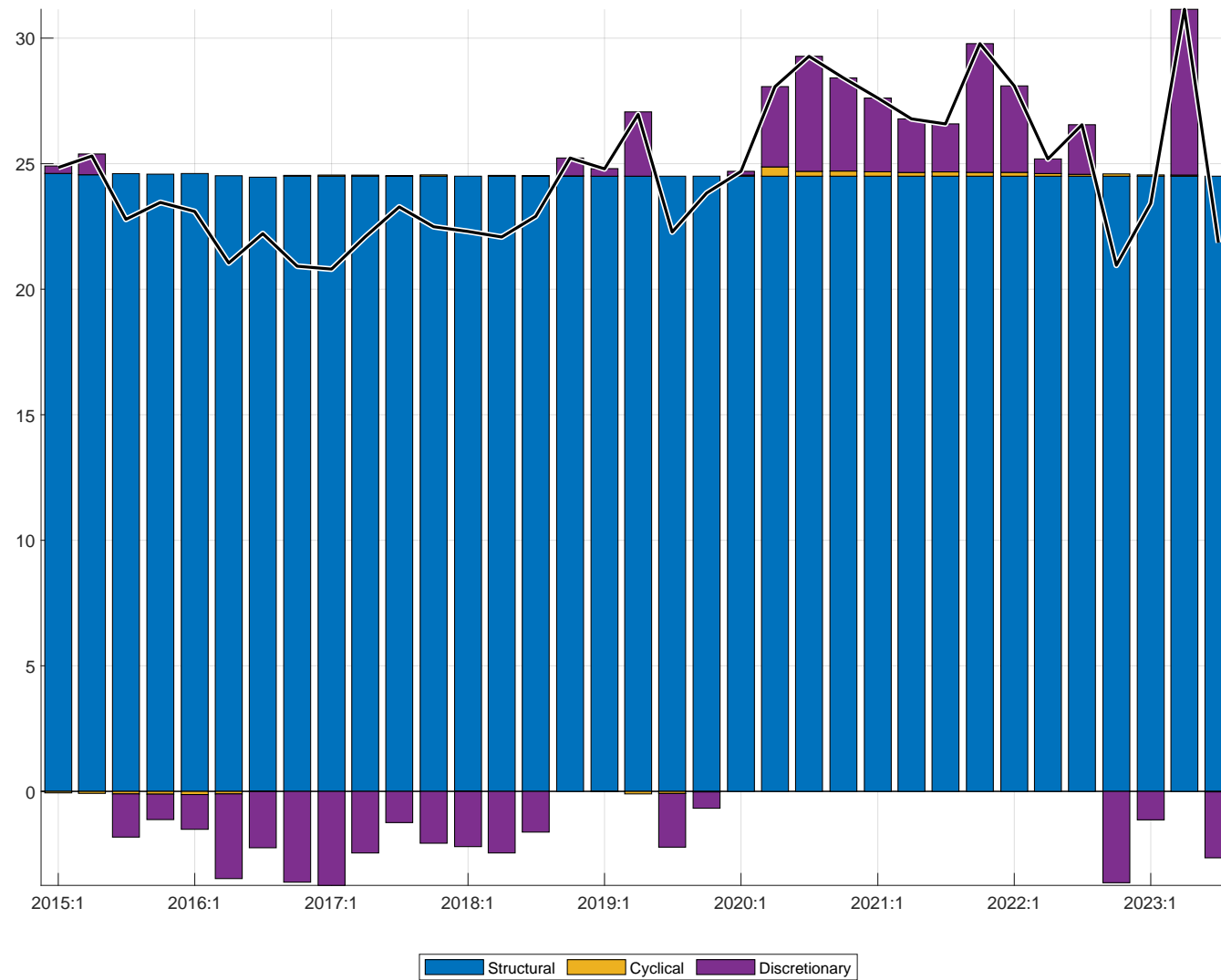




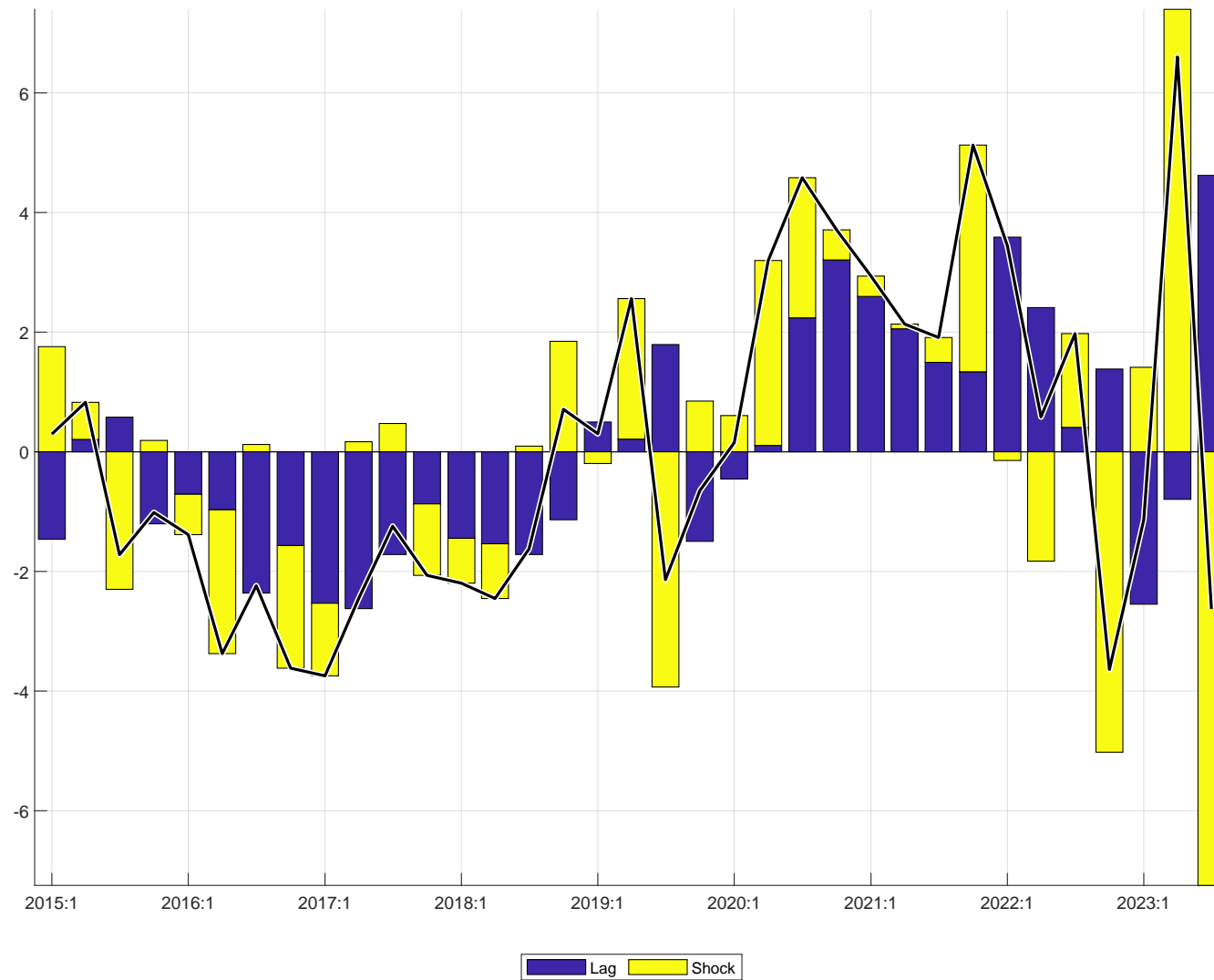
## Struct. govt. rev., % of GDP [grev\_y\_str]



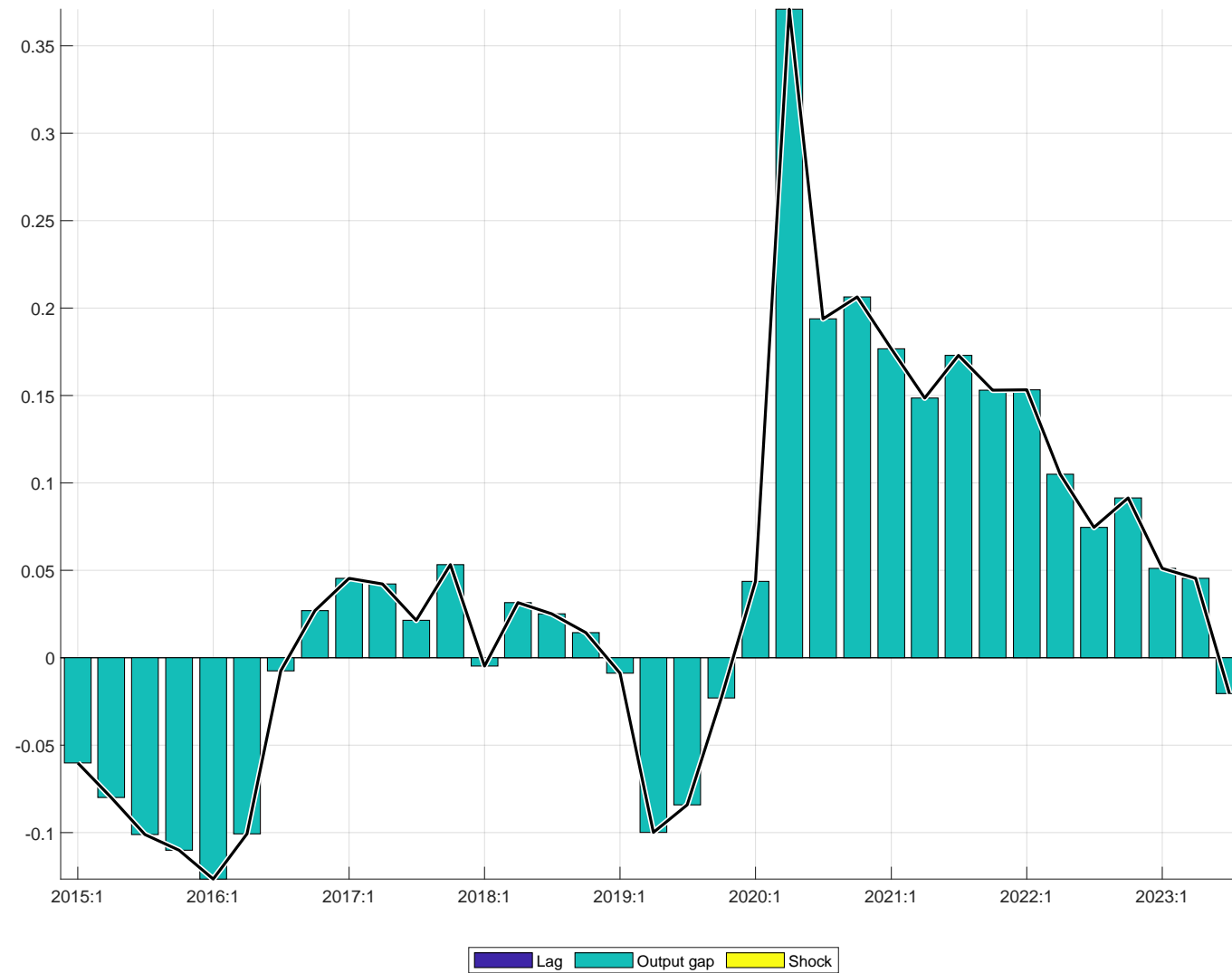
## Govt. demand (G&amp;S), % GDP [gdem\_y]



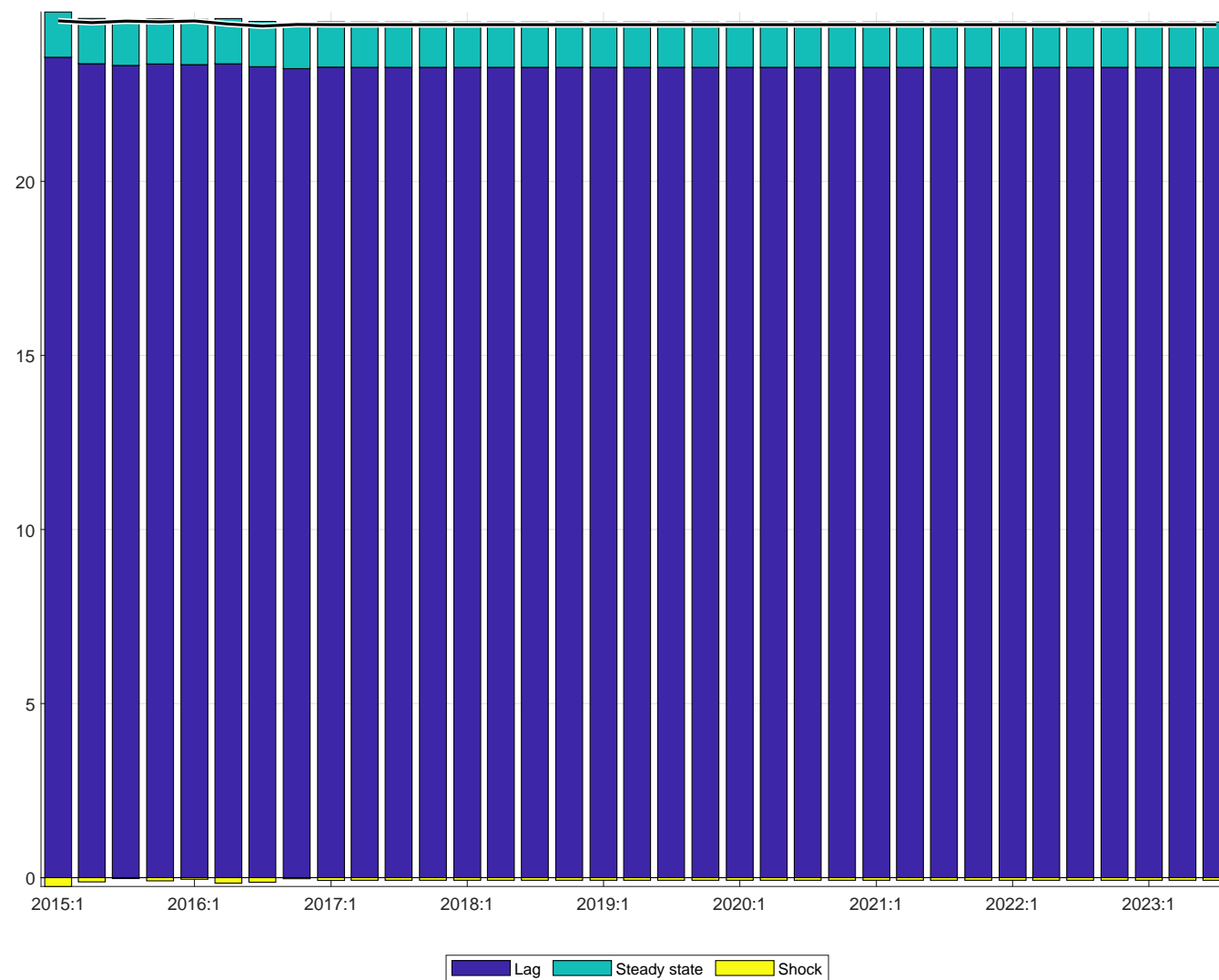
## Discr. govt. demand (G&amp;S), % GDP [gdem\_y\_discr]



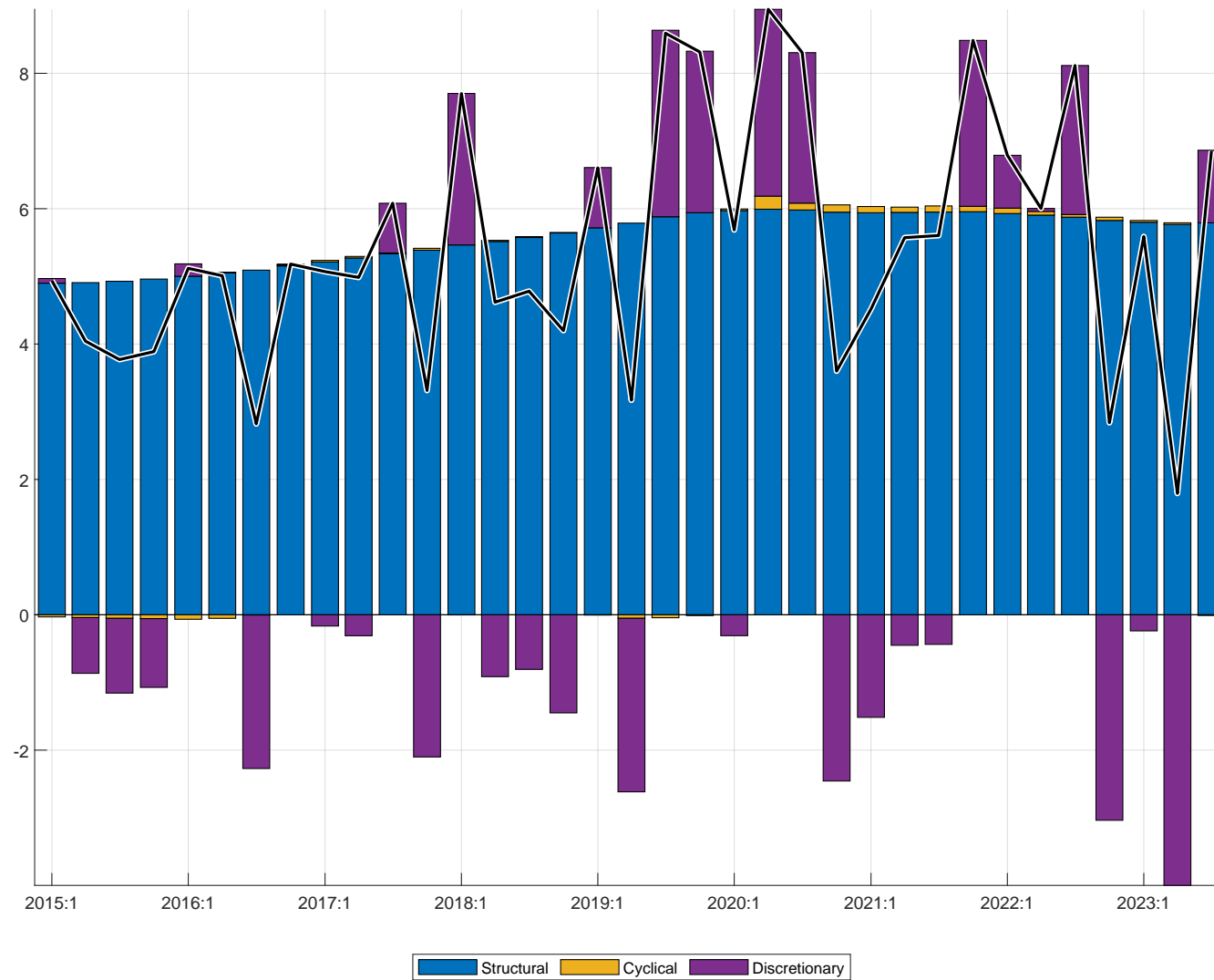
## Cyc. govt. demand (G&amp;S), % GDP [gdem\_y\_cyc]



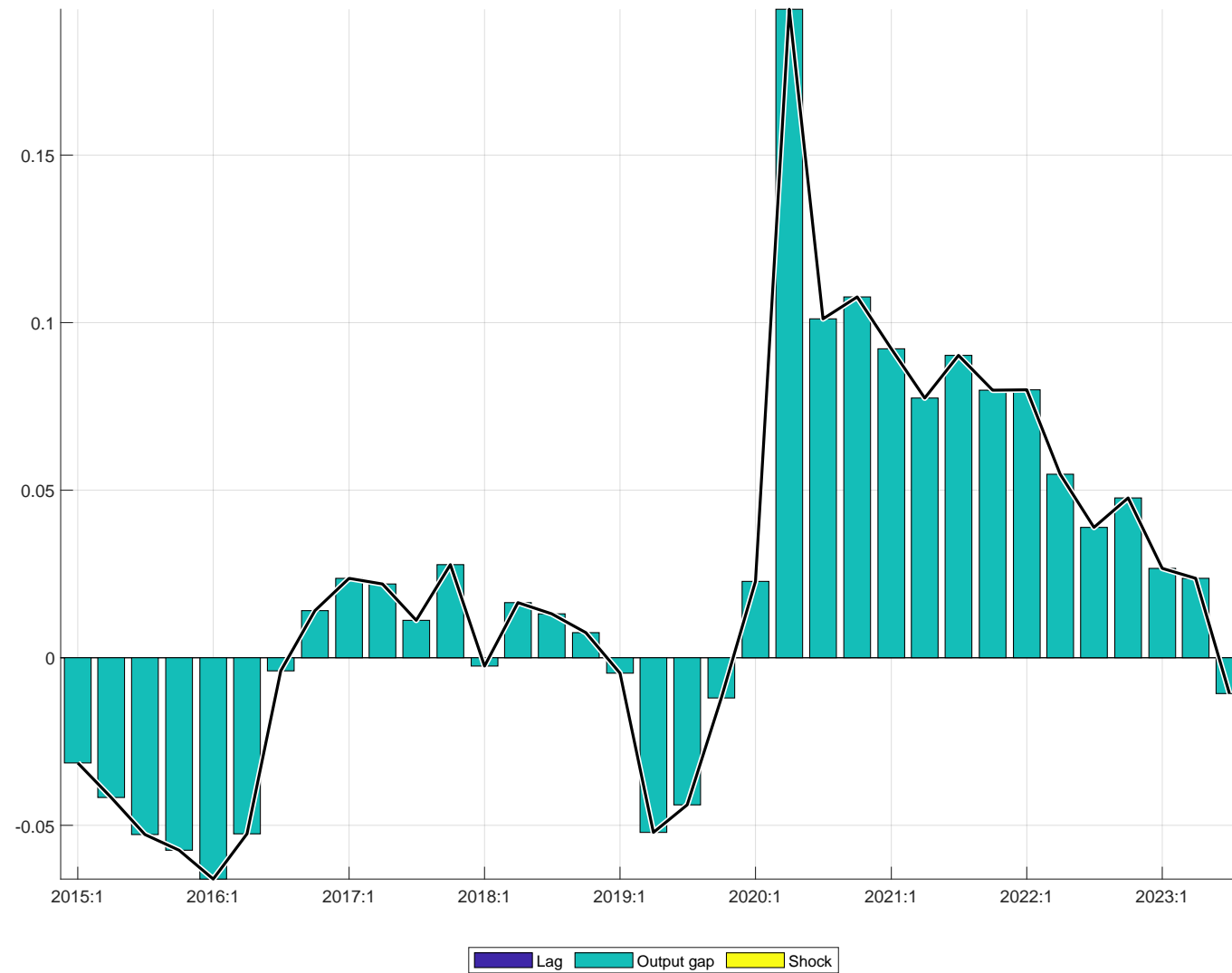
## Struct. govt. demand (G&amp;S), % GDP [gdem\_y\_str]



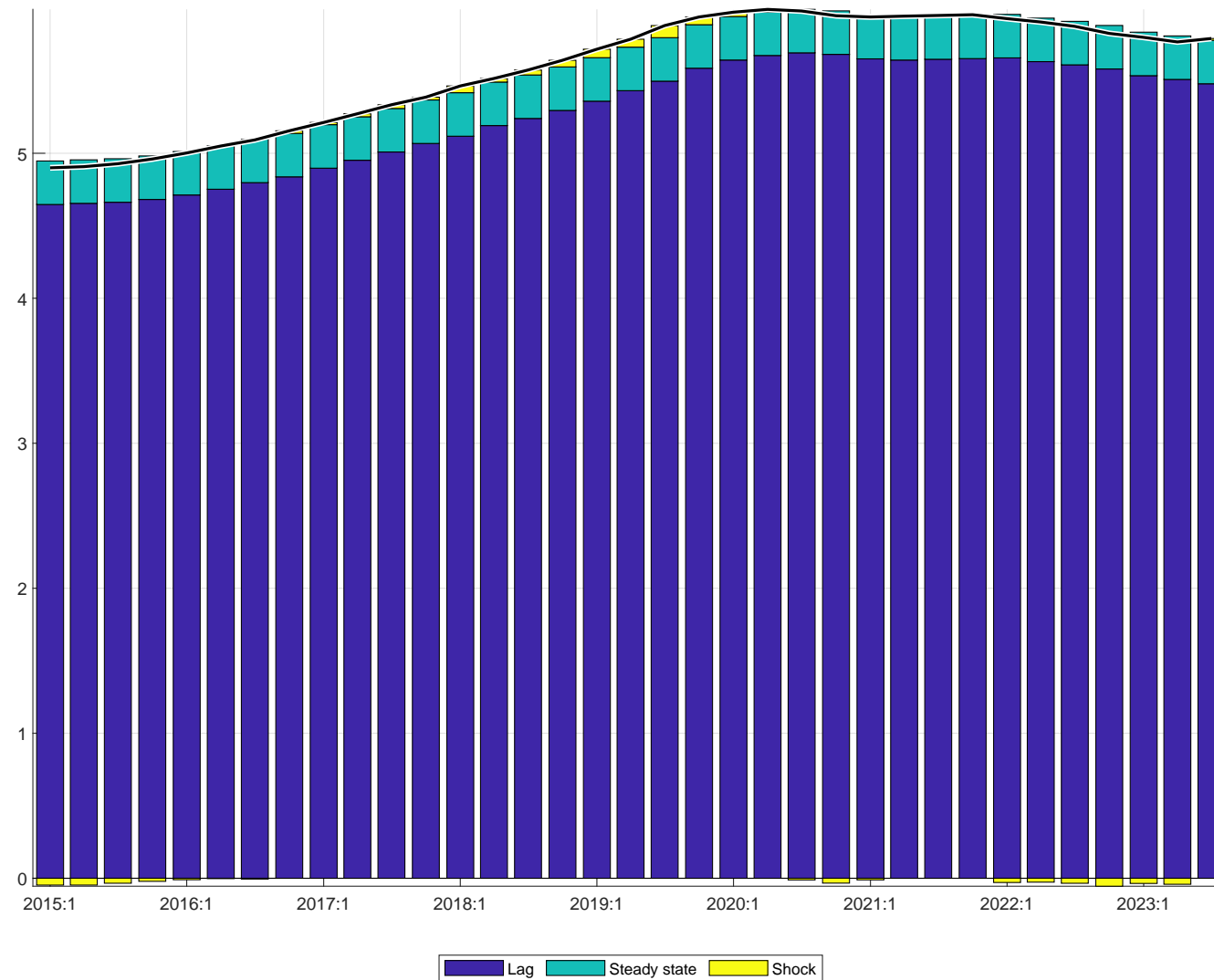
## Other govt. exp., % to GDP [oexp\_y]



## Cyc. other govt. exp., % to GDP [oexp\_y\_cyc]

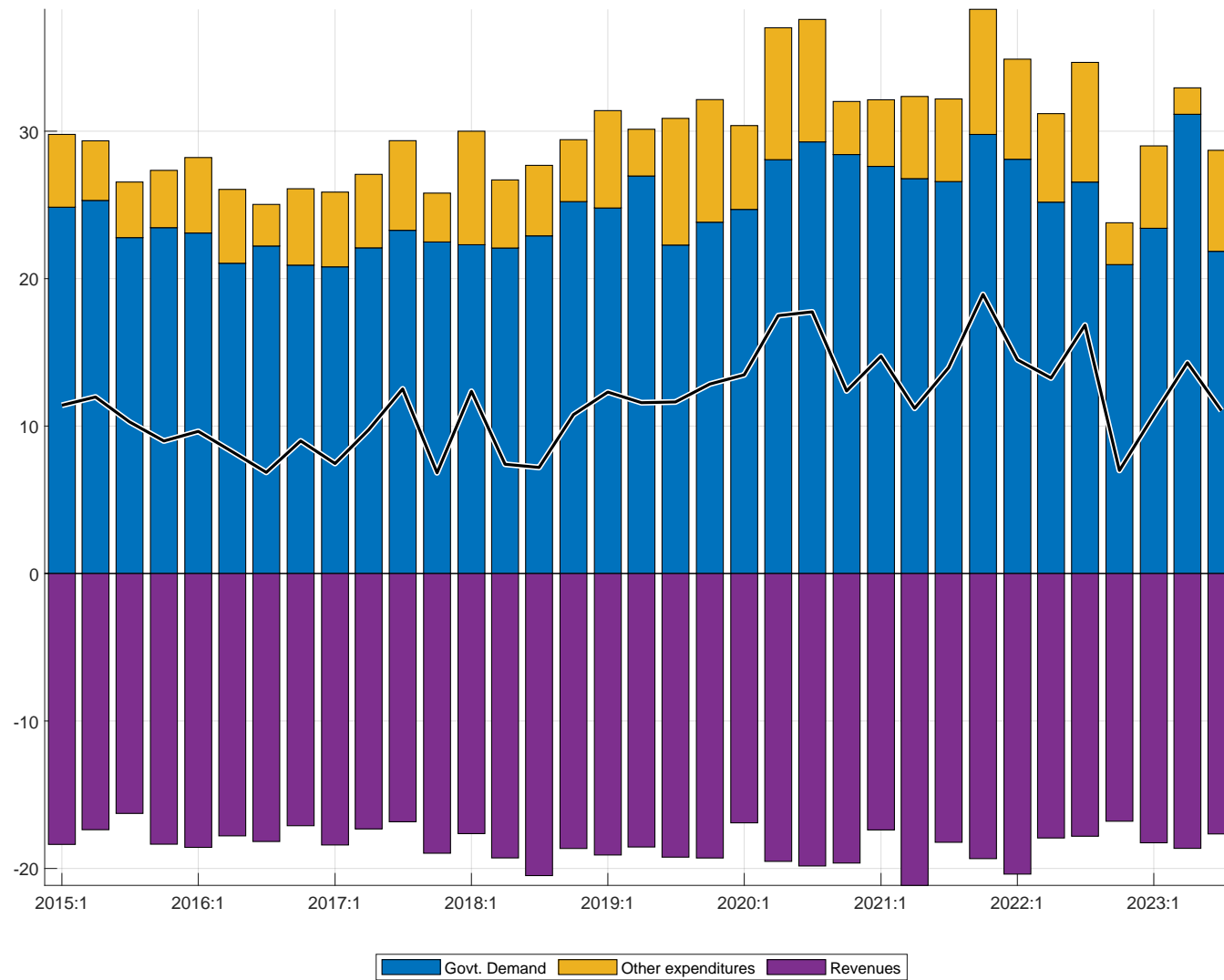


## Struct. other govt. exp., % to GDP [oexp\_y\_str]

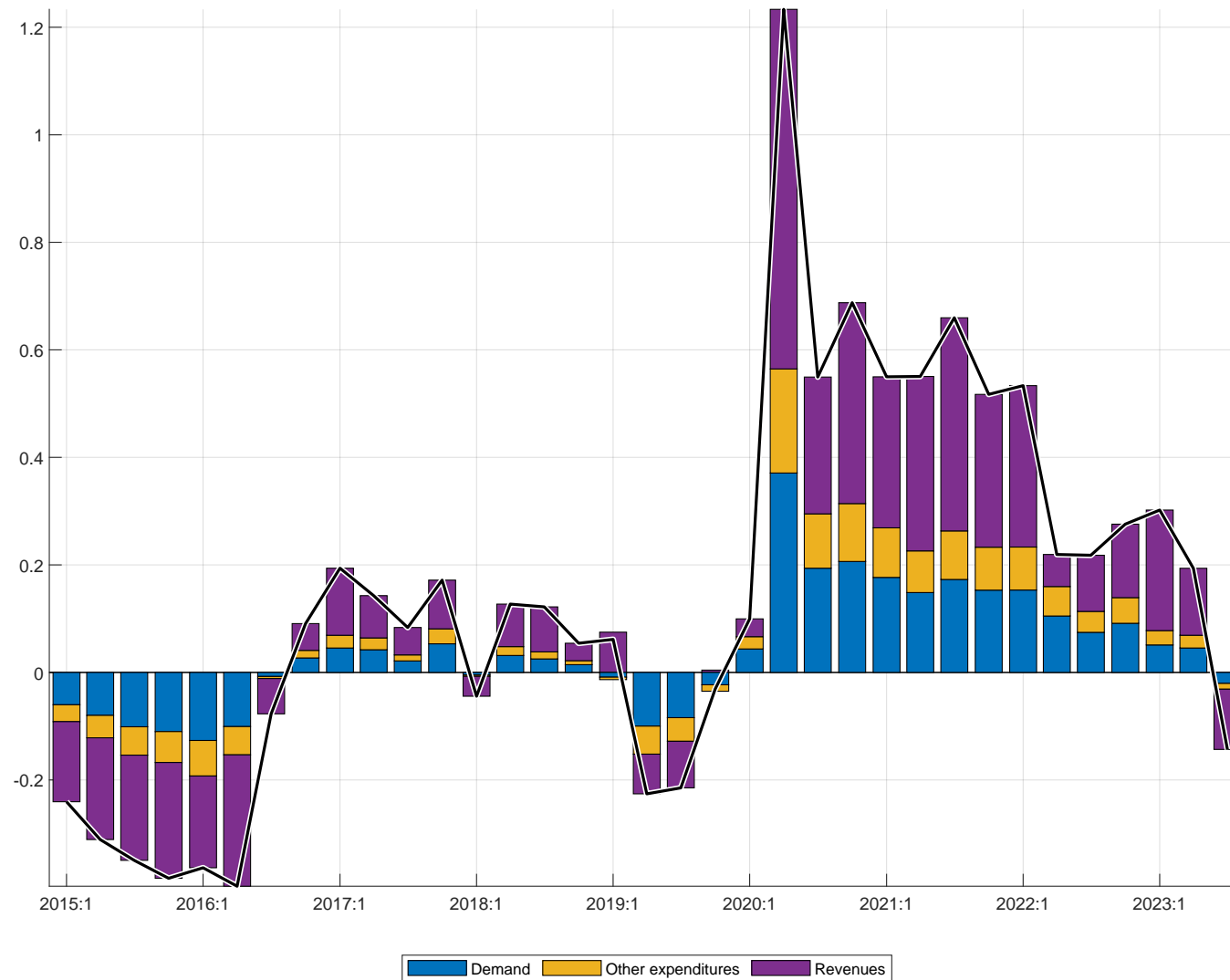




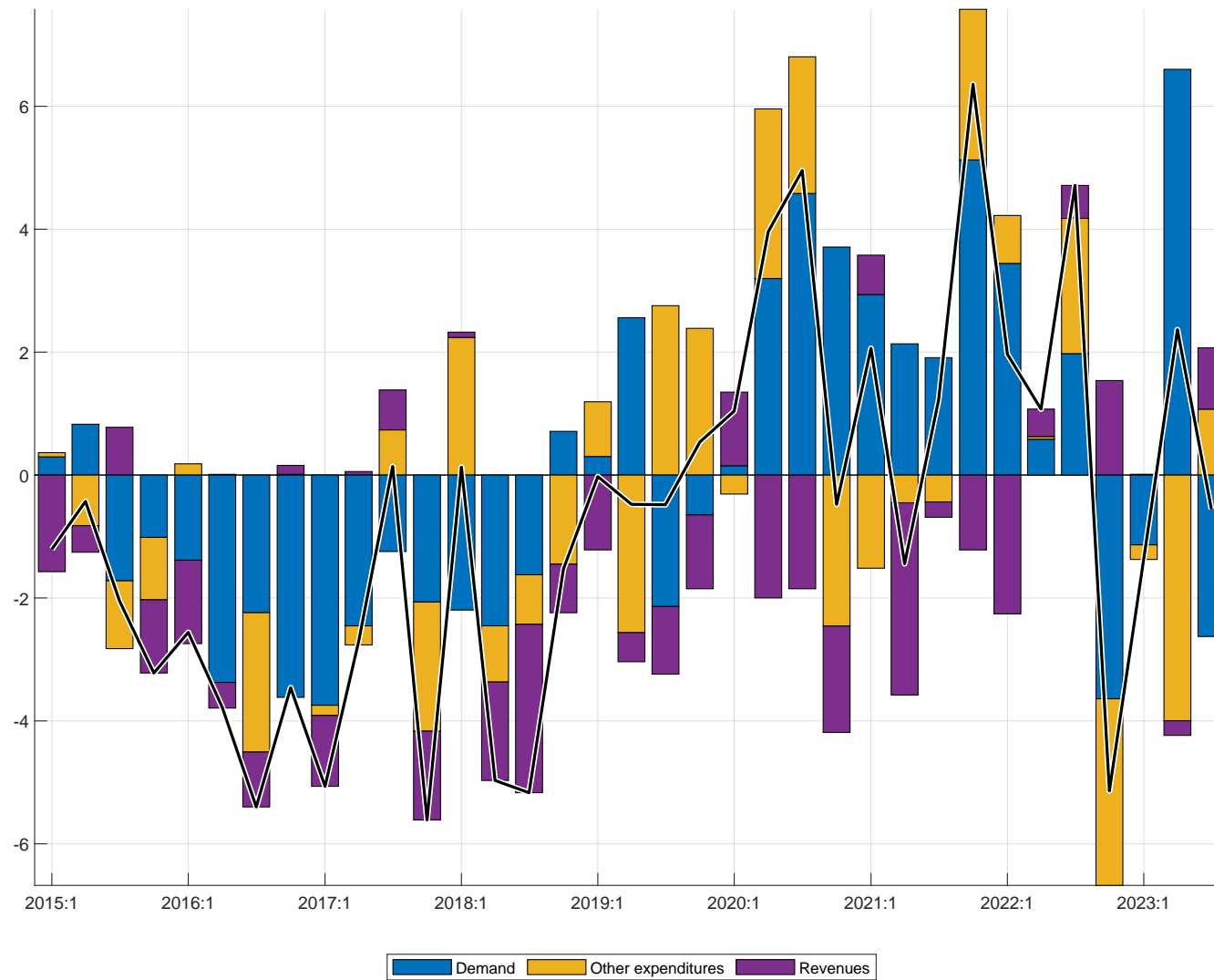
Budget deficit, % of GDP [def\_y]



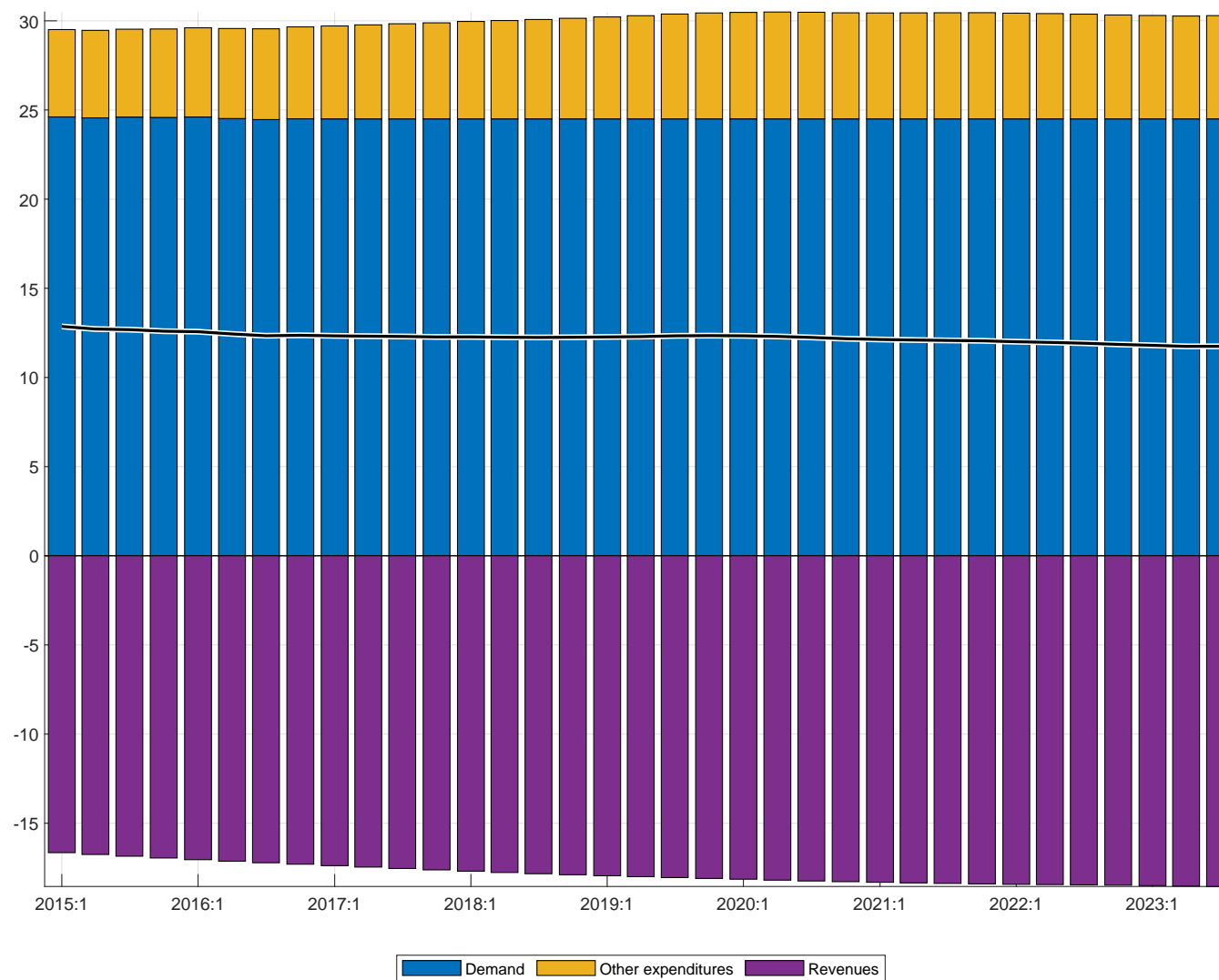
## Cyc. deficit, % of GDP [def\_y\_cyc]



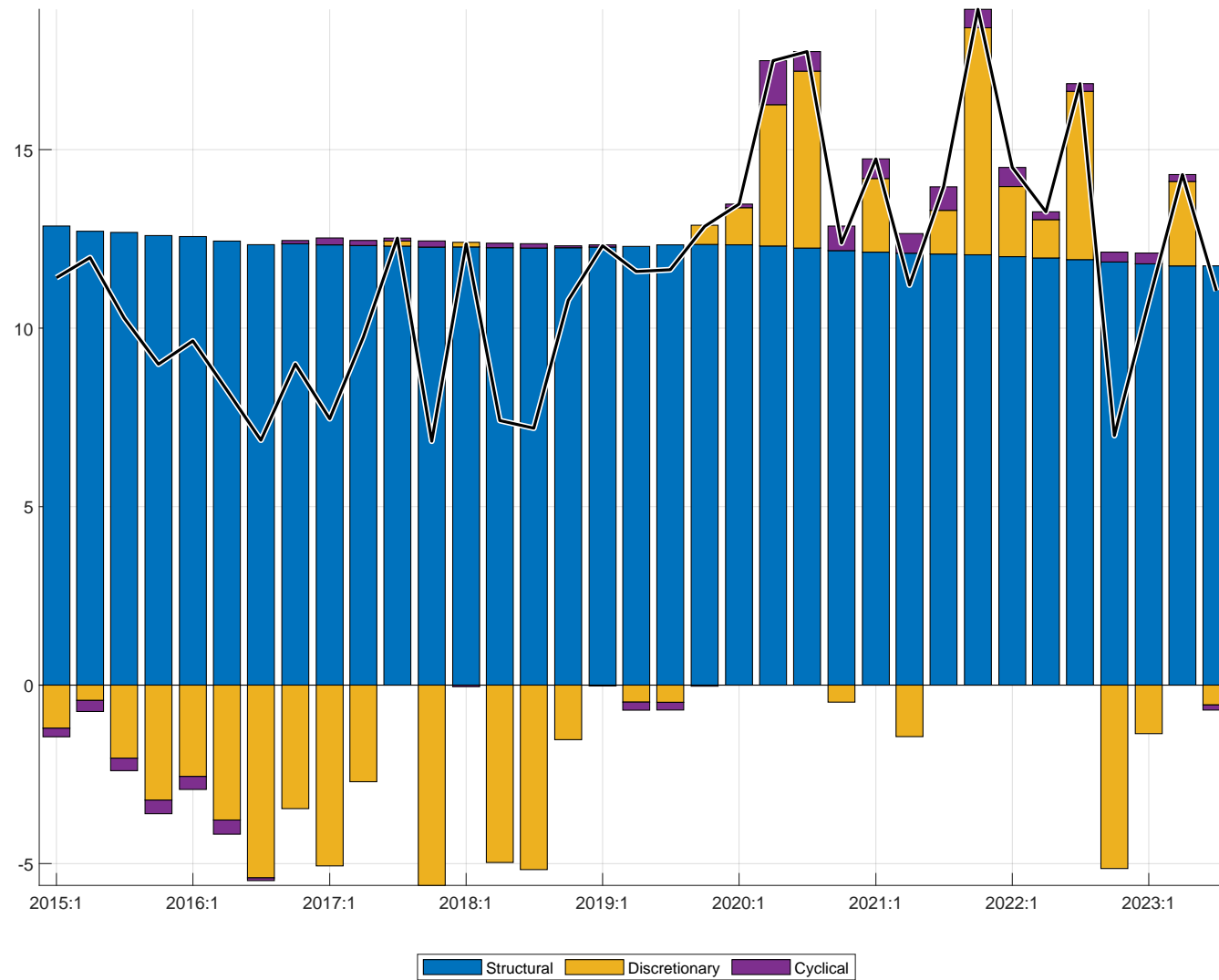
## Discr. deficit, % of GDP [def\_y\_discr]



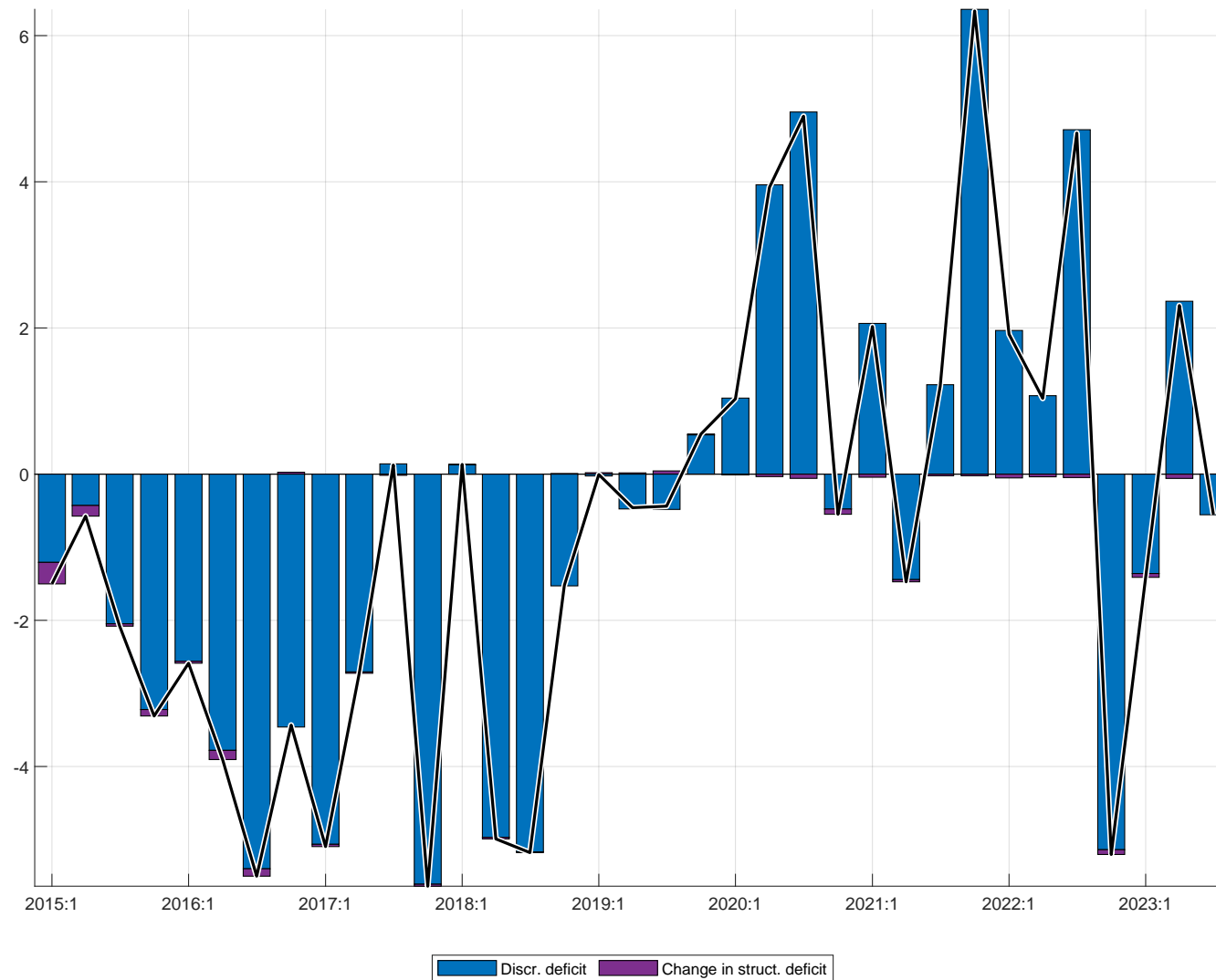
## Struct. deficit, % of GDP [def\_y\_str]



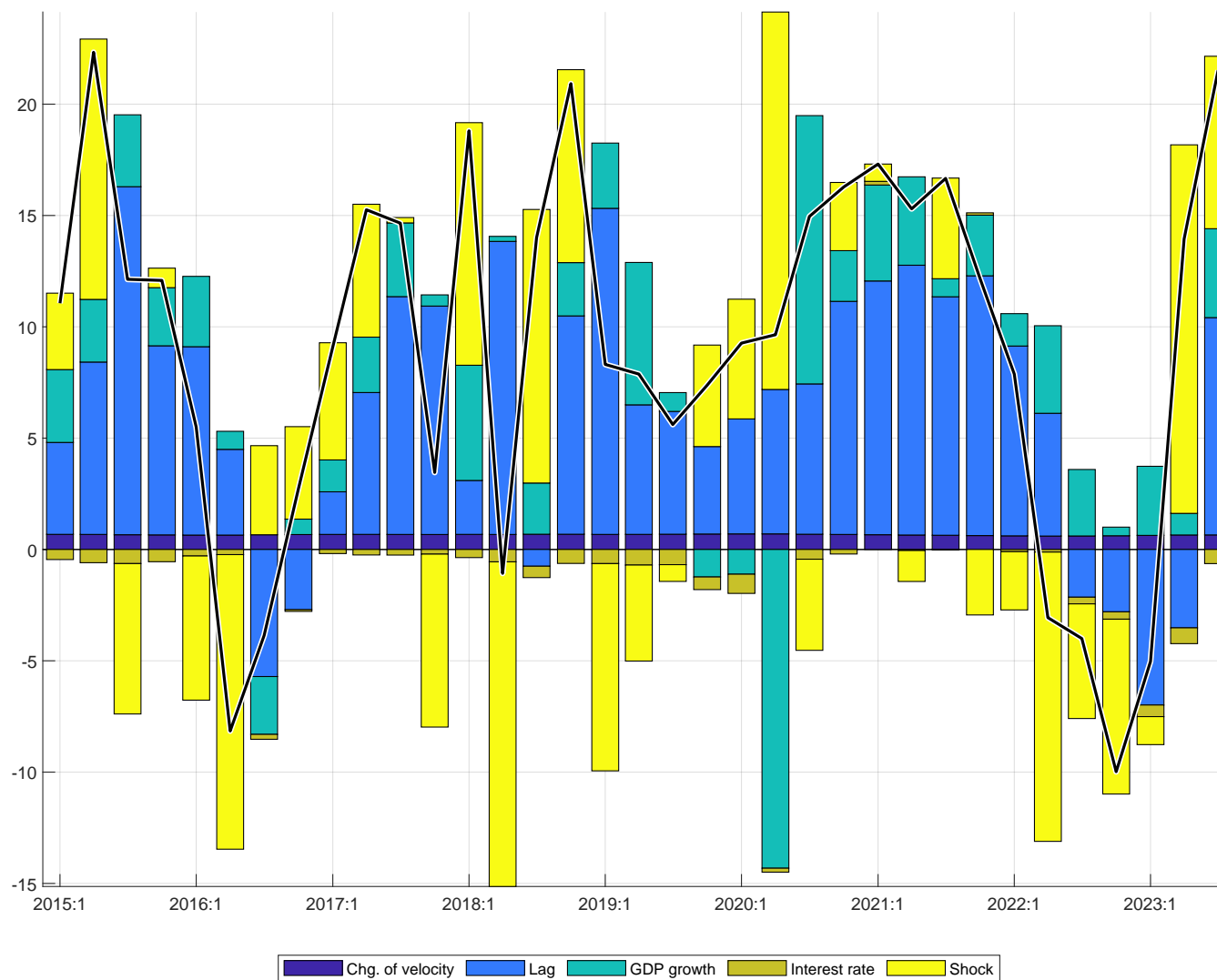
Budget deficit, % of GDP [def\_y\_scd]



## Fiscal impulse, % of GDP [fisc\_imp]



## Real money, ann. QQ % [dl\_rmd]



## 4 Decomposition of equations: tables



## Consumption gap, % [l\_cons\_gap]

	2019Q1	2019Q2	2019Q3	2019Q4	2020Q1	2020Q2	2020Q3	2020Q4	2021Q1	2021Q2	2021Q3	2021Q4	2022Q1	2022Q2	2022Q3	2022Q4	2023Q1	2023Q2	2023Q3
Lag	-0.57	-3.37	-1.46	-1.87	-4.16	-3.15	-9.89	-5.12	-5.99	-3.43	-7.35	-9.02	-6.18	-7.84	0.73	-1.87	-1.40	-6.08	-4.45
Expectation	-0.00	-0.00	-0.00	-0.00	-0.00	-0.00	-0.00	-0.00	-0.00	-0.00	-0.00	-0.00	-0.00	0.00	-0.00	-0.00	-0.00	-0.00	0.00
RIR gap	-0.12	0.19	0.15	0.21	0.15	-0.49	-0.06	-0.51	-0.40	-0.19	-0.49	-0.19	-0.00	0.31	0.06	0.12	0.16	0.51	0.76
REER gap	0.00	0.00	0.00	-0.00	-0.00	-0.00	-0.00	0.00	0.00	0.00	0.00	0.00	0.00	-0.00	-0.00	-0.00	-0.00	-0.00	-0.00
Income	0.08	0.87	0.73	0.20	-0.38	-3.23	-1.69	-1.79	-1.54	-1.29	-1.50	-1.33	-1.33	-0.91	-0.65	-0.79	-0.44	-0.40	0.18
Fisc. imp.	-0.00	-0.11	-0.11	0.14	0.26	0.98	1.22	-0.14	0.50	-0.37	0.30	1.58	0.48	0.26	1.17	-1.30	-0.35	0.58	-0.14
Shock	-4.57	0.18	-2.20	-5.07	-0.71	-9.34	2.53	-1.65	2.15	-6.02	-4.83	-0.57	-5.02	9.30	-4.18	1.68	-7.32	-1.46	7.48
Total	-5.19	-2.24	-2.88	-6.40	-4.84	-15.21	-7.88	-9.21	-5.28	-11.30	-13.87	-9.52	-12.07	1.12	-2.87	-2.16	-9.35	-6.84	3.83

## Investment gap, % [l\_inv\_gap]

	2019Q1	2019Q2	2019Q3	2019Q4	2020Q1	2020Q2	2020Q3	2020Q4	2021Q1	2021Q2	2021Q3	2021Q4	2022Q1	2022Q2	2022Q3	2022Q4	2023Q1	2023Q2	2023Q3
Lag	-3.92	1.96	14.21	18.85	18.62	12.02	-20.75	-43.21	-8.79	-27.31	10.90	8.45	-11.33	-7.76	-4.91	-11.74	1.82	-8.42	-27.19
Expectation	0.00	0.00	0.00	0.00	0.00	-0.00	-0.00	-0.00	-0.00	0.00	0.00	-0.00	-0.00	-0.00	-0.00	0.00	-0.00	-0.00	0.00
RIR gap	-0.12	0.19	0.15	0.21	0.15	-0.49	-0.06	-0.51	-0.40	-0.19	-0.49	-0.19	-0.00	0.31	0.06	0.12	0.16	0.51	0.76
REER gap	0.00	0.00	0.00	-0.00	-0.00	-0.00	-0.00	0.00	0.00	0.00	0.00	0.00	0.00	-0.00	-0.00	-0.00	-0.00	-0.00	-0.00
Income	0.08	0.87	0.73	0.20	-0.38	-3.23	-1.69	-1.79	-1.54	-1.29	-1.50	-1.33	-1.33	-0.91	-0.65	-0.79	-0.44	-0.40	0.18
Fisc. imp.	-0.00	-0.07	-0.07	0.08	0.15	0.59	0.73	-0.08	0.30	-0.22	0.18	0.95	0.29	0.16	0.70	-0.78	-0.21	0.35	-0.08
Shock	6.99	18.91	13.98	9.31	-0.07	-40.82	-44.71	32.06	-31.58	45.78	3.92	-25.32	0.45	0.65	-13.27	15.99	-14.28	-33.88	40.71
Total	3.02	21.87	29.01	28.65	18.49	-31.93	-66.47	-13.53	-42.01	16.76	13.00	-17.43	-11.93	-7.55	-18.07	2.79	-12.96	-41.84	14.37

**Gov. demand gap, % [l\_gdem\_gap]**

	2019Q1	2019Q2	2019Q3	2019Q4	2020Q1	2020Q2	2020Q3	2020Q4	2021Q1	2021Q2	2021Q3	2021Q4	2022Q1	2022Q2	2022Q3	2022Q4	2023Q1	2023Q2	2023Q3
Output gap	0.38	4.34	3.66	1.00	-1.90	-16.13	-8.43	-8.97	-7.68	-6.46	-7.52	-6.65	-6.66	-4.56	-3.24	-3.97	-2.22	-1.98	0.89
Cyclical	-0.04	-0.37	-0.38	-0.10	0.18	1.32	0.66	0.73	0.64	0.55	0.65	0.51	0.55	0.42	0.28	0.44	0.22	0.15	-0.09
Discretionary	1.22	9.50	-9.60	-2.72	0.61	11.39	15.65	13.06	10.64	7.97	7.19	17.22	12.26	2.31	7.44	-17.37	-4.85	21.19	-12.02
Approx. error	-0.05	0.34	1.43	0.24	-0.04	1.01	2.05	1.28	0.70	0.26	0.18	2.58	1.03	-0.09	0.16	3.29	0.46	4.22	1.93
Total	1.51	13.81	-4.89	-1.59	-1.15	-2.40	9.94	6.09	4.29	2.33	0.49	13.65	7.17	-1.92	4.64	-17.62	-6.39	23.59	-9.29

**Export gap, % [l\_exp\_gap]**

	2019Q1	2019Q2	2019Q3	2019Q4	2020Q1	2020Q2	2020Q3	2020Q4	2021Q1	2021Q2	2021Q3	2021Q4	2022Q1	2022Q2	2022Q3	2022Q4	2023Q1	2023Q2	2023Q3
Lag	1.62	3.01	4.63	12.67	12.68	3.84	-22.45	8.42	-18.95	-18.15	-10.82	-14.94	-8.08	-3.82	-2.93	0.68	-2.03	6.77	5.11
Expectation	0.00	0.00	0.00	0.00	0.00	-0.00	0.00	-0.00	-0.00	-0.00	-0.00	-0.00	-0.00	-0.00	-0.00	-0.00	0.00	0.00	0.00
RIR gap	-0.00	0.00	0.00	0.00	0.00	-0.00	-0.00	-0.00	-0.00	-0.00	-0.00	-0.00	-0.00	0.00	0.00	0.00	0.00	0.00	0.00
REER gap	0.40	0.25	0.19	-0.01	-0.29	-0.81	-0.58	0.24	0.64	1.02	1.26	1.06	0.68	-0.38	-1.06	-1.79	-1.74	-1.04	-0.04
Foreign demand	0.47	0.53	0.50	0.39	-0.14	-0.54	-0.82	-0.98	-0.86	-0.73	-0.59	-0.44	-0.17	0.04	0.19	0.30	0.30	0.29	0.27
Shock	2.14	3.34	14.16	6.46	-6.36	-37.03	36.81	-36.84	-8.75	1.21	-12.84	1.89	1.70	-0.35	4.84	-2.31	13.89	1.83	0.66
Total	4.63	7.13	19.49	19.52	5.90	-34.54	12.96	-29.16	-27.92	-16.65	-22.99	-12.43	-5.87	-4.51	1.04	-3.12	10.42	7.85	5.99

### Import gap, % [l\_imp\_gap]

	2019Q1	2019Q2	2019Q3	2019Q4	2020Q1	2020Q2	2020Q3	2020Q4	2021Q1	2021Q2	2021Q3	2021Q4	2022Q1	2022Q2	2022Q3	2022Q4	2023Q1	2023Q2	2023Q3
Cons. gap	-2.31	-1.00	-1.29	-2.85	-2.16	-6.78	-3.51	-4.11	-2.35	-5.04	-6.18	-4.24	-5.38	0.50	-1.28	-0.96	-4.17	-3.05	1.71
Invest. gap	0.47	3.41	4.52	4.47	2.88	-4.98	-10.37	-2.11	-6.55	2.62	2.03	-2.72	-1.86	-1.18	-2.82	0.44	-2.02	-6.53	2.24
Gov.demand gap	0.42	3.81	-1.35	-0.44	-0.32	-0.66	2.74	1.68	1.18	0.64	0.14	3.77	1.98	-0.53	1.28	-4.86	-1.76	6.51	-2.56
Export gap	0.57	0.87	2.38	2.39	0.72	-4.22	1.58	-3.57	-3.41	-2.04	-2.81	-1.52	-0.72	-0.55	0.13	-0.38	1.27	0.96	0.73
REER gap	-0.60	-0.38	-0.29	0.01	0.43	1.21	0.87	-0.36	-0.95	-1.54	-1.89	-1.59	-1.02	0.57	1.59	2.68	2.62	1.56	0.06
Shock	-1.91	-4.40	4.03	5.16	8.92	-11.87	10.12	-5.48	1.43	-4.60	-4.55	0.14	3.30	4.23	0.24	-2.13	-7.19	0.06	5.87
Total	-3.37	2.31	8.02	8.74	10.48	-27.31	1.44	-13.95	-10.66	-9.95	-13.26	-6.17	-3.69	3.04	-0.86	-5.22	-11.26	-0.48	8.05

## Output gap, % [l\_y\_gap]

	2019Q1	2019Q2	2019Q3	2019Q4	2020Q1	2020Q2	2020Q3	2020Q4	2021Q1	2021Q2	2021Q3	2021Q4	2022Q1	2022Q2	2022Q3	2022Q4	2023Q1	2023Q2	2023Q3
Cons. gap	-4.05	-1.75	-2.25	-4.99	-3.78	-11.87	-6.14	-7.19	-4.12	-8.81	-10.82	-7.42	-9.41	0.87	-2.24	-1.68	-7.29	-5.34	2.99
Invest. gap	0.39	2.84	3.77	3.72	2.40	-4.15	-8.64	-1.76	-5.46	2.18	1.69	-2.27	-1.55	-0.98	-2.35	0.36	-1.68	-5.44	1.87
Gov.demand gap	0.35	3.18	-1.12	-0.36	-0.26	-0.55	2.29	1.40	0.99	0.53	0.11	3.14	1.65	-0.44	1.07	-4.05	-1.47	5.43	-2.14
Export gap	0.97	1.50	4.09	4.10	1.24	-7.25	2.72	-6.12	-5.86	-3.50	-4.83	-2.61	-1.23	-0.95	0.22	-0.65	2.19	1.65	1.26
Import gap	1.18	-0.81	-2.81	-3.06	-3.67	9.56	-0.50	4.88	3.73	3.48	4.64	2.16	1.29	-1.06	0.30	1.83	3.94	0.17	-2.82
Shock	1.54	-0.61	1.97	1.59	2.17	-1.86	1.85	-0.19	3.04	-0.35	1.68	0.34	2.59	-2.00	-0.24	0.23	2.10	1.56	-0.27
Total	0.38	4.34	3.66	1.00	-1.90	-16.13	-8.43	-8.97	-7.68	-6.46	-7.52	-6.65	-6.66	-4.56	-3.24	-3.97	-2.22	-1.98	0.89

**GDP tnd., ann. QQ % [dl\_y\_tnd]**

	2019Q1	2019Q2	2019Q3	2019Q4	2020Q1	2020Q2	2020Q3	2020Q4	2021Q1	2021Q2	2021Q3	2021Q4	2022Q1	2022Q2	2022Q3	2022Q4	2023Q1	2023Q2	2023Q3
Cons.	4.26	4.17	4.18	4.46	4.87	5.26	5.32	5.45	5.29	5.03	4.64	4.28	4.09	4.08	4.11	4.02	3.79	3.51	3.42
Invest.	0.87	0.85	0.85	0.89	0.96	1.03	1.04	1.07	1.04	1.00	0.91	0.83	0.79	0.78	0.77	0.75	0.70	0.64	0.63
Gov.demand	1.32	1.26	1.28	1.50	1.82	2.11	2.16	2.25	2.12	1.92	1.60	1.29	1.12	1.08	1.07	0.97	0.77	0.52	0.42
Export	2.56	2.44	2.39	2.50	2.70	2.90	2.89	2.91	2.77	2.58	2.28	2.00	1.84	1.78	1.76	1.65	1.45	1.19	1.08
Import	-3.27	-3.24	-3.13	-2.84	-2.45	-2.11	-2.03	-1.91	-2.01	-2.19	-2.49	-2.78	-2.95	-3.02	-3.05	-3.16	-3.37	-3.61	-3.70
Total	5.74	5.48	5.56	6.52	7.89	9.19	9.37	9.77	9.21	8.34	6.95	5.62	4.88	4.71	4.67	4.22	3.34	2.25	1.84

## Core CPI, ann. QQ % [dl\_cpi\_core]

	2019Q1	2019Q2	2019Q3	2019Q4	2020Q1	2020Q2	2020Q3	2020Q4	2021Q1	2021Q2	2021Q3	2021Q4	2022Q1	2022Q2	2022Q3	2022Q4	2023Q1	2023Q2	2023Q3
Lag	1.21	0.91	1.16	1.27	3.29	2.90	4.52	2.18	-1.83	0.64	0.86	0.34	3.70	5.37	8.77	5.10	7.93	4.46	2.11
Expectation	0.65	2.16	1.89	3.18	2.29	0.30	1.55	-1.79	0.15	0.96	-0.44	2.75	3.69	6.66	3.42	4.57	2.39	2.73	4.22
Direct	-0.06	-0.02	0.08	0.16	0.04	-0.02	0.47	0.62	0.47	0.48	0.27	0.21	0.21	-0.08	-0.12	0.16	0.54	0.94	1.30
Output gap	0.06	0.69	0.59	0.16	-0.30	-2.58	-1.35	-1.44	-1.23	-1.03	-1.20	-1.06	-1.07	-0.73	-0.52	-0.64	-0.36	-0.32	0.14
REER gap	0.08	0.05	0.04	-0.00	-0.06	-0.16	-0.12	0.05	0.13	0.20	0.25	0.21	0.14	-0.08	-0.21	-0.36	-0.35	-0.21	-0.01
Shock	0.09	-1.23	-0.93	2.53	1.18	9.61	-0.24	-3.68	3.73	0.67	1.01	5.77	5.26	8.35	-0.02	8.80	-0.25	-2.92	-1.79
Total	2.02	2.57	2.83	7.30	6.44	10.04	4.84	-4.06	1.42	1.92	0.75	8.22	11.94	19.49	11.33	17.63	9.90	4.68	5.96



Dir. ext. eff. in core, ann. QQ % [dl\_cpi\_core\_direct]

	2019Q1	2019Q2	2019Q3	2019Q4	2020Q1	2020Q2	2020Q3	2020Q4	2021Q1	2021Q2	2021Q3	2021Q4	2022Q1	2022Q2	2022Q3	2022Q4	2023Q1	2023Q2	2023Q3
Foreign CPI	-4.01	-2.64	-1.37	-0.27	-1.83	-0.81	4.44	6.81	7.58	8.71	3.95	1.38	2.76	-2.12	-5.18	-3.88	0.40	5.00	8.18
Exchange rate	4.72	4.12	4.94	5.41	4.48	2.26	6.88	7.47	3.74	3.01	3.67	5.04	3.69	2.63	5.00	9.16	12.55	15.93	19.98
Trend adjustment	-1.89	-1.91	-1.91	-1.88	-1.83	-1.81	-1.89	-1.94	-2.00	-2.06	-2.12	-2.17	-2.18	-2.17	-2.15	-2.17	-2.19	-2.22	-2.20
Total	-1.18	-0.43	1.67	3.26	0.82	-0.36	9.44	12.34	9.32	9.66	5.49	4.26	4.27	-1.66	-2.34	3.12	10.76	18.71	25.96

**Food CPI, ann. QQ % [dl\_cpi\_food]**

	2019Q1	2019Q2	2019Q3	2019Q4	2020Q1	2020Q2	2020Q3	2020Q4	2021Q1	2021Q2	2021Q3	2021Q4	2022Q1	2022Q2	2022Q3	2022Q4	2023Q1	2023Q2	2023Q3
Lag	−9.28	3.49	4.82	5.42	13.31	8.14	−4.98	7.10	1.29	−6.62	−2.14	−0.98	−2.60	10.99	13.82	14.03	16.33	11.49	5.68
Expectation	5.26	5.64	6.45	11.11	8.05	1.24	8.40	3.77	−1.43	1.40	2.10	2.31	10.80	9.92	10.00	10.63	8.51	5.02	4.84
Direct	0.66	0.58	−0.45	1.09	0.54	−2.08	1.20	3.82	3.95	3.57	−0.82	0.67	5.06	2.63	−5.58	−0.07	2.33	0.76	−0.35
RER gap	0.61	0.41	−0.09	−0.77	−1.22	−1.38	−1.59	−0.73	0.73	1.78	1.64	1.99	2.48	2.15	−0.25	−1.44	−1.67	−1.89	−2.32
AgrOutp gap	−3.26	−4.22	−2.63	−0.73	3.23	3.67	1.21	1.25	−0.67	−1.10	−0.80	0.73	4.70	2.50	4.46	4.98	10.97	10.56	8.69
Shock	15.98	7.88	7.37	21.92	−0.65	−23.81	16.05	−11.52	−22.81	−5.14	−2.78	−12.15	10.96	11.30	17.65	18.51	−3.63	−9.72	−2.93
Total	9.96	13.76	15.47	38.02	23.26	−14.23	20.30	3.69	−18.92	−6.12	−2.80	−7.43	31.41	39.49	40.10	46.64	32.83	16.22	13.62

**Dir. ext. eff. in food, ann. QQ % [dl\_cpi\_food\_direct]**

	2019Q1	2019Q2	2019Q3	2019Q4	2020Q1	2020Q2	2020Q3	2020Q4	2021Q1	2021Q2	2021Q3	2021Q4	2022Q1	2022Q2	2022Q3	2022Q4	2023Q1	2023Q2	2023Q3
Foreign food inflation	3.15	3.45	-7.12	8.19	4.02	-19.51	9.54	35.76	41.28	38.41	-6.14	7.22	52.06	28.11	-57.11	-6.67	13.54	-5.98	-21.51
Exchange rate	4.72	4.12	4.94	5.41	4.48	2.26	6.88	7.47	3.74	3.01	3.67	5.04	3.69	2.63	5.00	9.16	12.55	15.93	19.98
Trend adjustment	-1.27	-1.81	-2.30	-2.72	-3.12	-3.59	-4.40	-5.07	-5.51	-5.75	-5.76	-5.61	-5.11	-4.44	-3.72	-3.19	-2.76	-2.36	-1.92
Total	6.61	5.76	-4.48	10.88	5.38	-20.83	12.02	38.16	39.51	35.67	-8.24	6.66	50.65	26.30	-55.84	-0.70	23.34	7.60	-3.45

**Energy CPI, ann. QQ % [dl\_cpi\_ener]**

	2019Q1	2019Q2	2019Q3	2019Q4	2020Q1	2020Q2	2020Q3	2020Q4	2021Q1	2021Q2	2021Q3	2021Q4	2022Q1	2022Q2	2022Q3	2022Q4	2023Q1	2023Q2	2023Q3
Lag	-0.19	-3.34	-0.68	2.61	2.19	4.21	1.50	-2.43	2.32	-0.57	-0.70	2.84	1.82	6.18	6.32	3.23	3.32	-0.30	-1.21
Expectation	-0.41	2.87	5.07	4.90	5.09	1.46	0.70	4.09	2.88	3.63	5.37	4.97	8.36	7.97	3.97	3.97	1.66	2.57	6.05
Direct	-0.45	0.56	-0.66	0.09	-1.66	-3.64	2.37	0.34	2.30	0.85	0.39	0.62	1.48	1.00	-1.12	-0.84	-0.39	-0.07	1.19
RER gap	0.43	0.74	0.30	0.26	-0.74	-2.62	-1.34	-1.26	-0.09	0.36	0.44	0.68	1.17	1.42	0.73	0.18	-0.00	0.01	0.54
Shock	-12.73	-3.57	6.42	0.90	11.95	6.60	-12.97	8.57	-9.67	-7.09	5.87	-1.82	11.87	8.73	3.01	6.73	-5.80	-7.06	-0.38
Total	-13.34	-2.74	10.44	8.76	16.82	6.01	-9.73	9.29	-2.27	-2.82	11.36	7.29	24.71	25.29	12.91	13.26	-1.21	-4.84	6.19

Dir. ext. eff. in energy, ann. QQ % [dl\_cpi\_ener\_direct]

	2019Q1	2019Q2	2019Q3	2019Q4	2020Q1	2020Q2	2020Q3	2020Q4	2021Q1	2021Q2	2021Q3	2021Q4	2022Q1	2022Q2	2022Q3	2022Q4	2023Q1	2023Q2	2023Q3
Foreign energy inflation	-23.88	27.27	-33.67	3.74	-82.23	-178.13	118.65	17.47	119.88	48.58	25.07	35.15	78.85	55.06	-54.55	-45.56	-27.38	-15.81	41.92
Exchange rate	4.72	4.12	4.94	5.41	4.48	2.26	6.88	7.47	3.74	3.01	3.67	5.04	3.69	2.63	5.00	9.16	12.55	15.93	19.98
Trend adjustment	-3.13	-3.63	-4.16	-4.72	-5.38	-6.17	-7.19	-8.08	-8.77	-9.17	-9.27	-9.06	-8.48	-7.63	-6.59	-5.53	-4.47	-3.44	-2.40
Total	-22.29	27.76	-32.88	4.43	-83.12	-182.04	118.35	16.87	114.86	42.42	19.47	31.13	74.06	50.06	-56.14	-41.92	-19.30	-3.32	59.50

**Agric. output gap, % [l\_y\_agr\_gap]**

	2019Q1	2019Q2	2019Q3	2019Q4	2020Q1	2020Q2	2020Q3	2020Q4	2021Q1	2021Q2	2021Q3	2021Q4	2022Q1	2022Q2	2022Q3	2022Q4	2023Q1	2023Q2	2023Q3
Lag	0.27	0.87	1.13	0.70	0.20	-0.86	-0.98	-0.32	-0.33	0.18	0.29	0.21	-0.20	-1.25	-0.67	-1.19	-1.33	-2.93	-2.82
Shock	1.91	1.95	0.63	-0.21	-2.35	-1.58	0.17	-0.51	0.78	0.55	0.24	-0.70	-2.94	-0.41	-2.31	-2.13	-5.99	-4.12	-2.98
Total	2.18	2.82	1.75	0.49	-2.15	-2.44	-0.81	-0.83	0.44	0.73	0.53	-0.49	-3.13	-1.67	-2.97	-3.32	-7.31	-7.04	-5.80

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

	2019Q1	2019Q2	2019Q3	2019Q4	2020Q1	2020Q2	2020Q3	2020Q4	2021Q1	2021Q2	2021Q3	2021Q4	2022Q1	2022Q2	2022Q3	2022Q4	2023Q1	2023Q2	2023Q3
Lag	4.28	4.30	4.19	4.26	4.27	4.31	4.17	4.11	4.09	4.04	4.05	4.05	4.03	4.13	4.29	4.70	5.30	5.68	5.97
Neutral rate	1.92	1.98	1.98	1.82	2.23	1.28	1.61	1.29	0.79	1.08	1.03	0.87	1.16	1.23	1.58	1.77	2.11	2.44	2.38
Inflation reaction	-0.19	0.12	0.04	0.16	-0.06	-0.61	-0.08	-0.44	-0.28	-0.09	-0.35	0.03	0.14	0.33	-0.06	-0.13	-0.27	0.06	0.30
Output gap	0.04	0.43	0.37	0.10	-0.19	-1.61	-0.84	-0.90	-0.77	-0.65	-0.75	-0.67	-0.67	-0.46	-0.32	-0.40	-0.22	-0.20	0.09
FX target	0.00	0.00	0.00	0.00	-0.00	-0.00	-0.00	0.00	0.00	0.00	0.00	0.00	0.00	-0.00	-0.00	-0.00	-0.00	0.00	0.00
Shock	-0.68	-1.60	-1.24	-1.01	-0.86	1.84	0.27	1.05	1.22	0.68	1.09	0.76	0.48	0.13	0.40	0.69	0.18	-0.52	-1.05
Total	5.38	5.24	5.33	5.34	5.39	5.22	5.14	5.11	5.05	5.06	5.06	5.04	5.16	5.36	5.87	6.62	7.10	7.46	7.69

Exchange rate, QQ annualized % [dl\_s]

	2019Q1	2019Q2	2019Q3	2019Q4	2020Q1	2020Q2	2020Q3	2020Q4	2021Q1	2021Q2	2021Q3	2021Q4	2022Q1	2022Q2	2022Q3	2022Q4	2023Q1	2023Q2	2023Q3
Expectation	1.68	1.67	1.71	1.75	1.74	1.75	1.91	1.87	1.75	1.71	1.79	1.94	1.95	2.08	2.27	2.58	2.69	2.71	2.75
IR differential	-0.59	-0.58	-0.67	-0.75	-0.85	-1.01	-1.01	-1.00	-1.00	-1.01	-1.00	-1.00	-0.97	-0.85	-0.63	-0.50	-0.49	-0.47	-0.45
Premium	0.37	0.37	0.37	0.37	0.37	0.37	0.38	0.38	0.39	0.39	0.40	0.40	0.41	0.41	0.41	0.41	0.40	0.40	0.40
Target	2.45	2.24	2.65	3.02	4.40	7.34	5.64	3.96	2.30	0.70	0.64	0.52	1.51	4.50	7.72	10.43	10.78	7.88	4.18
Shock	0.81	0.43	0.88	1.03	-1.17	-6.17	-0.04	2.26	0.31	1.21	1.84	3.18	0.80	-3.50	-4.77	-3.75	-0.84	5.40	13.10
Total	4.72	4.12	4.94	5.41	4.48	2.26	6.88	7.47	3.74	3.01	3.67	5.04	3.69	2.63	5.00	9.16	12.55	15.93	19.98



**Exchange rate target, QQ % [dl\_s\_tar]**

	2019Q1	2019Q2	2019Q3	2019Q4	2020Q1	2020Q2	2020Q3	2020Q4	2021Q1	2021Q2	2021Q3	2021Q4	2022Q1	2022Q2	2022Q3	2022Q4	2023Q1	2023Q2	2023Q3
Lag	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
RER trend	1.89	1.91	1.91	1.88	1.83	1.81	1.89	1.94	2.00	2.06	2.12	2.17	2.18	2.17	2.15	2.17	2.19	2.22	2.20
CPI target	4.75	4.76	4.76	4.76	4.75	4.76	4.83	4.90	4.96	5.01	5.06	5.10	5.10	5.10	5.10	5.13	5.16	5.20	5.24
Core RP trend	-0.48	-0.47	-0.47	-0.47	-0.47	-0.45	-0.37	-0.30	-0.24	-0.20	-0.17	-0.14	-0.14	-0.15	-0.15	-0.13	-0.09	-0.04	-0.01
Foreign CPI	-1.98	-1.98	-1.98	-1.98	-1.98	-1.98	-1.98	-1.98	-1.98	-1.98	-1.98	-1.98	-1.98	-1.98	-1.98	-1.98	-1.98	-1.98	-1.98
CPI deviation	0.56	-0.36	-0.11	-0.48	0.18	1.82	0.23	1.33	0.83	0.28	1.05	-0.10	-0.42	-1.00	0.19	0.39	0.80	-0.18	-0.90
RER gap	-1.71	-1.07	-0.83	0.03	1.23	3.44	2.46	-1.03	-2.70	-4.35	-5.36	-4.51	-2.89	1.61	4.51	7.60	7.41	4.43	0.18
Shock	0.03	0.02	0.03	0.04	-0.04	-0.23	-0.00	0.08	0.01	0.04	0.07	0.12	0.03	-0.13	-0.18	-0.14	-0.03	0.20	0.48
Total	3.06	2.79	3.31	3.77	5.50	9.17	7.05	4.95	2.87	0.87	0.80	0.65	1.89	5.62	9.65	13.04	13.47	9.85	5.22

**RIR (policy) trend, % [r\_tnd]**

	2019Q1	2019Q2	2019Q3	2019Q4	2020Q1	2020Q2	2020Q3	2020Q4	2021Q1	2021Q2	2021Q3	2021Q4	2022Q1	2022Q2	2022Q3	2022Q4	2023Q1	2023Q2	2023Q3
Foreign RIR	1.70	1.96	1.94	1.23	3.29	-1.46	-0.07	-1.88	-4.61	-3.37	-3.75	-4.70	-3.26	-2.92	-1.16	-0.27	1.40	2.93	2.61
Premium	1.84	1.84	1.83	1.83	1.83	1.84	1.88	1.91	1.94	1.97	2.00	2.02	2.04	2.05	2.05	2.03	2.01	1.99	1.99
Exp. RER trend depr.	1.79	1.81	1.81	1.78	1.74	1.72	1.79	1.84	1.90	1.96	2.01	2.06	2.07	2.06	2.05	2.06	2.08	2.11	2.09
Total	5.33	5.62	5.59	4.84	6.86	2.10	3.60	1.87	-0.76	0.57	0.26	-0.61	0.85	1.20	2.93	3.82	5.49	7.03	6.69

**Govt. rev., % of GDP [grev\_y]**

	2019Q1	2019Q2	2019Q3	2019Q4	2020Q1	2020Q2	2020Q3	2020Q4	2021Q1	2021Q2	2021Q3	2021Q4	2022Q1	2022Q2	2022Q3	2022Q4	2023Q1	2023Q2	2023Q3
Structural	17.95	18.00	18.05	18.10	18.14	18.19	18.24	18.28	18.31	18.35	18.37	18.40	18.43	18.44	18.46	18.47	18.50	18.53	18.55
Cyclical	-0.07	0.07	0.09	-0.00	-0.03	-0.67	-0.25	-0.37	-0.28	-0.32	-0.40	-0.28	-0.30	-0.06	-0.10	-0.14	-0.22	-0.12	0.11
Discretionary	1.22	0.47	1.10	1.20	-1.20	2.00	1.85	1.73	-0.64	3.13	0.25	1.22	2.26	-0.45	-0.54	-1.54	-0.01	0.24	-1.00
Total	19.09	18.54	19.23	19.29	16.91	19.52	19.83	19.63	17.39	21.15	18.23	19.33	20.38	17.93	17.82	16.80	18.26	18.64	17.66

**Cyc. govt. rev., % of GDP [grev\_y\_cyc]**

	2019Q1	2019Q2	2019Q3	2019Q4	2020Q1	2020Q2	2020Q3	2020Q4	2021Q1	2021Q2	2021Q3	2021Q4	2022Q1	2022Q2	2022Q3	2022Q4	2023Q1	2023Q2	2023Q3
Cons. gap	-0.06	-0.03	-0.03	-0.08	-0.06	-0.18	-0.09	-0.11	-0.06	-0.14	-0.17	-0.11	-0.14	0.01	-0.03	-0.03	-0.11	-0.08	0.05
Imp. gap	-0.02	0.01	0.05	0.05	0.06	-0.16	0.01	-0.08	-0.06	-0.06	-0.08	-0.04	-0.02	0.02	-0.01	-0.03	-0.07	-0.00	0.05
Ouput gap	0.01	0.09	0.07	0.02	-0.04	-0.32	-0.17	-0.18	-0.15	-0.13	-0.15	-0.13	-0.13	-0.09	-0.06	-0.08	-0.04	-0.04	0.02
Shock	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Total	-0.07	0.07	0.09	-0.00	-0.03	-0.67	-0.25	-0.37	-0.28	-0.32	-0.40	-0.28	-0.30	-0.06	-0.10	-0.14	-0.22	-0.12	0.11

Struct. govt. rev., % of GDP [grev\_y\_str]

	2019Q1	2019Q2	2019Q3	2019Q4	2020Q1	2020Q2	2020Q3	2020Q4	2021Q1	2021Q2	2021Q3	2021Q4	2022Q1	2022Q2	2022Q3	2022Q4	2023Q1	2023Q2	2023Q3
Lag	17.71	17.77	17.82	17.87	17.91	17.96	18.01	18.06	18.09	18.13	18.16	18.19	18.22	18.24	18.26	18.27	18.29	18.31	18.34
Steady state	0.21	0.21	0.21	0.21	0.21	0.21	0.21	0.21	0.21	0.21	0.21	0.21	0.21	0.21	0.21	0.21	0.21	0.21	0.21
Shock	0.03	0.02	0.02	0.02	0.01	0.02	0.02	0.01	0.01	0.01	0.00	0.00	−0.00	−0.01	−0.01	−0.01	−0.00	0.00	−0.00
Total	17.95	18.00	18.05	18.10	18.14	18.19	18.24	18.28	18.31	18.35	18.37	18.40	18.43	18.44	18.46	18.47	18.50	18.53	18.55

**Govt. demand (G&S), % GDP [gdem\_y]**

	2019Q1	2019Q2	2019Q3	2019Q4	2020Q1	2020Q2	2020Q3	2020Q4	2021Q1	2021Q2	2021Q3	2021Q4	2022Q1	2022Q2	2022Q3	2022Q4	2023Q1	2023Q2	2023Q3
Structural	24.50	24.50	24.50	24.50	24.50	24.50	24.50	24.50	24.50	24.50	24.50	24.50	24.50	24.50	24.50	24.50	24.50	24.50	24.50
Cyclical	-0.01	-0.10	-0.08	-0.02	0.04	0.37	0.19	0.21	0.18	0.15	0.17	0.15	0.15	0.10	0.07	0.09	0.05	0.05	-0.02
Discretionary	0.30	2.56	-2.14	-0.65	0.15	3.20	4.58	3.71	2.94	2.14	1.91	5.13	3.44	0.58	1.98	-3.64	-1.14	6.60	-2.63
Total	24.79	26.96	22.28	23.83	24.69	28.07	29.28	28.42	27.61	26.78	26.58	29.78	28.10	25.19	26.55	20.95	23.42	31.15	21.85

**Discr. govt. demand (G&S), % GDP [gdem\_y\_discr]**

	2019Q1	2019Q2	2019Q3	2019Q4	2020Q1	2020Q2	2020Q3	2020Q4	2021Q1	2021Q2	2021Q3	2021Q4	2022Q1	2022Q2	2022Q3	2022Q4	2023Q1	2023Q2	2023Q3
Lag	0.50	0.21	1.79	-1.50	-0.45	0.11	2.24	3.21	2.60	2.06	1.49	1.34	3.59	2.41	0.41	1.38	-2.55	-0.79	4.62
Shock	-0.20	2.35	-3.93	0.85	0.61	3.09	2.34	0.50	0.34	0.08	0.42	3.79	-0.15	-1.83	1.57	-5.02	1.41	7.40	-7.25
Total	0.30	2.56	-2.14	-0.65	0.15	3.20	4.58	3.71	2.94	2.14	1.91	5.13	3.44	0.58	1.98	-3.64	-1.14	6.60	-2.63

Cyc. govt. demand (G&S), % GDP [gdem\_y\_cyc]

	2019Q1	2019Q2	2019Q3	2019Q4	2020Q1	2020Q2	2020Q3	2020Q4	2021Q1	2021Q2	2021Q3	2021Q4	2022Q1	2022Q2	2022Q3	2022Q4	2023Q1	2023Q2	2023Q3
Lag	0.00	−0.00	−0.00	−0.00	−0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Output gap	−0.01	−0.10	−0.08	−0.02	0.04	0.37	0.19	0.21	0.18	0.15	0.17	0.15	0.15	0.10	0.07	0.09	0.05	0.05	−0.02
Shock	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Total	−0.01	−0.10	−0.08	−0.02	0.04	0.37	0.19	0.21	0.18	0.15	0.17	0.15	0.15	0.10	0.07	0.09	0.05	0.05	−0.02



## Struct. govt. demand (G&amp;S), % GDP [gdem\_y\_str]

[illegible]

**Other govt. exp., % to GDP [oexp\_y]**

	2019Q1	2019Q2	2019Q3	2019Q4	2020Q1	2020Q2	2020Q3	2020Q4	2021Q1	2021Q2	2021Q3	2021Q4	2022Q1	2022Q2	2022Q3	2022Q4	2023Q1	2023Q2	2023Q3
Structural	5.72	5.79	5.88	5.94	5.97	5.99	5.98	5.95	5.94	5.95	5.95	5.96	5.93	5.91	5.88	5.83	5.80	5.77	5.79
Cyclical	-0.00	-0.05	-0.04	-0.01	0.02	0.19	0.10	0.11	0.09	0.08	0.09	0.08	0.08	0.05	0.04	0.05	0.03	0.02	-0.01
Discretionary	0.89	-2.56	2.76	2.39	-0.31	2.76	2.22	-2.46	-1.52	-0.45	-0.44	2.45	0.78	0.04	2.20	-3.04	-0.24	-4.00	1.07
Total	6.60	3.17	8.59	8.32	5.69	8.95	8.31	3.60	4.52	5.57	5.60	8.49	6.79	6.00	8.12	2.84	5.59	1.79	6.85

**Cyc. other govt. exp., % to GDP [oexp\_y\_cyc]**

	2019Q1	2019Q2	2019Q3	2019Q4	2020Q1	2020Q2	2020Q3	2020Q4	2021Q1	2021Q2	2021Q3	2021Q4	2022Q1	2022Q2	2022Q3	2022Q4	2023Q1	2023Q2	2023Q3
Lag	0.00	-0.00	-0.00	-0.00	-0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Output gap	-0.00	-0.05	-0.04	-0.01	0.02	0.19	0.10	0.11	0.09	0.08	0.09	0.08	0.08	0.05	0.04	0.05	0.03	0.02	-0.01
Shock	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Total	-0.00	-0.05	-0.04	-0.01	0.02	0.19	0.10	0.11	0.09	0.08	0.09	0.08	0.08	0.05	0.04	0.05	0.03	0.02	-0.01

**Struct. other govt. exp., % to GDP [oexp\_y\_str]**

	2019Q1	2019Q2	2019Q3	2019Q4	2020Q1	2020Q2	2020Q3	2020Q4	2021Q1	2021Q2	2021Q3	2021Q4	2022Q1	2022Q2	2022Q3	2022Q4	2023Q1	2023Q2	2023Q3
Lag	5.36	5.43	5.50	5.59	5.64	5.67	5.69	5.68	5.65	5.64	5.65	5.65	5.66	5.63	5.61	5.58	5.54	5.51	5.48
Steady state	0.30	0.30	0.30	0.30	0.30	0.30	0.30	0.30	0.30	0.30	0.30	0.30	0.30	0.30	0.30	0.30	0.30	0.30	0.30
Shock	0.06	0.05	0.08	0.05	0.03	0.02	-0.01	-0.03	-0.01	0.00	0.00	0.00	-0.03	-0.03	-0.03	-0.05	-0.04	-0.04	0.01
Total	5.72	5.79	5.88	5.94	5.97	5.99	5.98	5.95	5.94	5.95	5.95	5.96	5.93	5.91	5.88	5.83	5.80	5.77	5.79

**Budget deficit, % of GDP [def\_y]**

	2019Q1	2019Q2	2019Q3	2019Q4	2020Q1	2020Q2	2020Q3	2020Q4	2021Q1	2021Q2	2021Q3	2021Q4	2022Q1	2022Q2	2022Q3	2022Q4	2023Q1	2023Q2	2023Q3
Govt. Demand	24.79	26.96	22.28	23.83	24.69	28.07	29.28	28.42	27.61	26.78	26.58	29.78	28.10	25.19	26.55	20.95	23.42	31.15	21.85
Other expenditures	6.60	3.17	8.59	8.32	5.69	8.95	8.31	3.60	4.52	5.57	5.60	8.49	6.79	6.00	8.12	2.84	5.59	1.79	6.85
Revenues	-19.09	-18.54	-19.23	-19.29	-16.91	-19.52	-19.83	-19.63	-17.39	-21.15	-18.23	-19.33	-20.38	-17.93	-17.82	-16.80	-18.26	-18.64	-17.66
Total	12.31	11.59	11.64	12.85	13.47	17.49	17.75	12.38	14.74	11.21	13.96	18.93	14.50	13.26	16.85	6.99	10.74	14.30	11.05

**Cyc. deficit, % of GDP [def\_y\_cyc]**

	2019Q1	2019Q2	2019Q3	2019Q4	2020Q1	2020Q2	2020Q3	2020Q4	2021Q1	2021Q2	2021Q3	2021Q4	2022Q1	2022Q2	2022Q3	2022Q4	2023Q1	2023Q2	2023Q3
Demand	−0.01	−0.10	−0.08	−0.02	0.04	0.37	0.19	0.21	0.18	0.15	0.17	0.15	0.15	0.10	0.07	0.09	0.05	0.05	−0.02
Other expenditures	−0.00	−0.05	−0.04	−0.01	0.02	0.19	0.10	0.11	0.09	0.08	0.09	0.08	0.08	0.05	0.04	0.05	0.03	0.02	−0.01
Revenues	0.07	−0.07	−0.09	0.00	0.03	0.67	0.25	0.37	0.28	0.32	0.40	0.28	0.30	0.06	0.10	0.14	0.22	0.12	−0.11
Total	0.06	−0.23	−0.21	−0.03	0.10	1.23	0.55	0.69	0.55	0.55	0.66	0.52	0.53	0.22	0.22	0.28	0.30	0.19	−0.14

**Discr. deficit, % of GDP [def\_y\_discr]**

	2019Q1	2019Q2	2019Q3	2019Q4	2020Q1	2020Q2	2020Q3	2020Q4	2021Q1	2021Q2	2021Q3	2021Q4	2022Q1	2022Q2	2022Q3	2022Q4	2023Q1	2023Q2	2023Q3
Demand	0.30	2.56	-2.14	-0.65	0.15	3.20	4.58	3.71	2.94	2.14	1.91	5.13	3.44	0.58	1.98	-3.64	-1.14	6.60	-2.63
Other expenditures	0.89	-2.56	2.76	2.39	-0.31	2.76	2.22	-2.46	-1.52	-0.45	-0.44	2.45	0.78	0.04	2.20	-3.04	-0.24	-4.00	1.07
Revenues	-1.22	-0.47	-1.10	-1.20	1.20	-2.00	-1.85	-1.73	0.64	-3.13	-0.25	-1.22	-2.26	0.45	0.54	1.54	0.01	-0.24	1.00
Total	-0.03	-0.48	-0.48	0.54	1.04	3.96	4.95	-0.48	2.06	-1.44	1.22	6.36	1.97	1.07	4.71	-5.14	-1.36	2.37	-0.56

**Struct. deficit, % of GDP [def\_y\_str]**

	2019Q1	2019Q2	2019Q3	2019Q4	2020Q1	2020Q2	2020Q3	2020Q4	2021Q1	2021Q2	2021Q3	2021Q4	2022Q1	2022Q2	2022Q3	2022Q4	2023Q1	2023Q2	2023Q3
Demand	24.50	24.50	24.50	24.50	24.50	24.50	24.50	24.50	24.50	24.50	24.50	24.50	24.50	24.50	24.50	24.50	24.50	24.50	24.50
Other expenditures	5.72	5.79	5.88	5.94	5.97	5.99	5.98	5.95	5.94	5.95	5.95	5.96	5.93	5.91	5.88	5.83	5.80	5.77	5.79
Revenues	-17.95	-18.00	-18.05	-18.10	-18.14	-18.19	-18.24	-18.28	-18.31	-18.35	-18.37	-18.40	-18.43	-18.44	-18.46	-18.47	-18.50	-18.53	-18.55
Total	12.27	12.29	12.33	12.34	12.33	12.30	12.24	12.17	12.13	12.10	12.08	12.05	12.00	11.97	11.92	11.85	11.80	11.74	11.75



**Budget deficit, % of GDP [def\_y\_scd]**

	2019Q1	2019Q2	2019Q3	2019Q4	2020Q1	2020Q2	2020Q3	2020Q4	2021Q1	2021Q2	2021Q3	2021Q4	2022Q1	2022Q2	2022Q3	2022Q4	2023Q1	2023Q2	2023Q3
Structural	12.27	12.29	12.33	12.34	12.33	12.30	12.24	12.17	12.13	12.10	12.08	12.05	12.00	11.97	11.92	11.85	11.80	11.74	11.75
Discretionary	-0.03	-0.48	-0.48	0.54	1.04	3.96	4.95	-0.48	2.06	-1.44	1.22	6.36	1.97	1.07	4.71	-5.14	-1.36	2.37	-0.56
Cyclical	0.06	-0.23	-0.21	-0.03	0.10	1.23	0.55	0.69	0.55	0.55	0.66	0.52	0.53	0.22	0.22	0.28	0.30	0.19	-0.14
Total	12.31	11.59	11.64	12.85	13.47	17.49	17.75	12.38	14.74	11.21	13.96	18.93	14.50	13.26	16.85	6.99	10.74	14.30	11.05

**Fiscal impulse, % of GDP [fisc\_imp]**

	2019Q1	2019Q2	2019Q3	2019Q4	2020Q1	2020Q2	2020Q3	2020Q4	2021Q1	2021Q2	2021Q3	2021Q4	2022Q1	2022Q2	2022Q3	2022Q4	2023Q1	2023Q2	2023Q3
Discr. deficit	−0.03	−0.48	−0.48	0.54	1.04	3.96	4.95	−0.48	2.06	−1.44	1.22	6.36	1.97	1.07	4.71	−5.14	−1.36	2.37	−0.56
Change in struct. deficit	0.02	0.02	0.04	0.01	−0.01	−0.03	−0.06	−0.07	−0.04	−0.03	−0.02	−0.02	−0.05	−0.04	−0.05	−0.07	−0.05	−0.06	0.00
Total	−0.01	−0.46	−0.44	0.55	1.03	3.93	4.90	−0.55	2.02	−1.47	1.20	6.34	1.91	1.04	4.67	−5.20	−1.41	2.31	−0.55

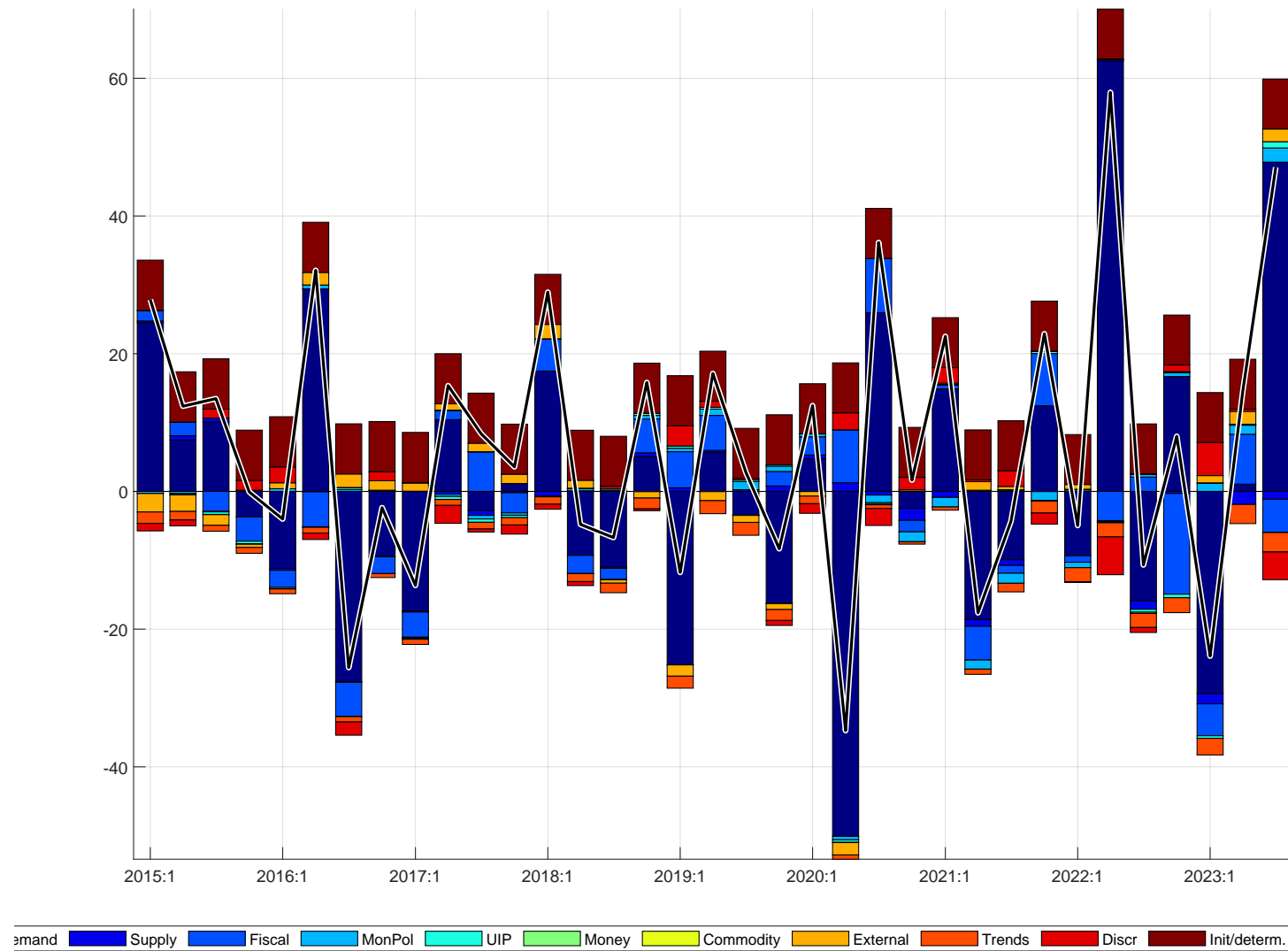
**Real money, ann. QQ % [dl\_rmd]**

	2019Q1	2019Q2	2019Q3	2019Q4	2020Q1	2020Q2	2020Q3	2020Q4	2021Q1	2021Q2	2021Q3	2021Q4	2022Q1	2022Q2	2022Q3	2022Q4	2023Q1	2023Q2	2023Q3
Chg. of velocity	0.68	0.68	0.69	0.69	0.70	0.70	0.68	0.67	0.66	0.65	0.64	0.62	0.61	0.60	0.61	0.62	0.63	0.65	0.65
Lag	14.65	5.82	5.52	3.93	5.16	6.49	6.75	10.47	11.40	12.12	10.71	11.67	8.52	5.51	-2.14	-2.80	-6.99	-3.52	9.76
GDP growth	2.93	6.40	0.85	-1.24	-1.11	-14.32	12.05	2.28	4.31	3.97	0.81	2.73	1.45	3.93	2.99	0.39	3.10	0.97	3.99
Interest rate	-0.63	-0.70	-0.68	-0.57	-0.86	-0.18	-0.44	-0.20	0.16	-0.05	-0.01	0.10	-0.10	-0.12	-0.30	-0.33	-0.52	-0.71	-0.64
Shock	-9.31	-4.31	-0.75	4.56	5.38	16.95	-4.09	3.06	0.78	-1.39	4.52	-2.94	-2.62	-12.99	-5.15	-7.85	-1.26	16.55	7.75
Total	8.31	7.88	5.61	7.38	9.27	9.64	14.96	16.28	17.31	15.30	16.67	12.18	7.88	-3.06	-4.00	-9.98	-5.03	13.94	21.52

**5 Shock decomposition**



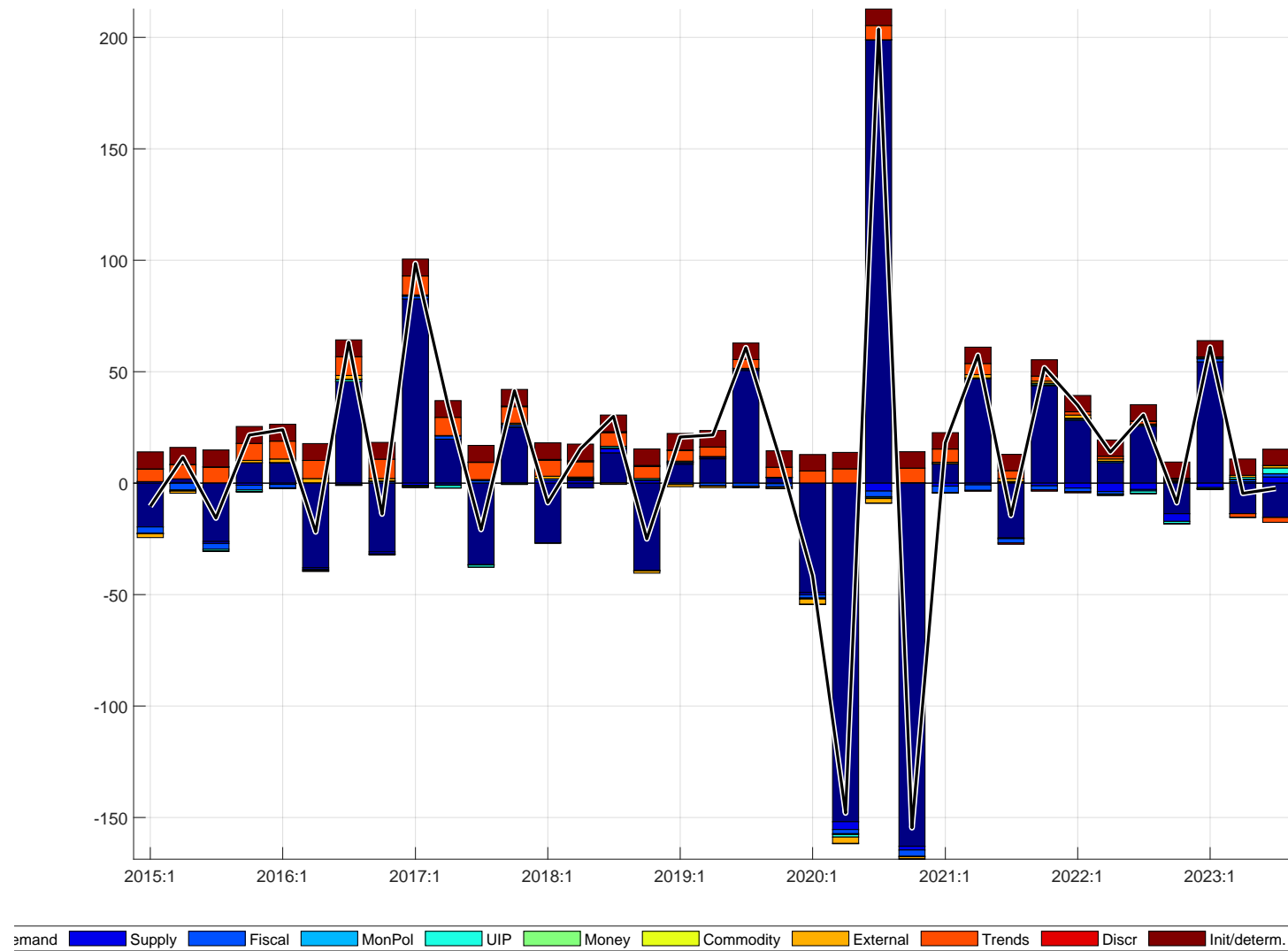
## Consumption, ann. QQ % [dl\_cons]







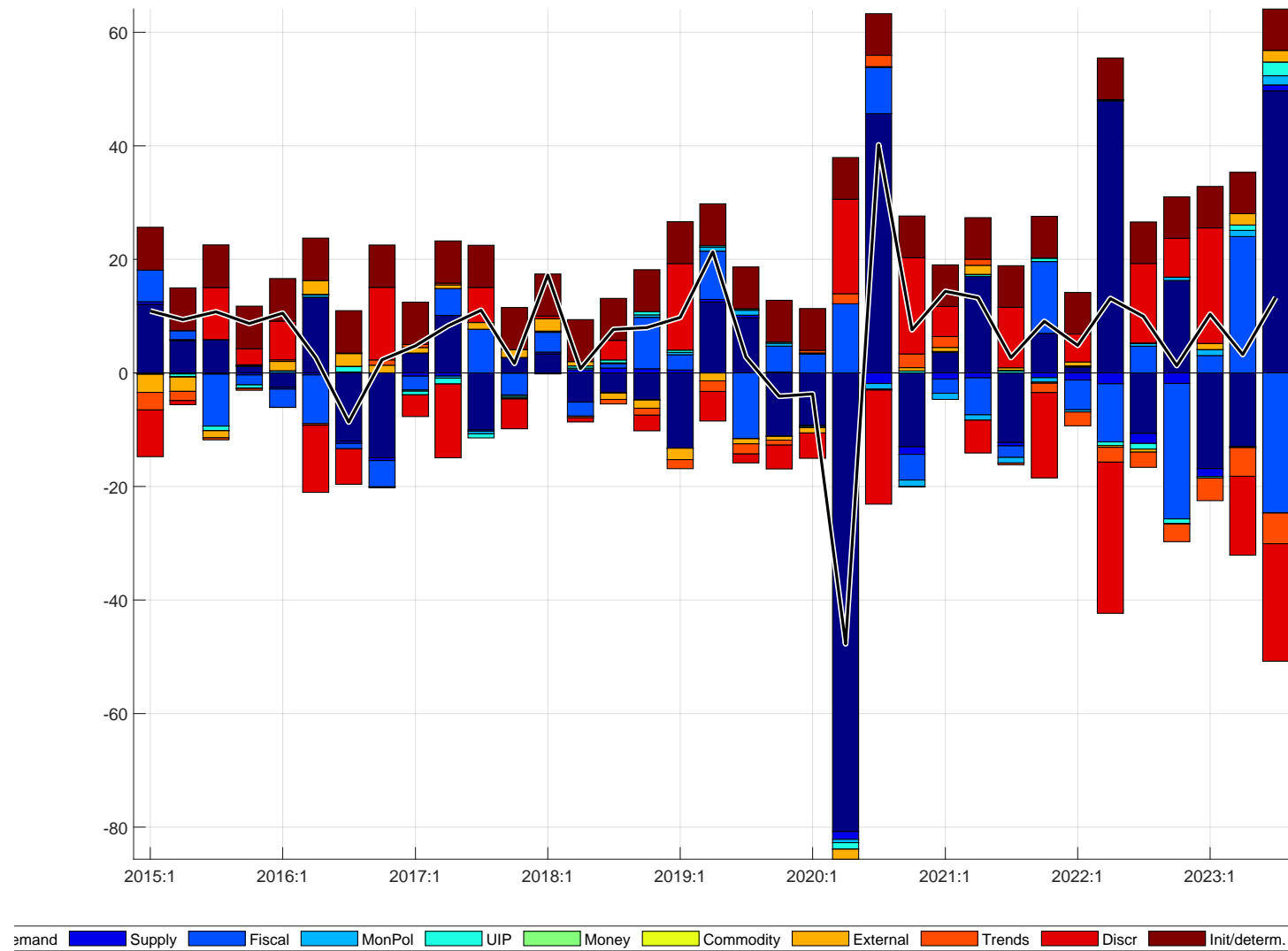
## Export, ann. QQ % [dl\_exp]



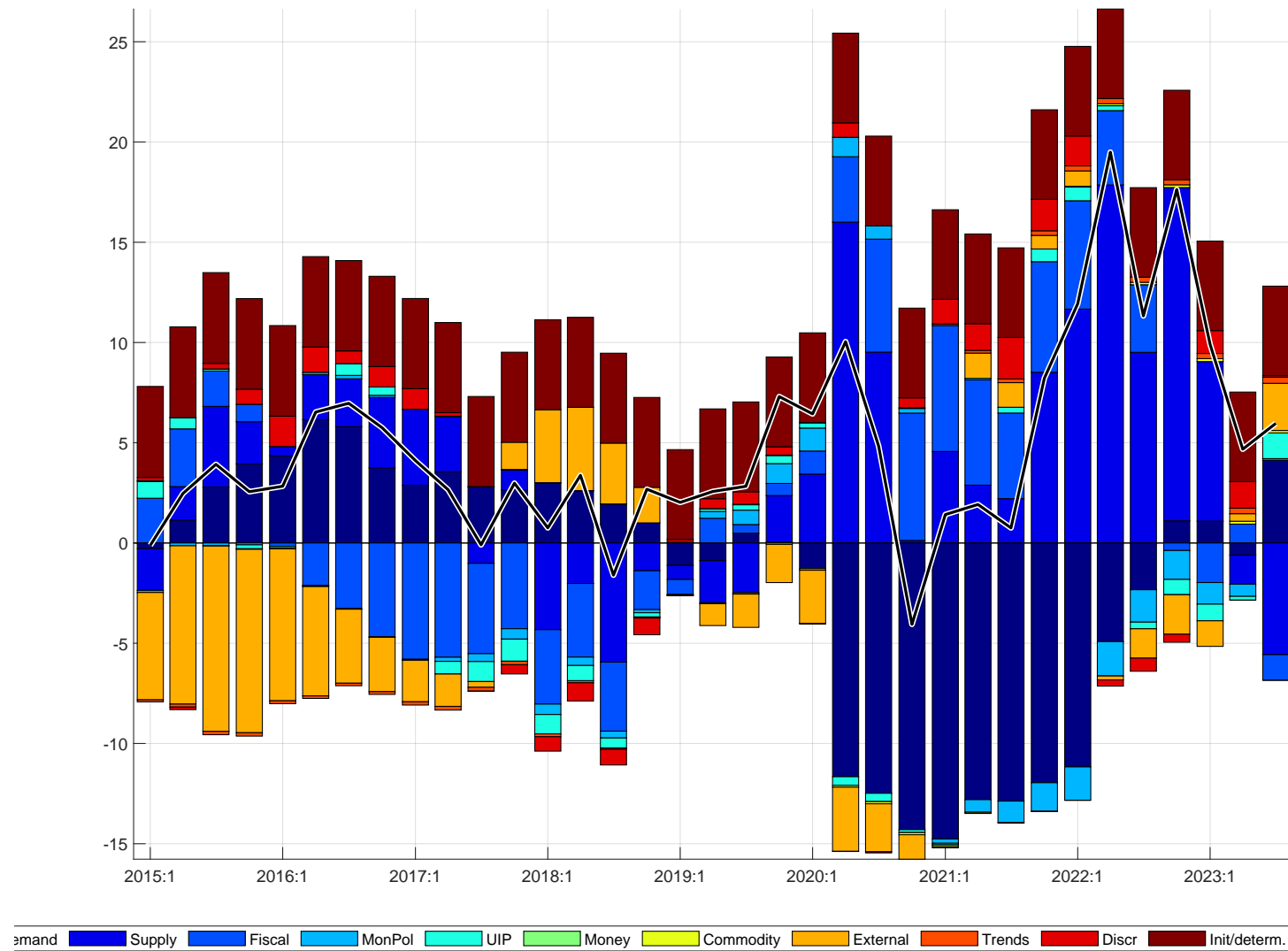




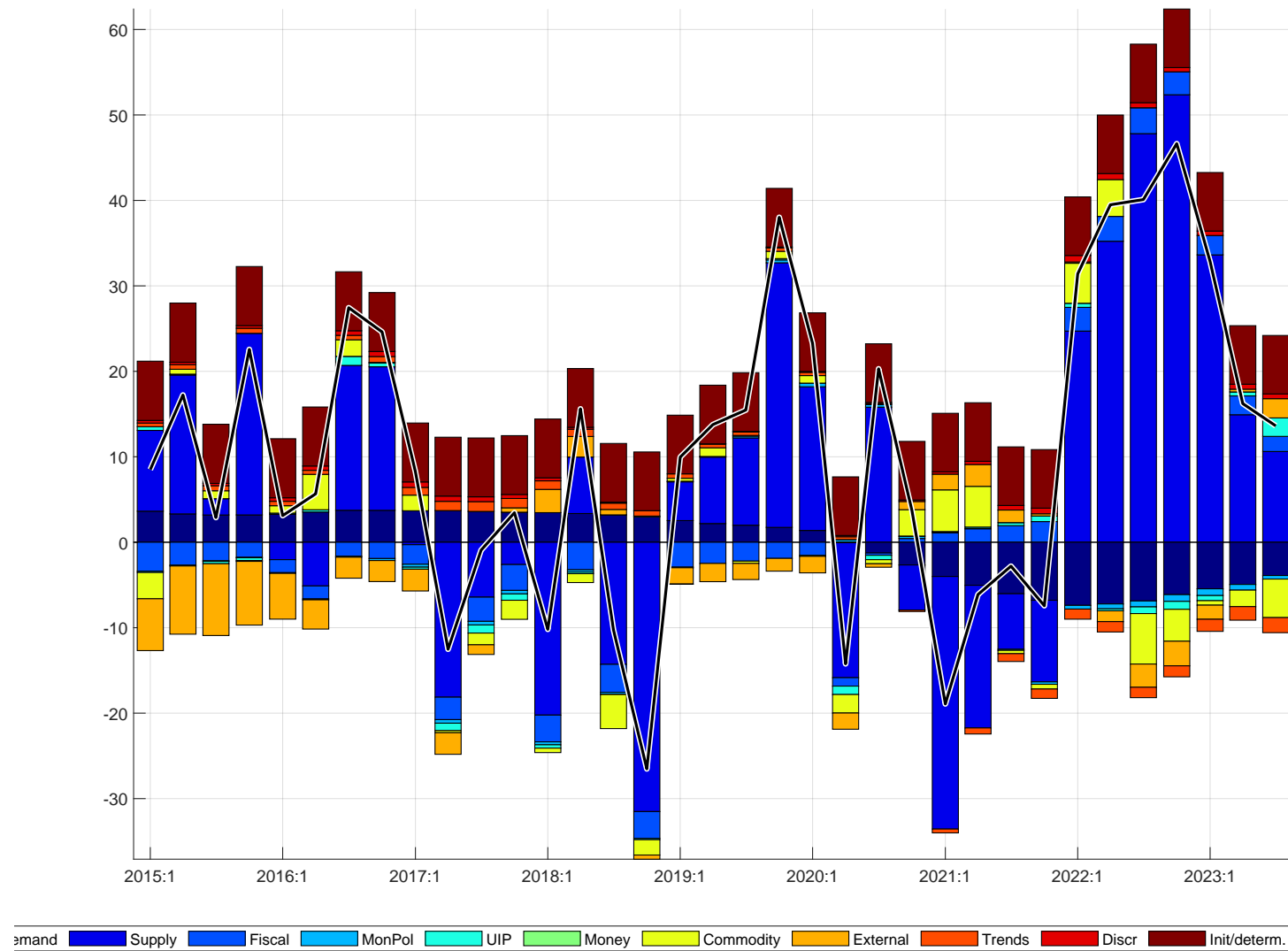
## GDP, ann. QQ % [dl\_y]



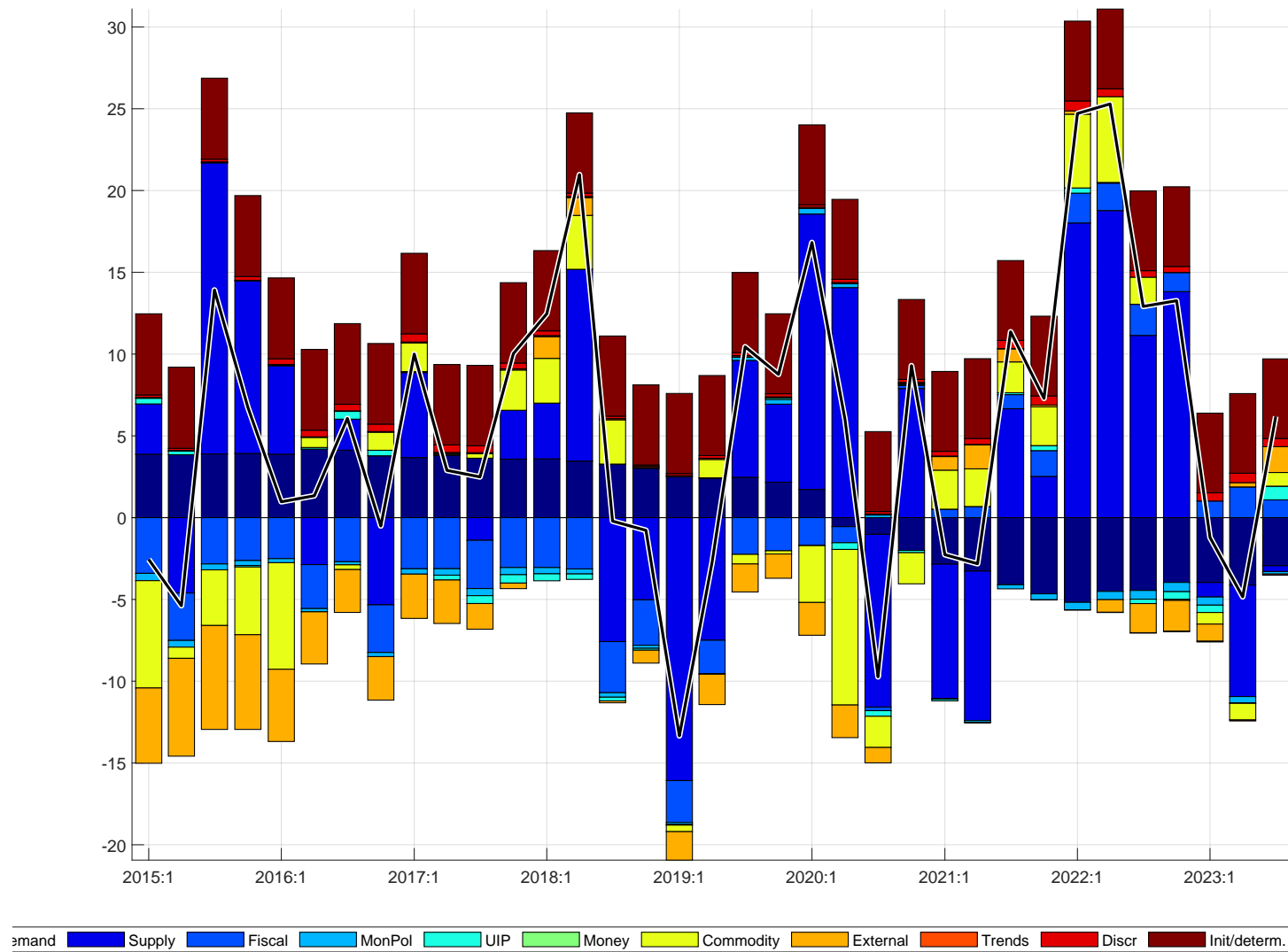
## Core CPI, ann. QQ % [dl\_cpi\_core]



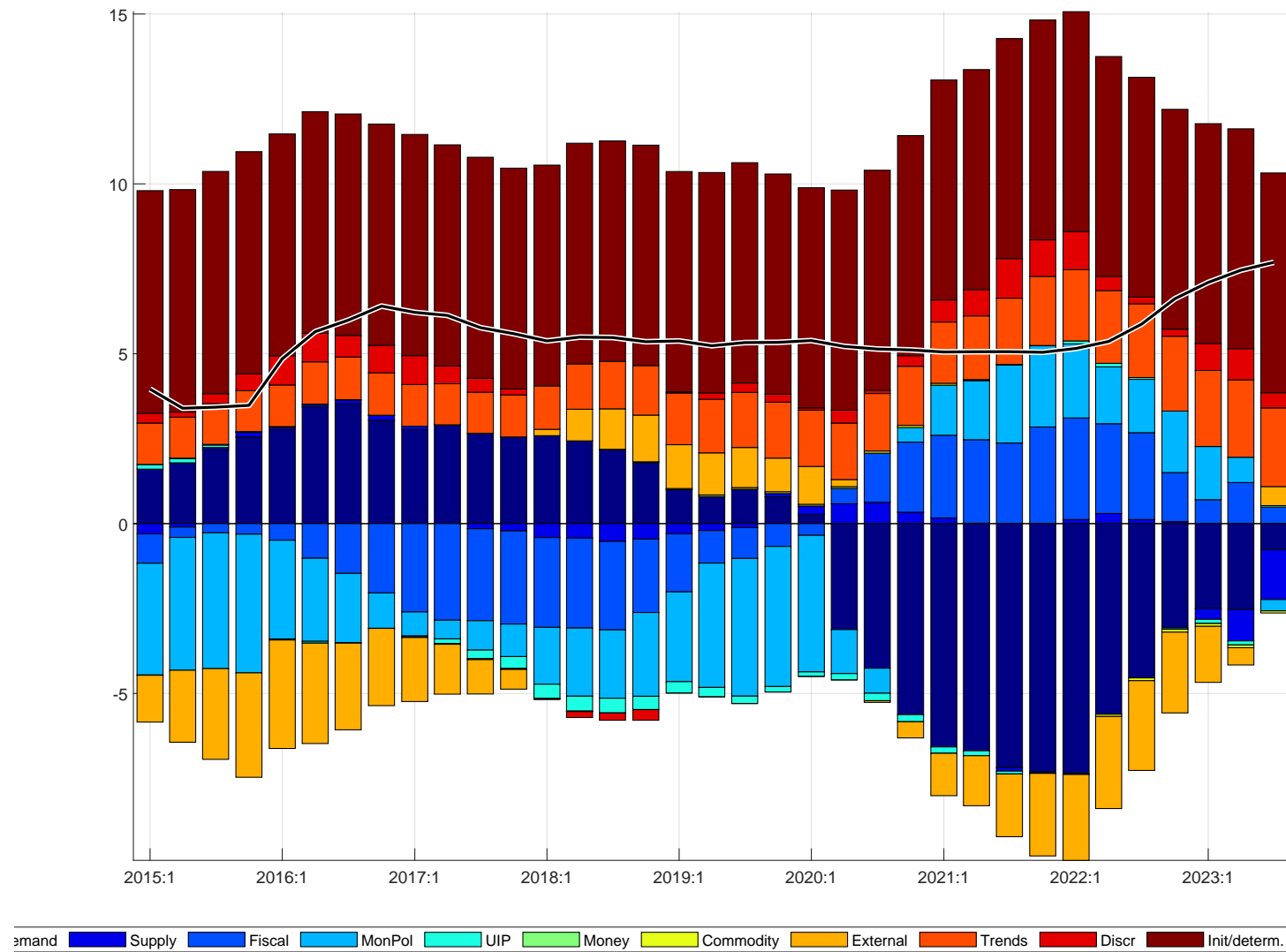
## Food CPI, ann. QQ % [dl\_cpi\_food]



## Energy CPI, ann. QQ % [dl\_cpi\_ener]

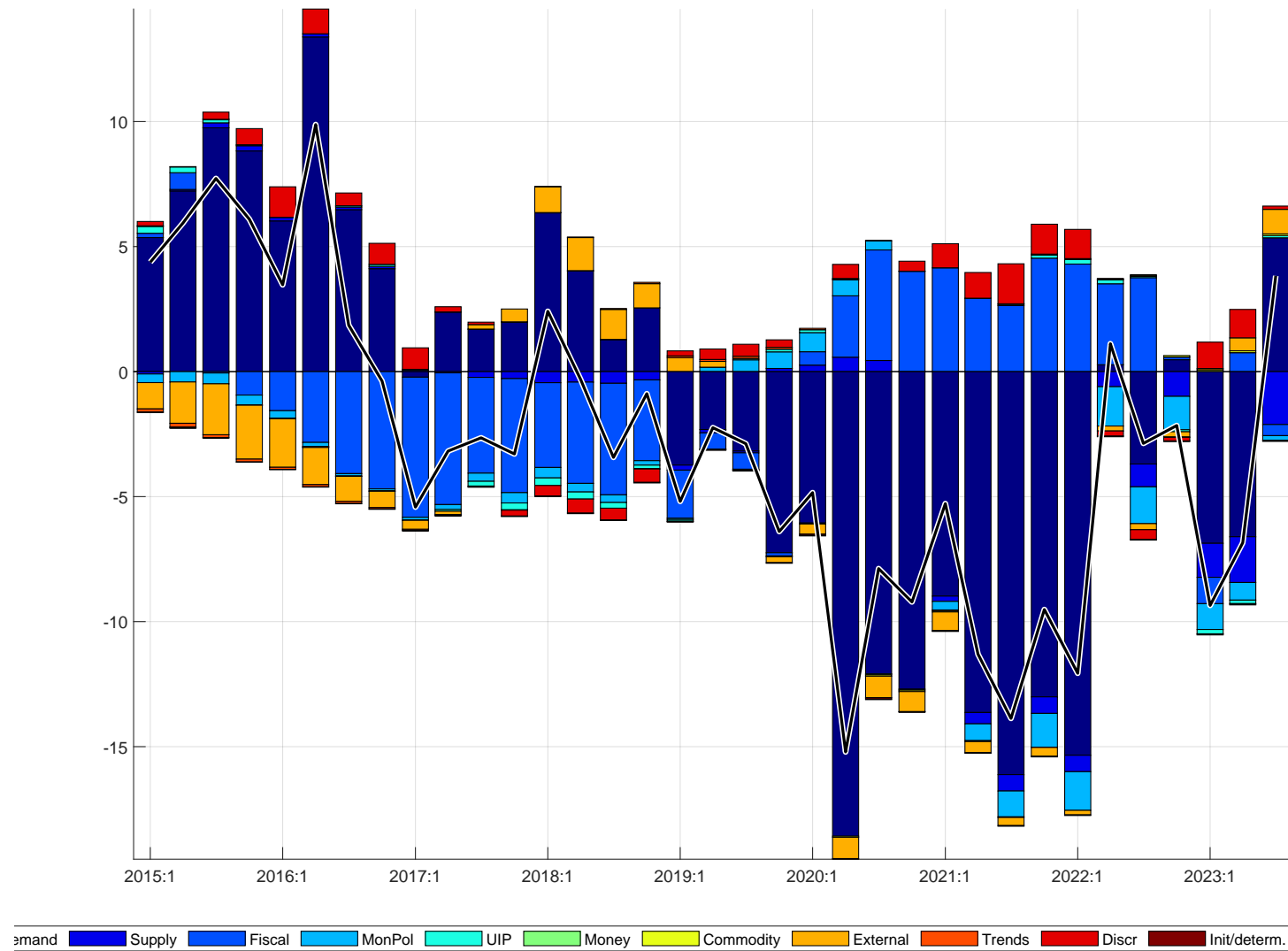


## Policy rate (IB rate used), % [i]

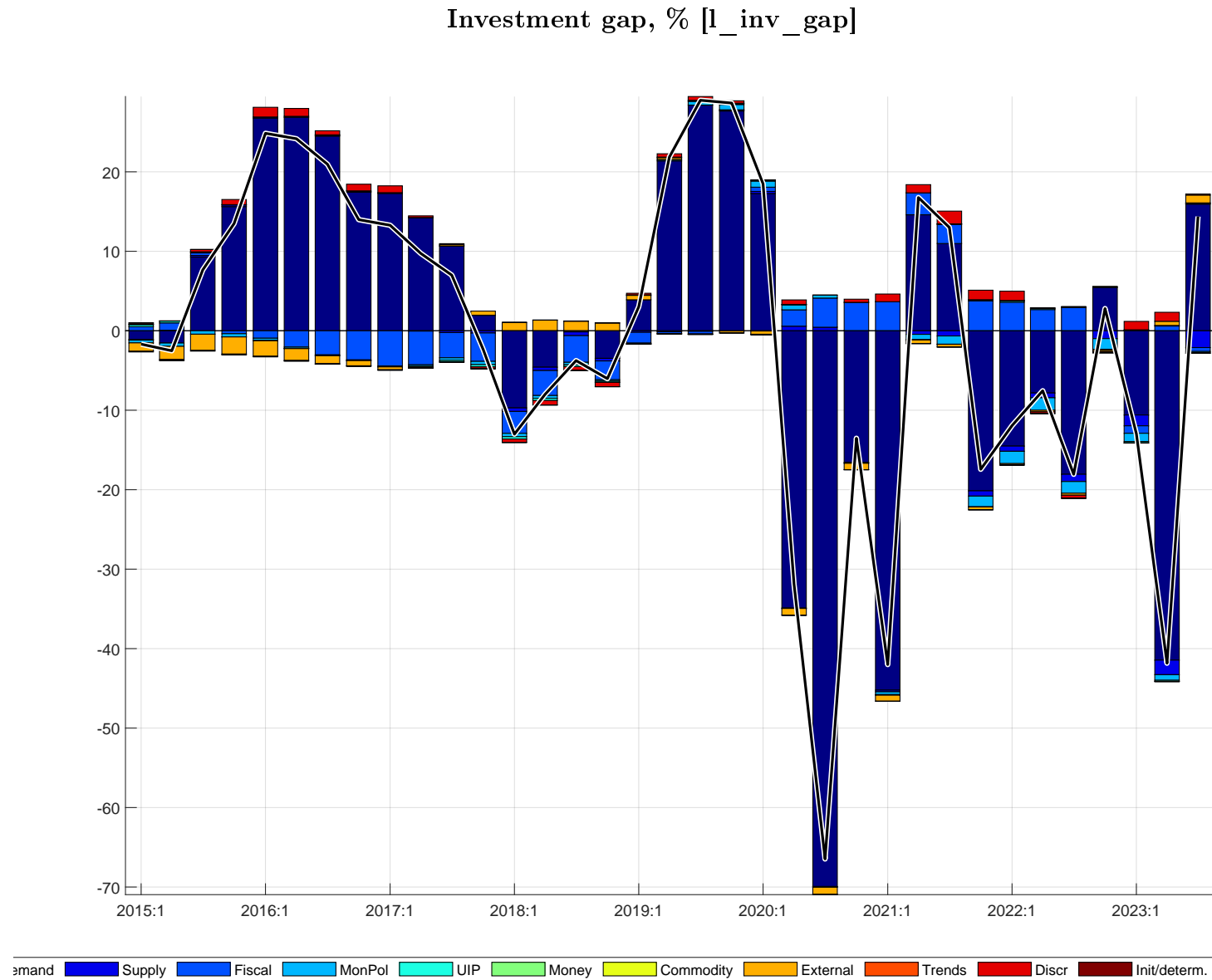




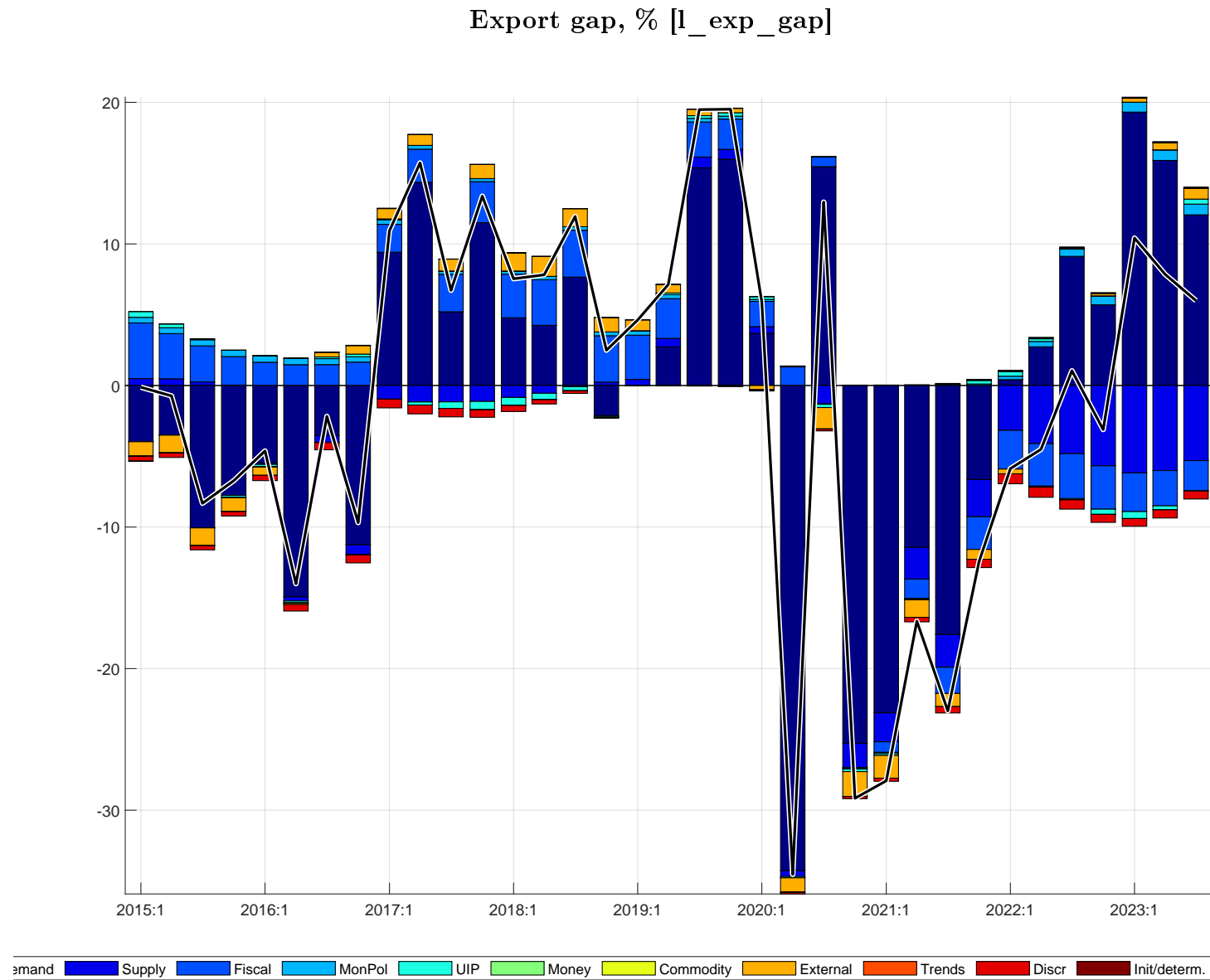
## Consumption gap, % [l\_cons\_gap]

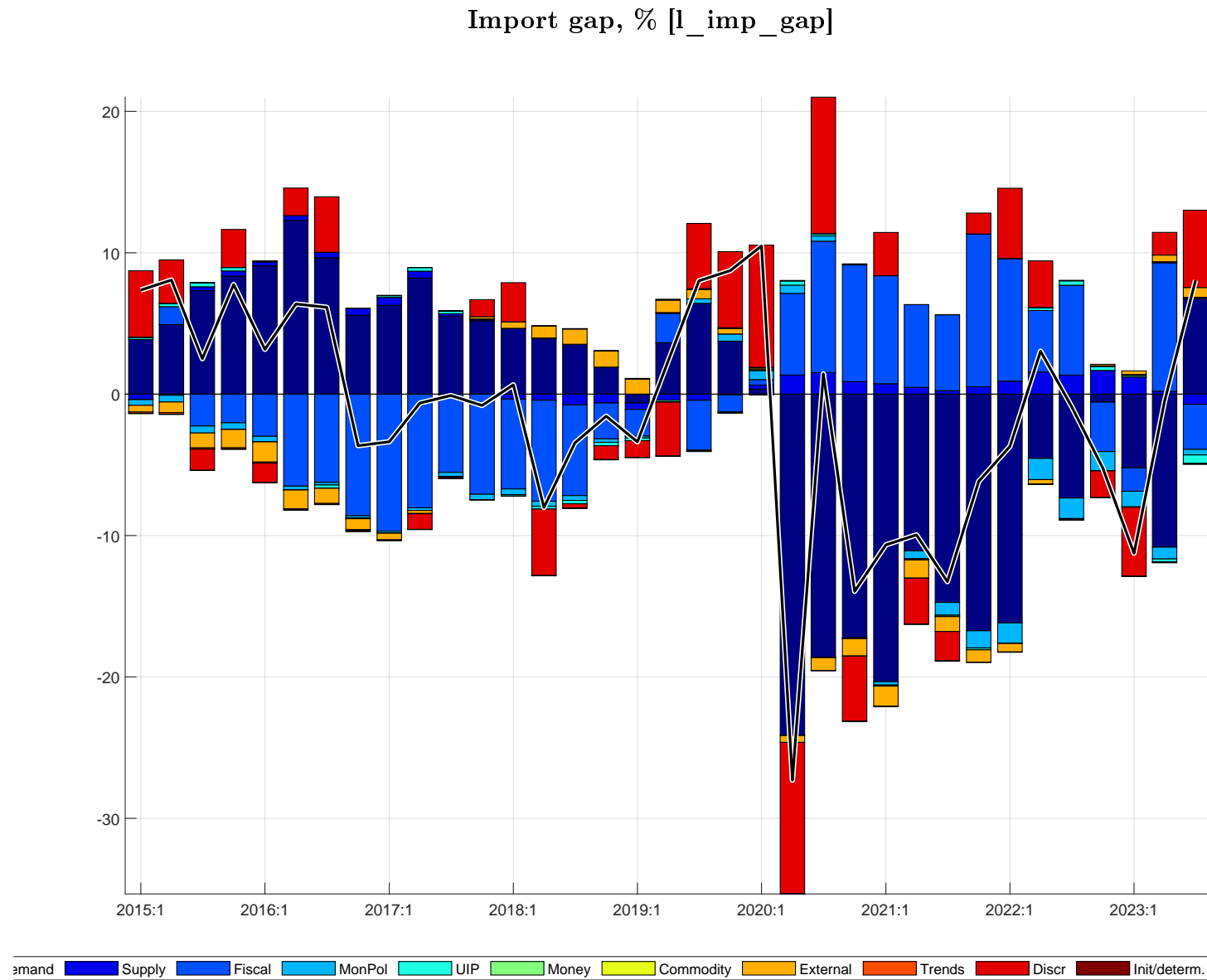


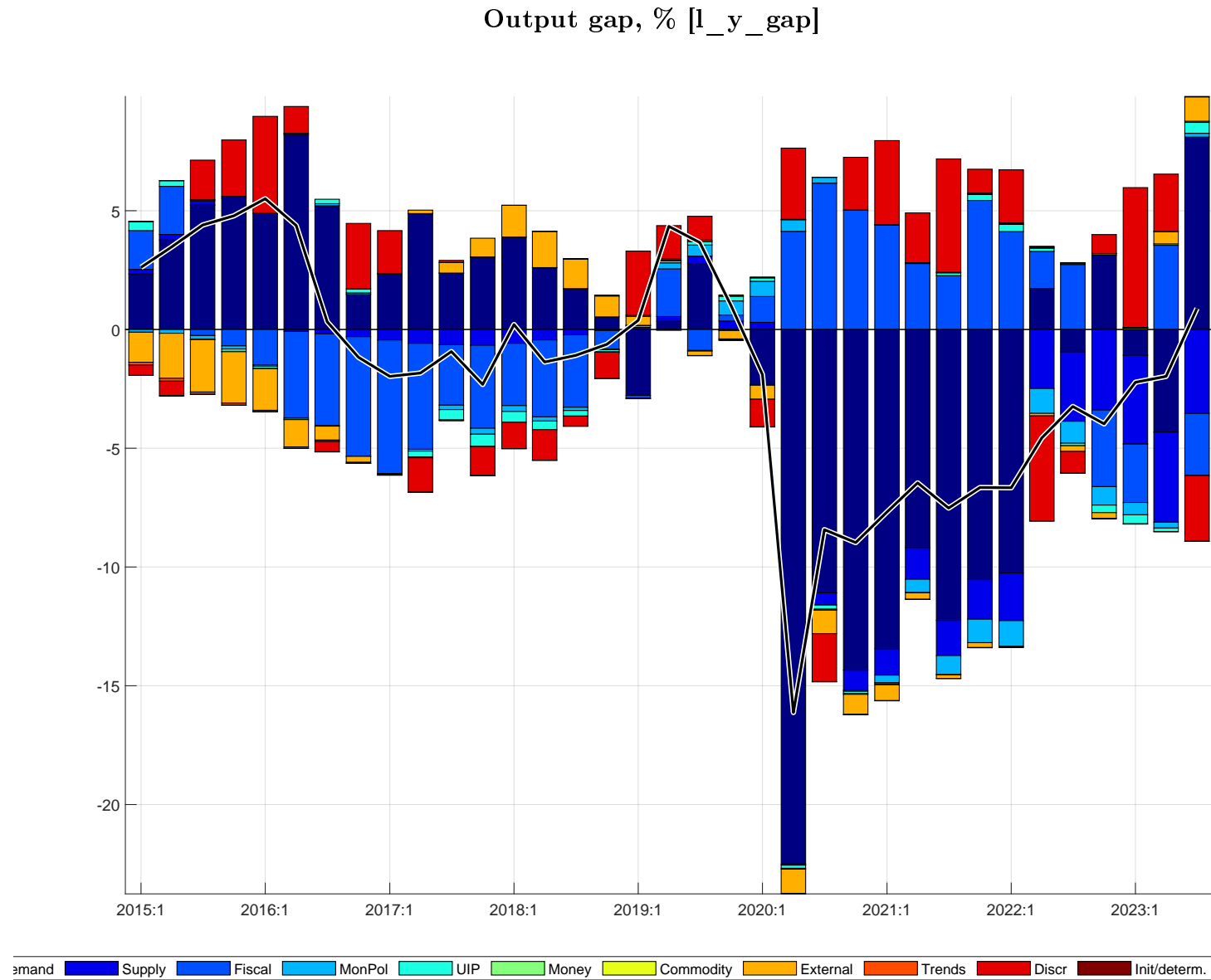




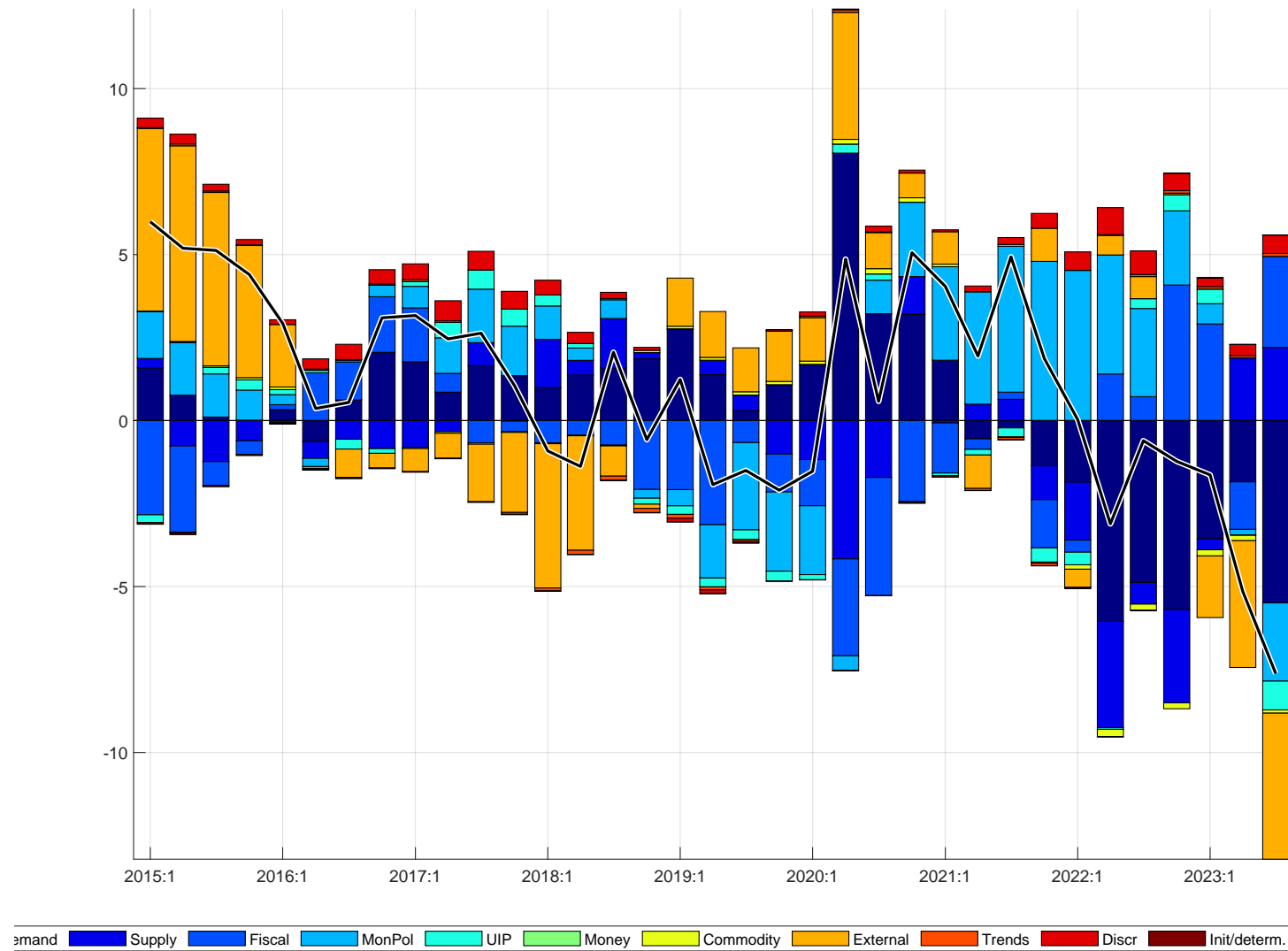




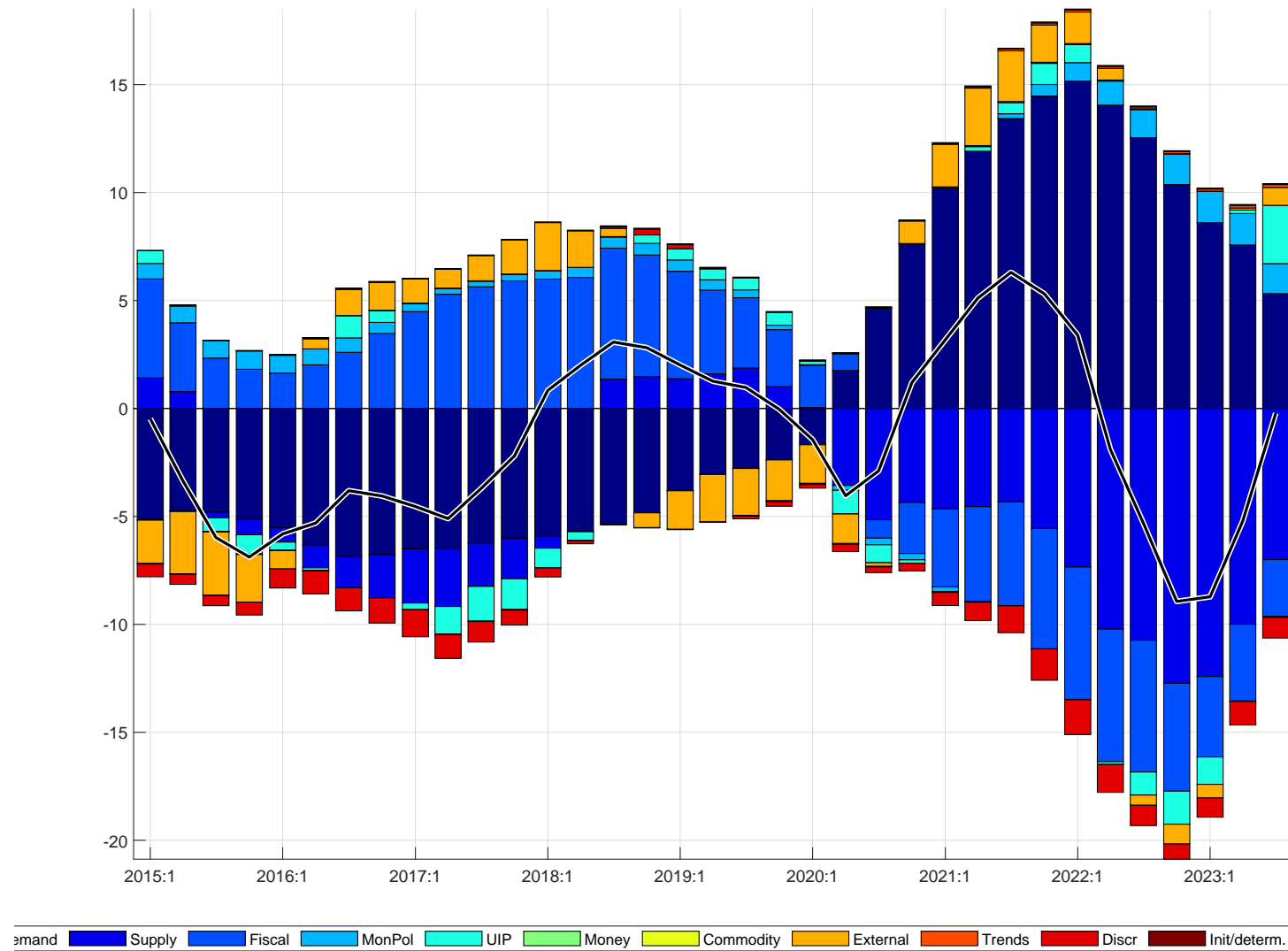




## Exptd. RIR (lending) gap, 4-Q ahead av., % [r4\_gap]



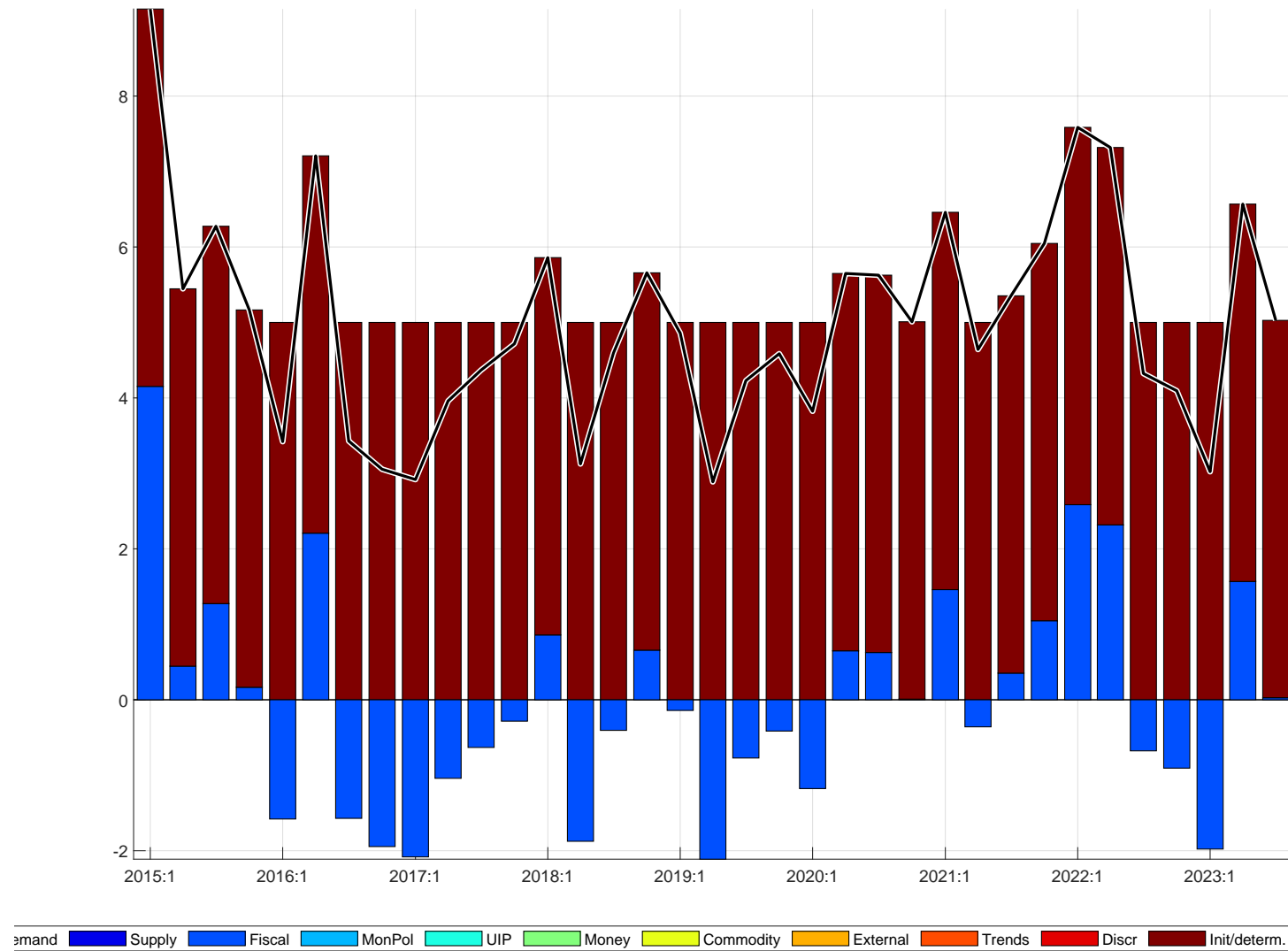
## Real exchng. rate gap, % [l\_z\_gap]







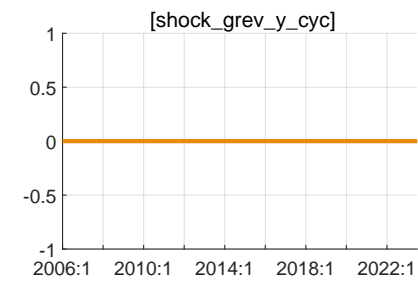
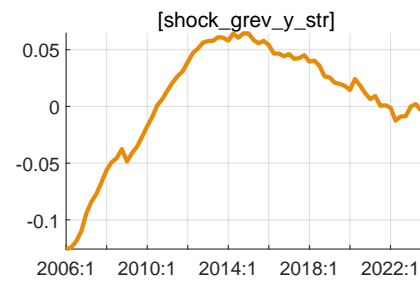
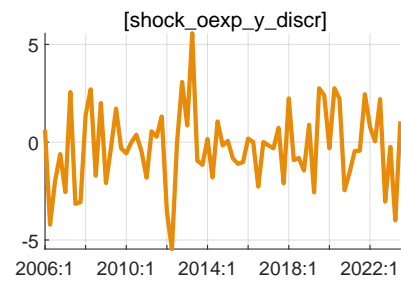
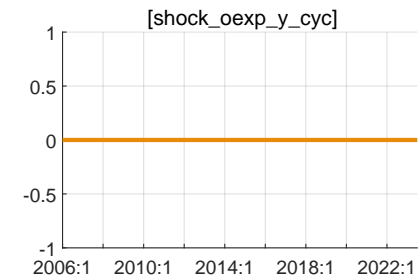
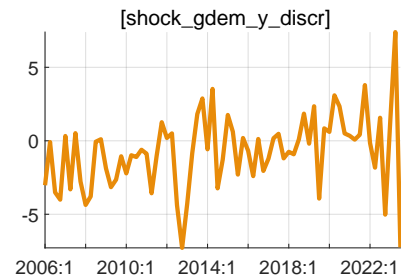
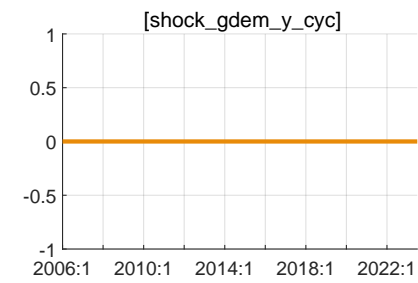
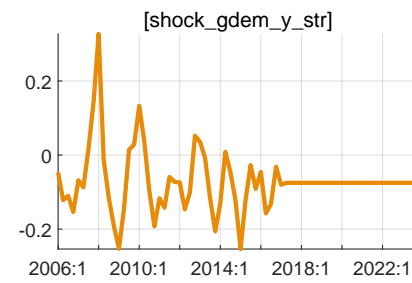
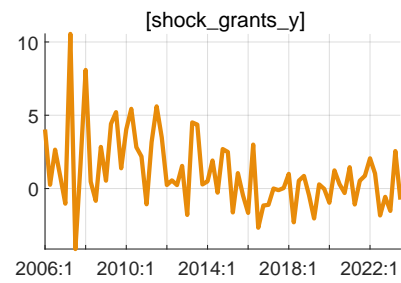
## Fiscal grants, % of GDP [grants\_y]



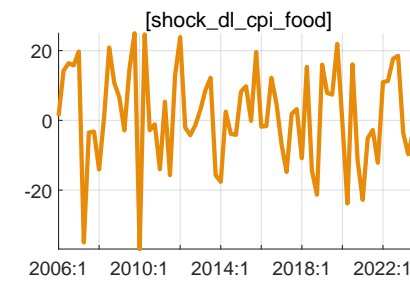
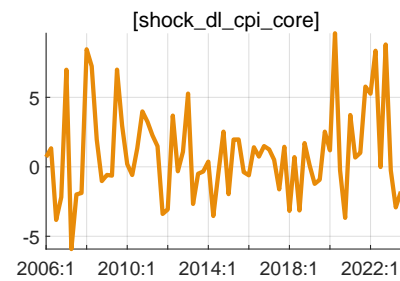
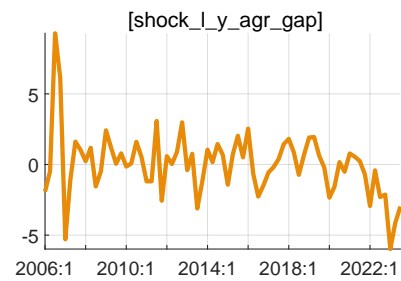
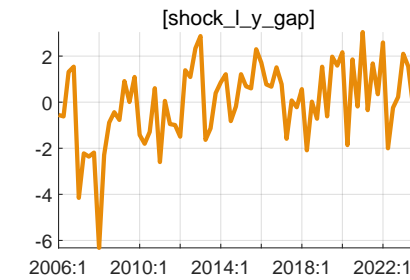
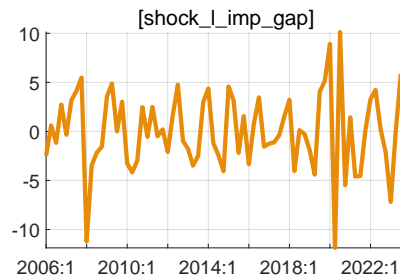
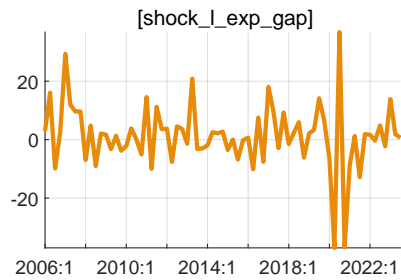
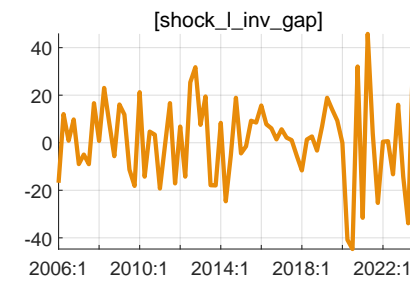
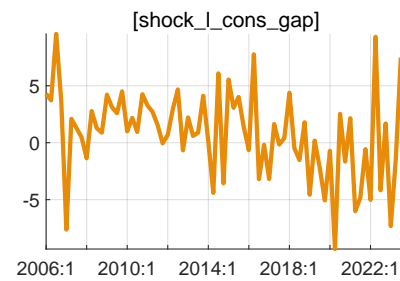
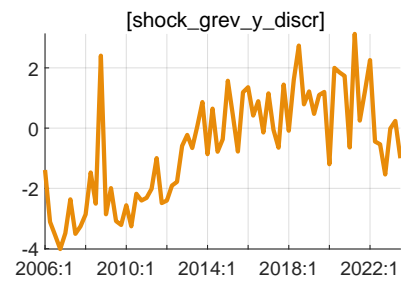
## 6 Shocks



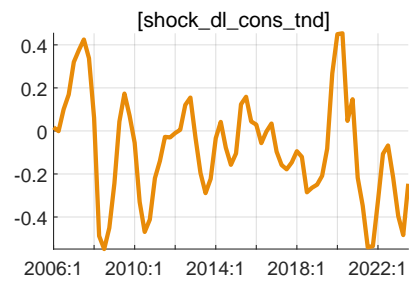
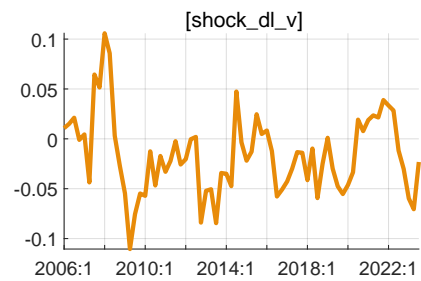
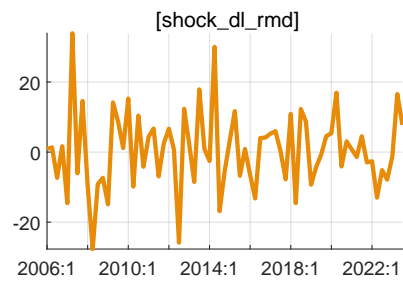
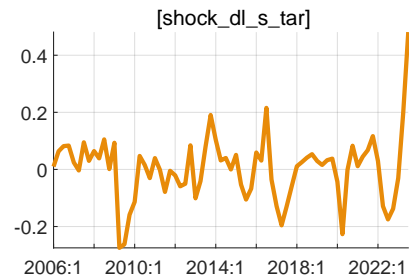
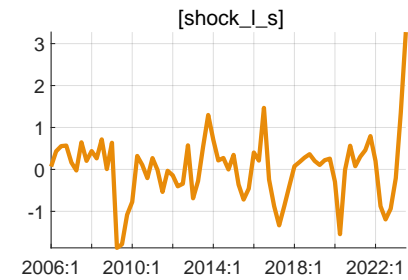
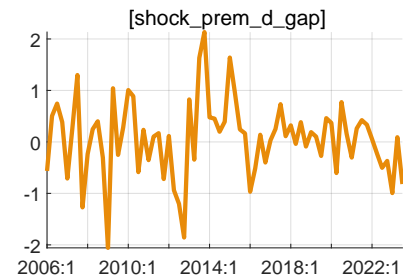
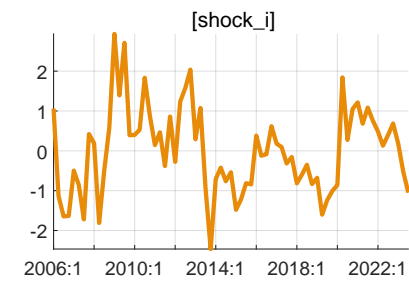
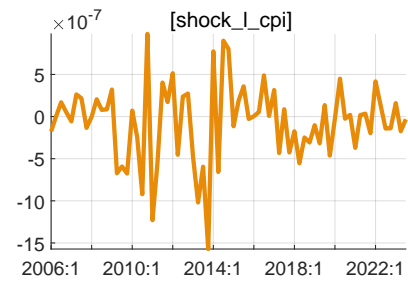
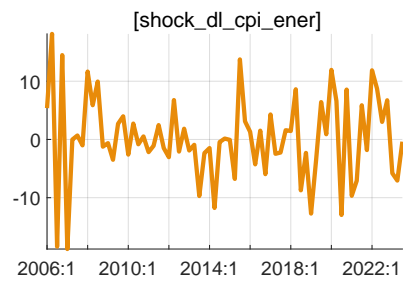
## Shocks (page 1)



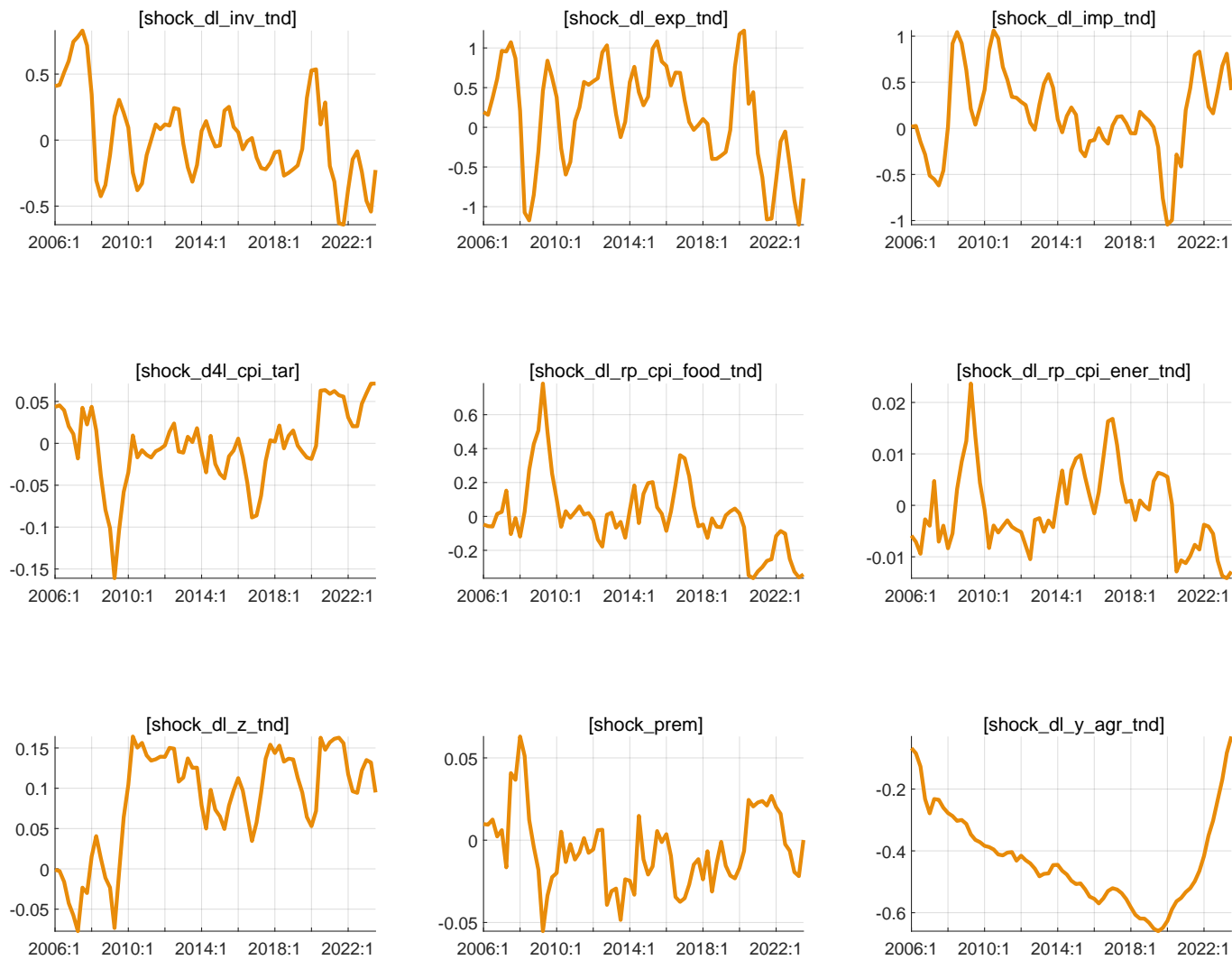
## Shocks (page 2)



## Shocks (page 3)



## Shocks (page 4)



## Shocks (page 5)

