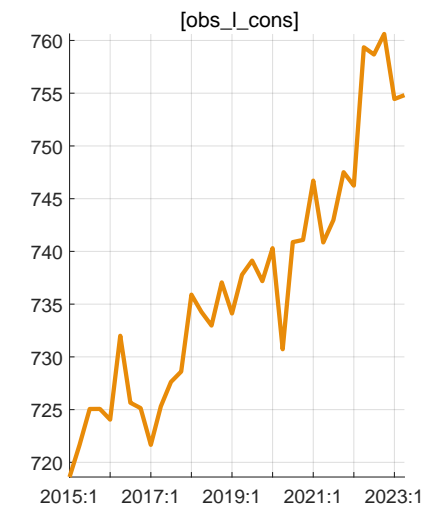
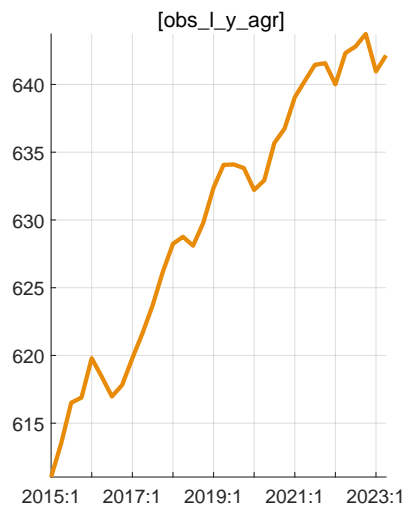
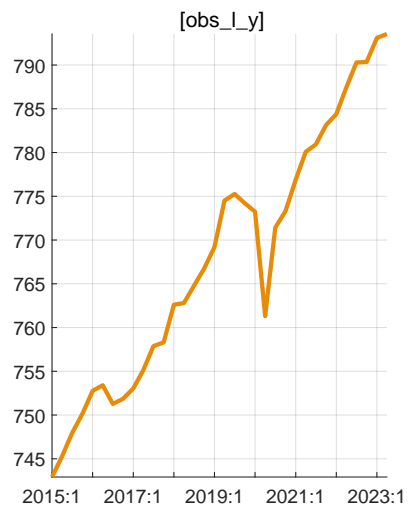
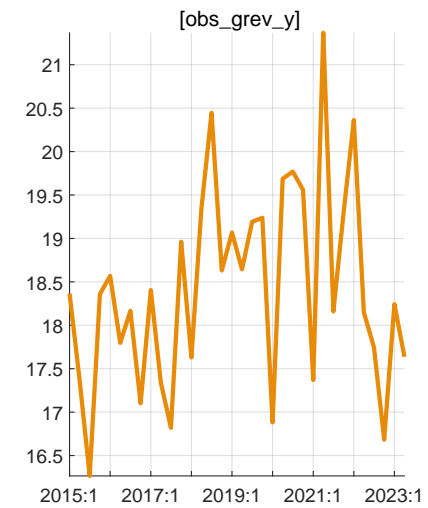
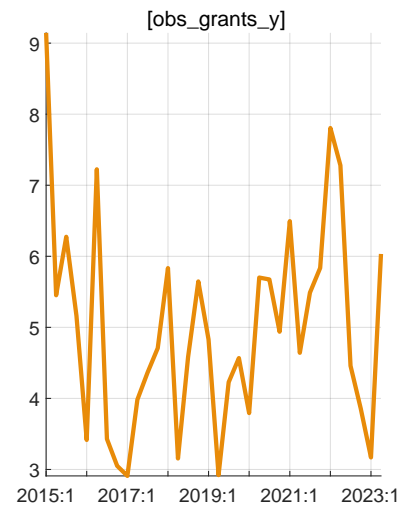
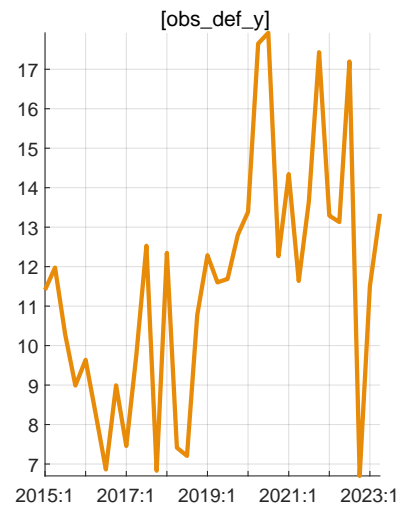


Observed and filtered data

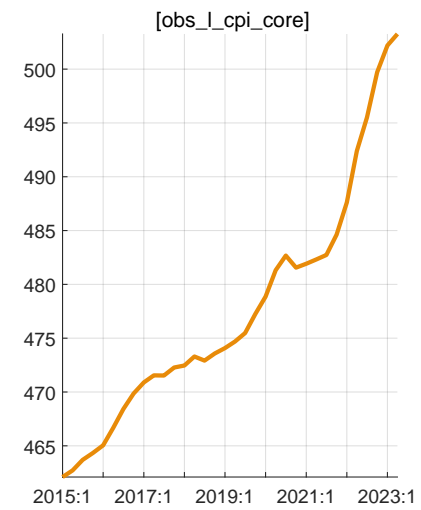
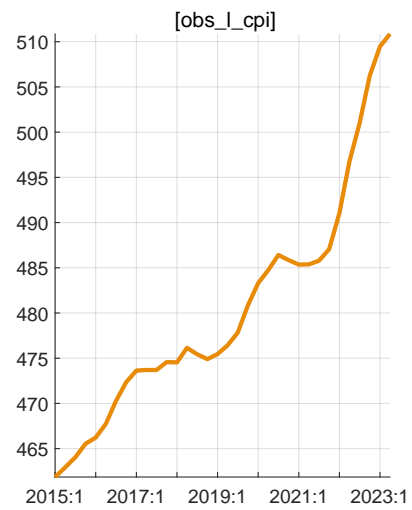
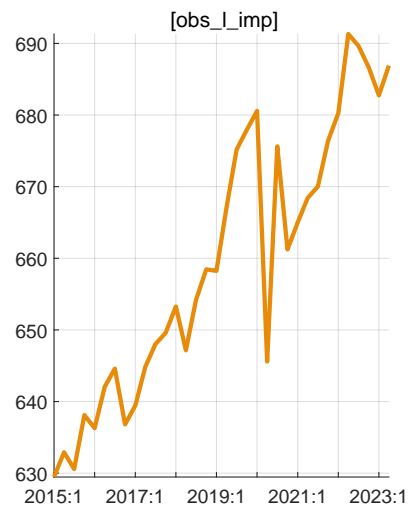
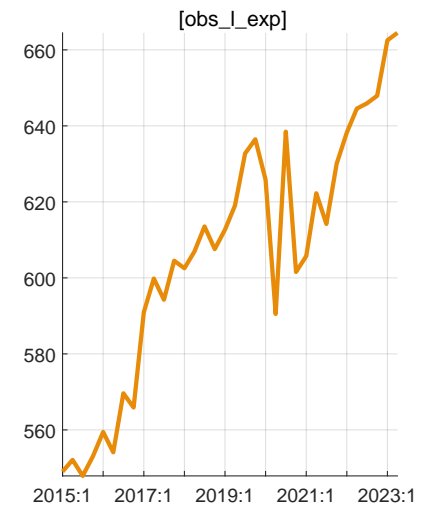
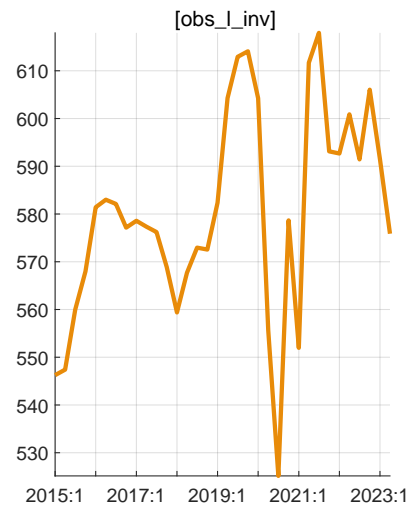
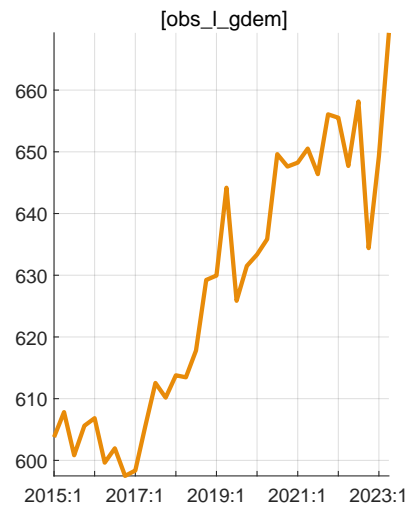
Round: 2023 Nov main round, time: 16-Sep-2024 19:39:57.

1 Observed data

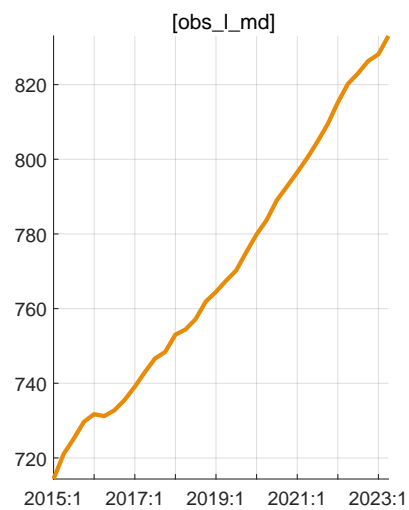
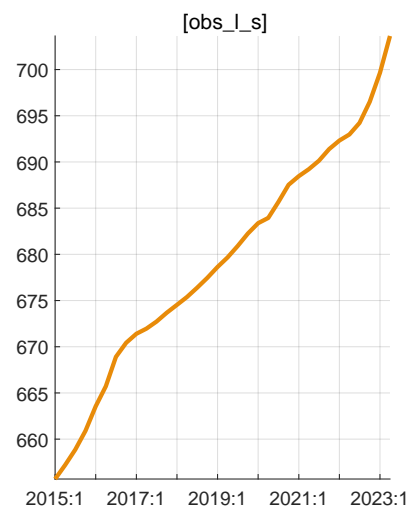
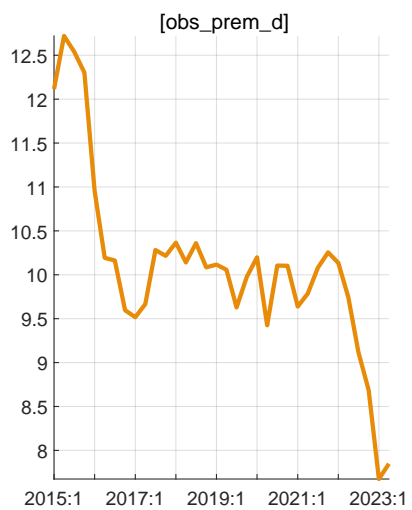
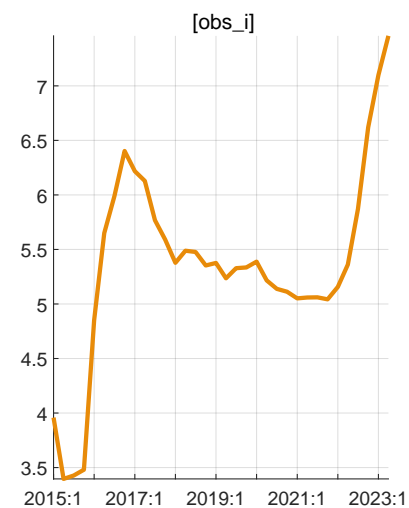
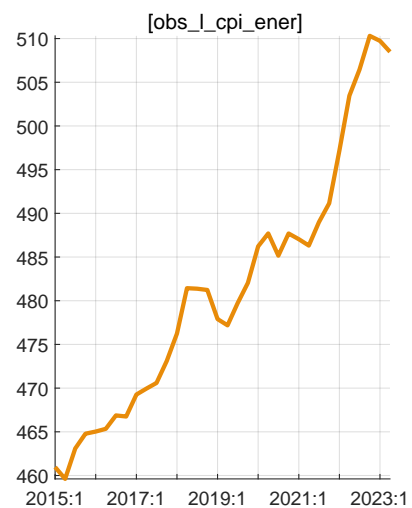
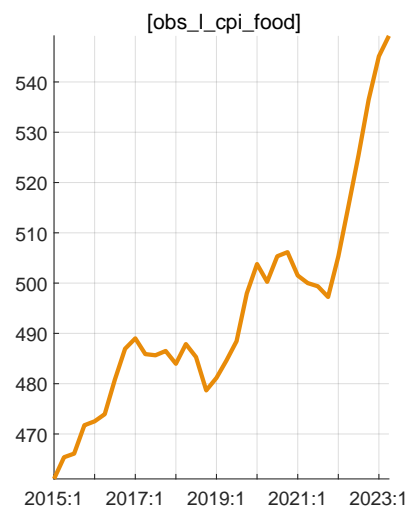
Observed data (page 1)



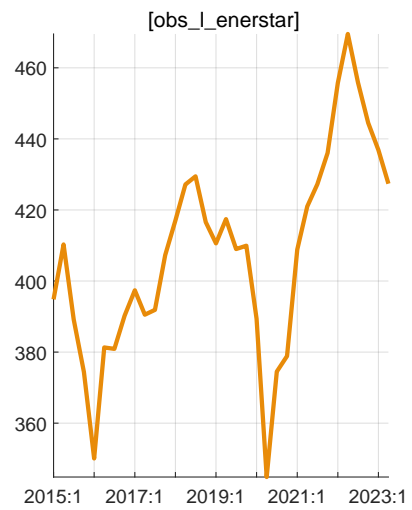
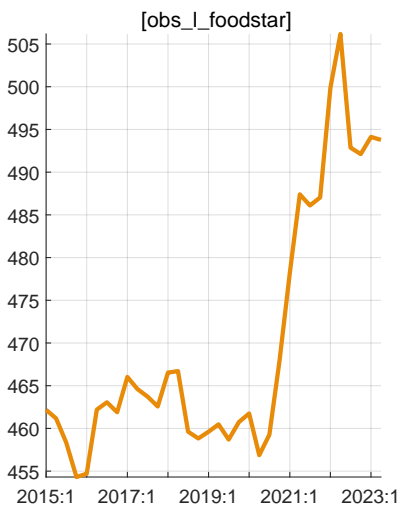
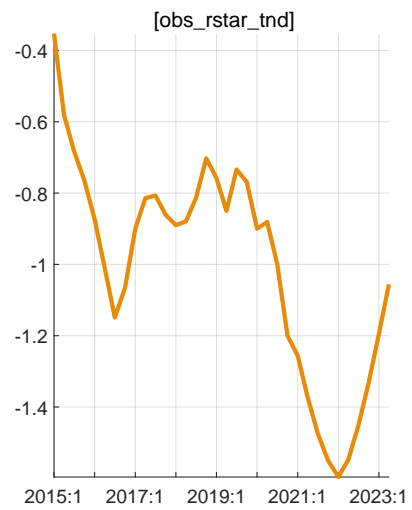
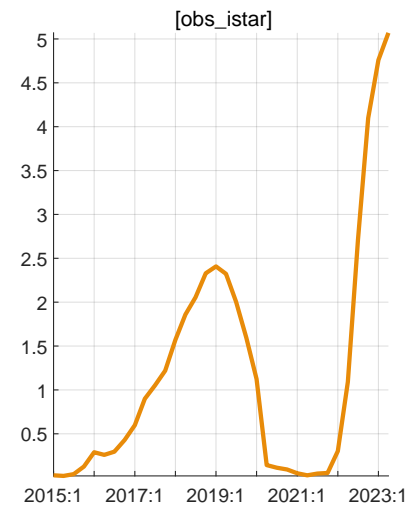
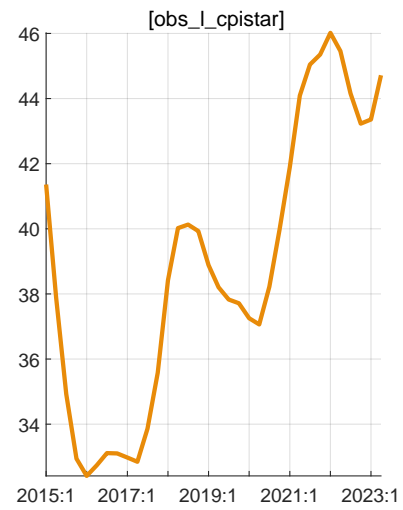
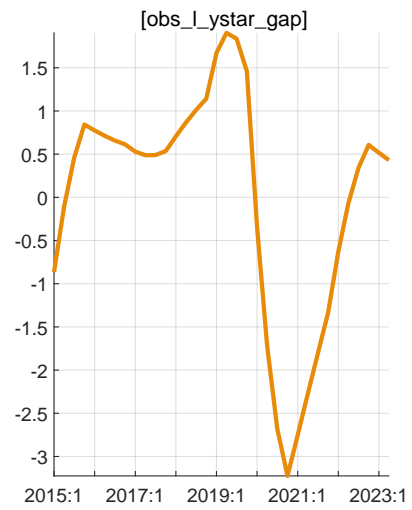
Observed data (page 2)



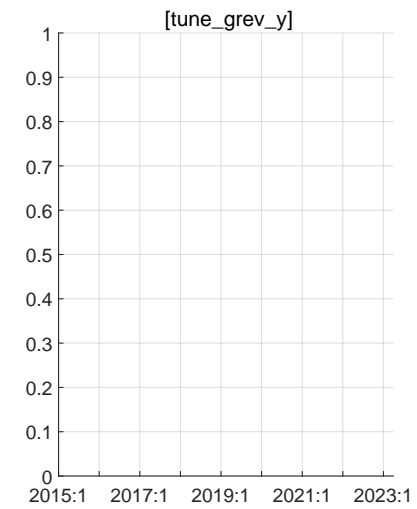
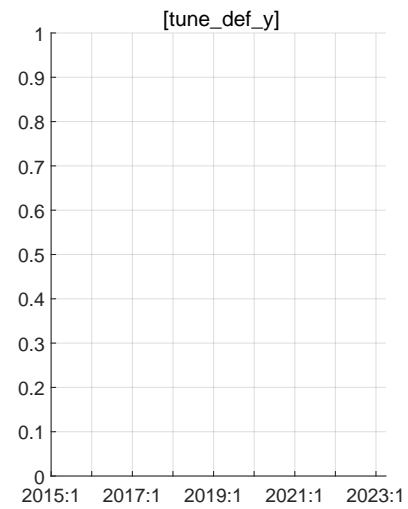
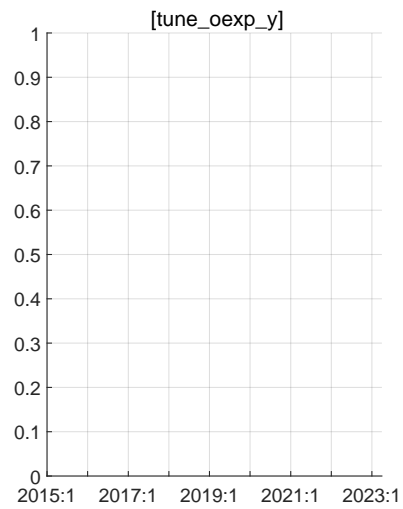
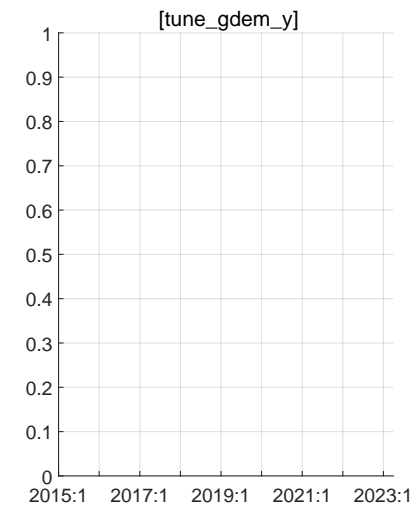
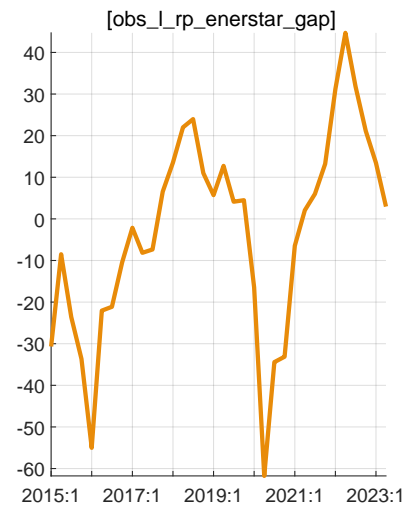
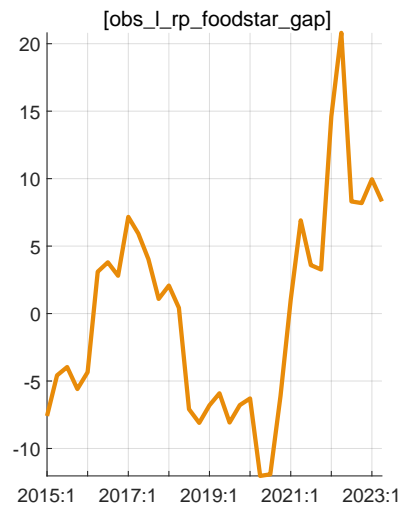
Observed data (page 3)

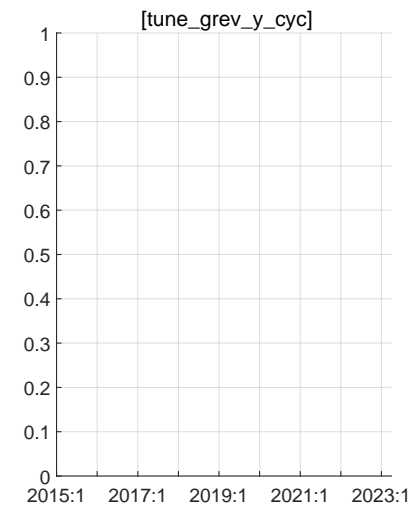
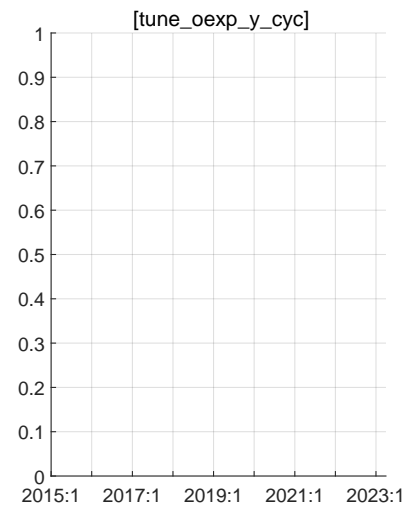
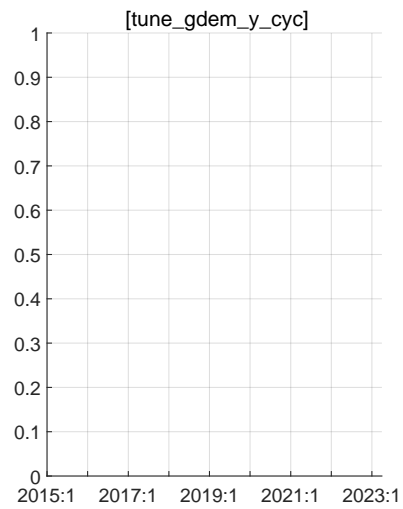
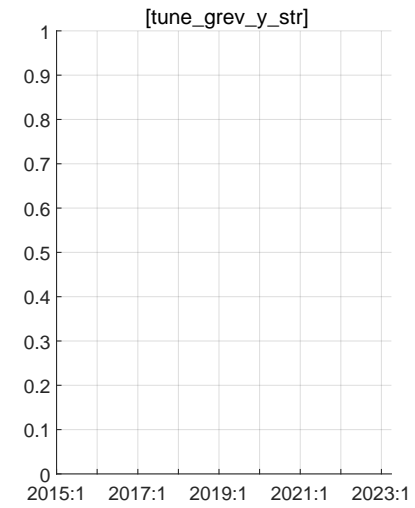
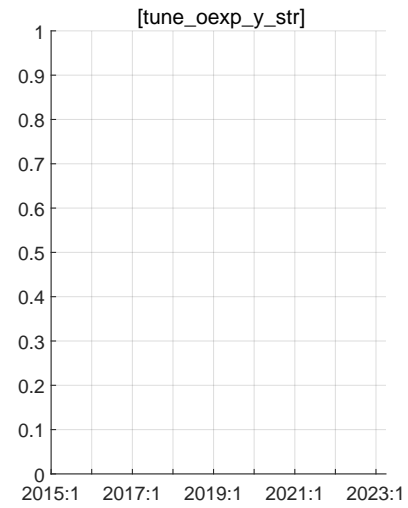
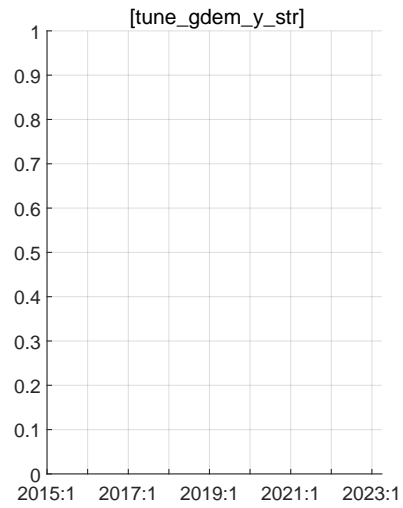


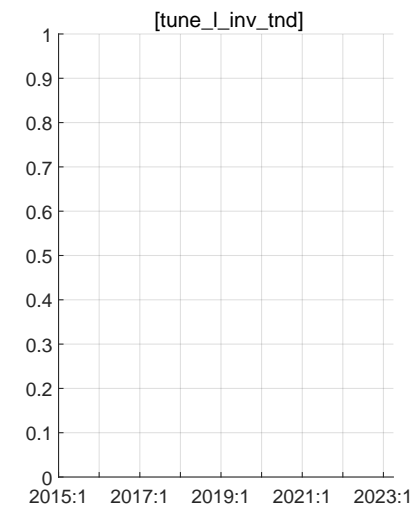
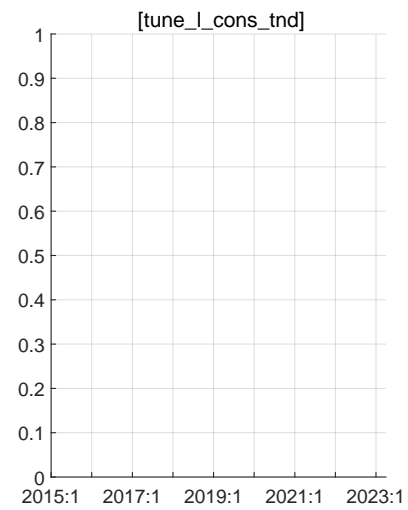
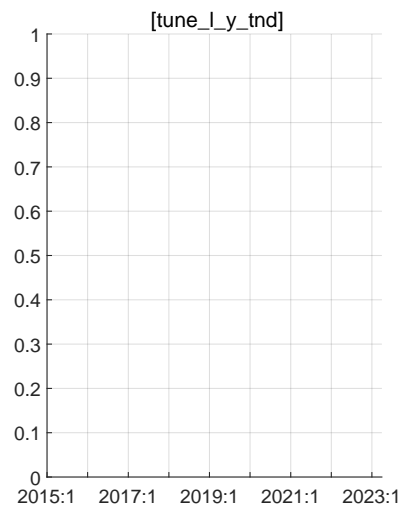
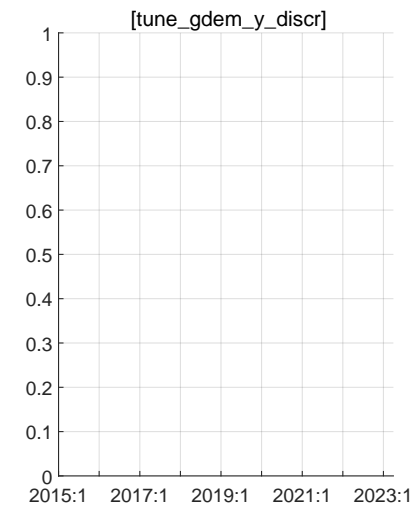
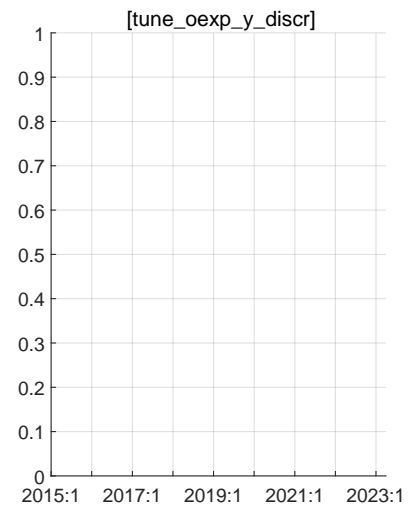
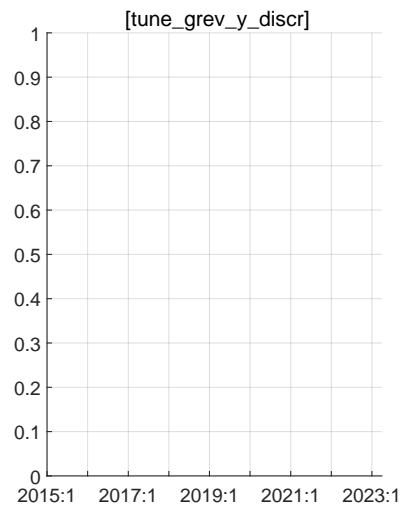
Observed data (page 4)

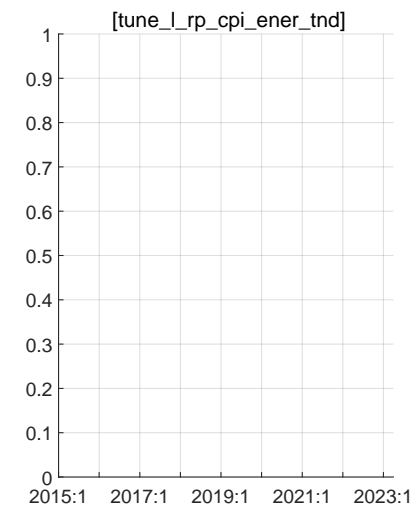
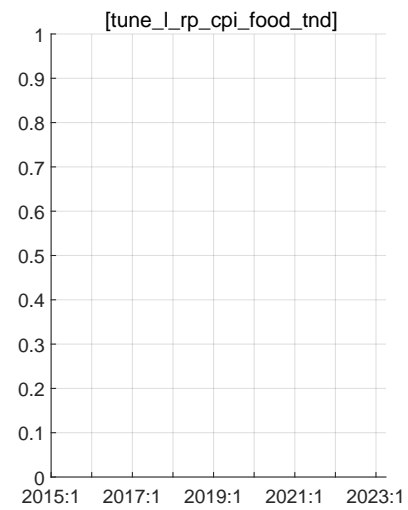
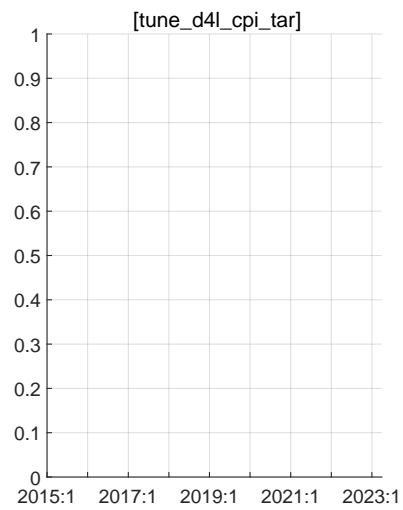
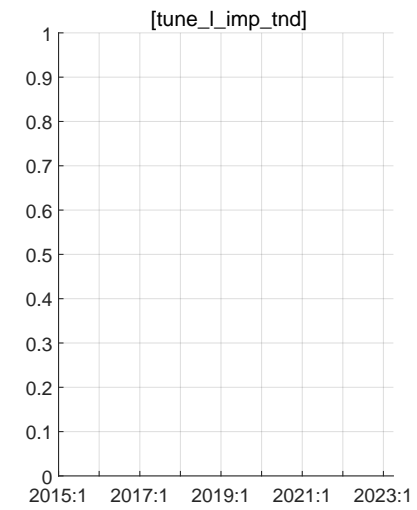
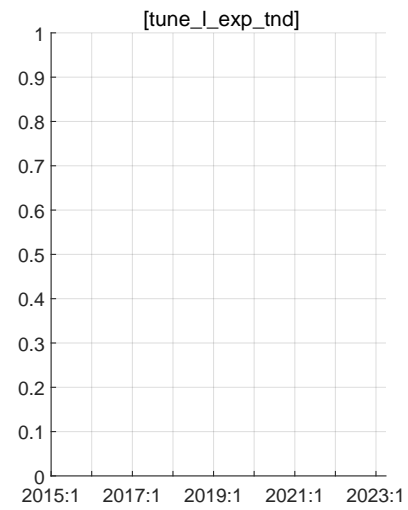
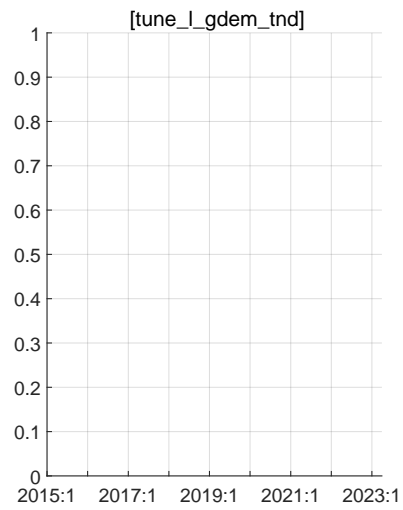


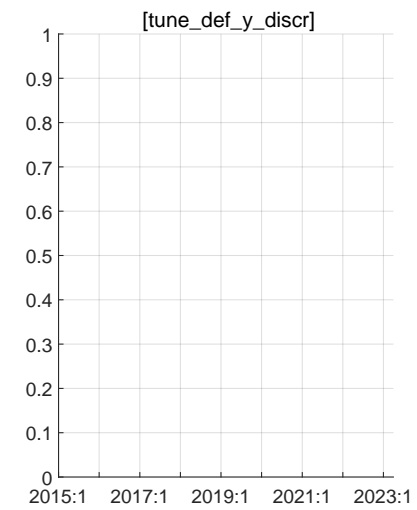
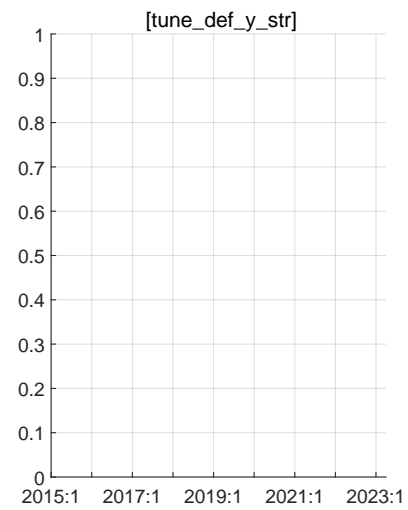
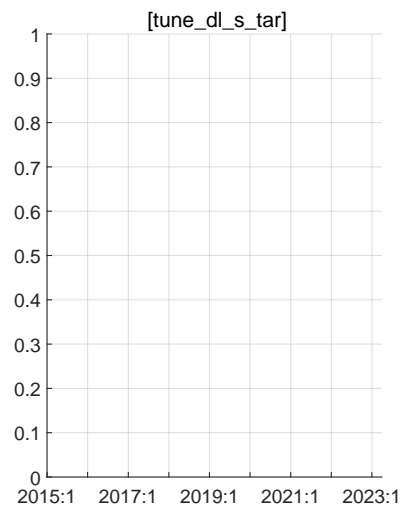
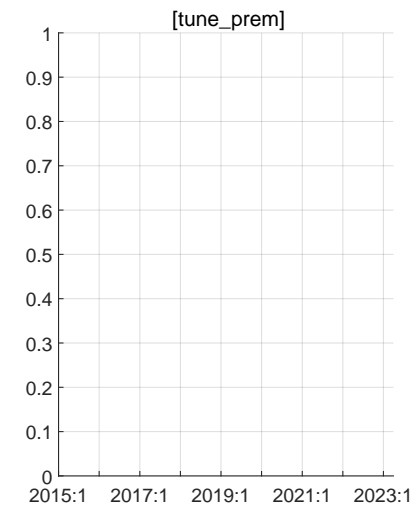
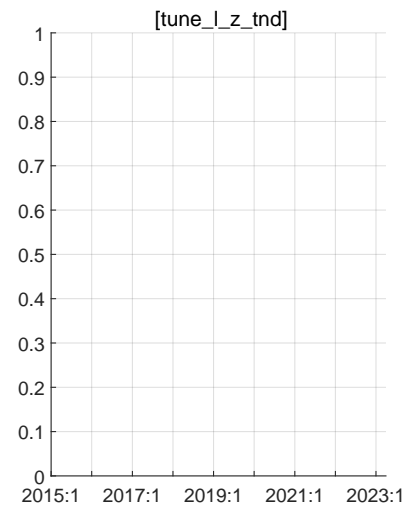
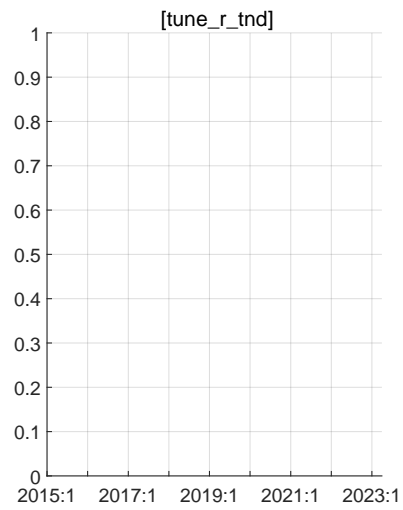
Observed data (page 5)



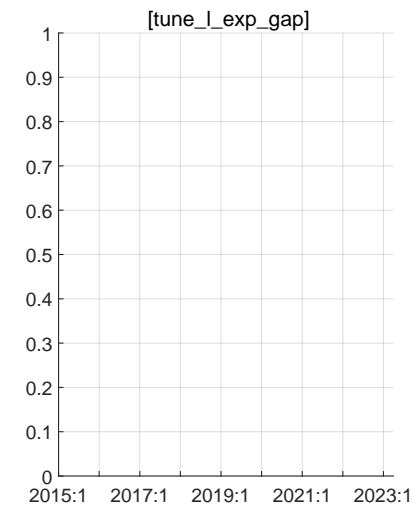
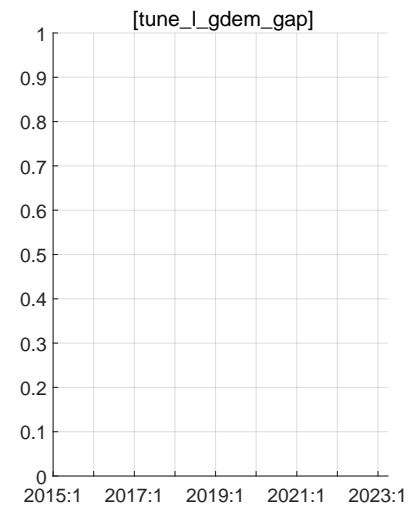
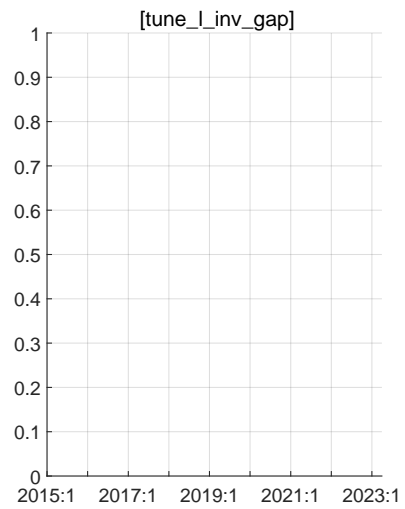
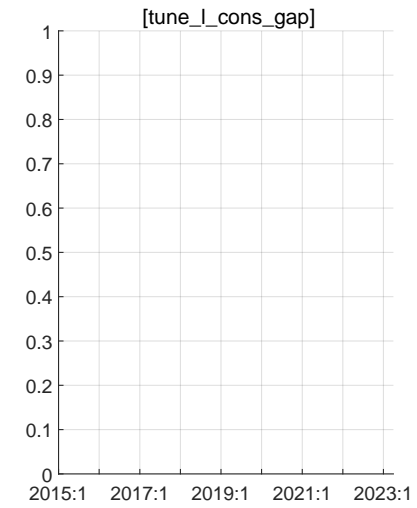
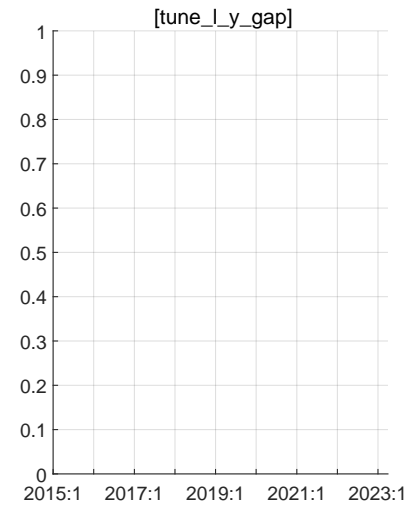
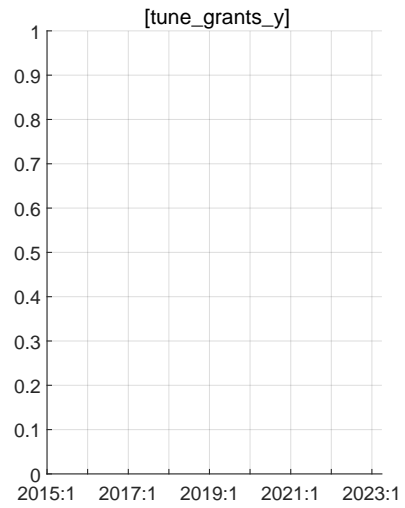
Observed data (page 6)

Observed data (page 7)

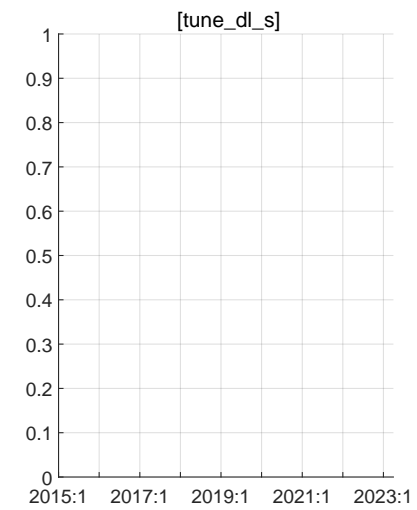
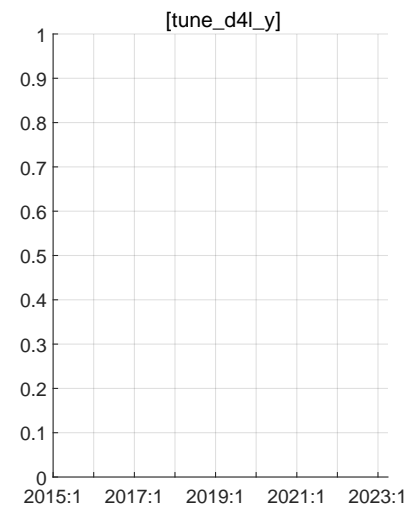
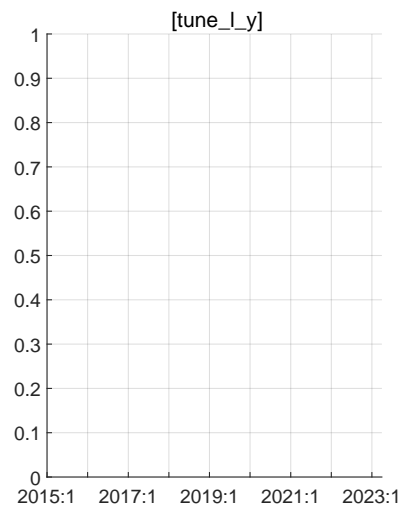
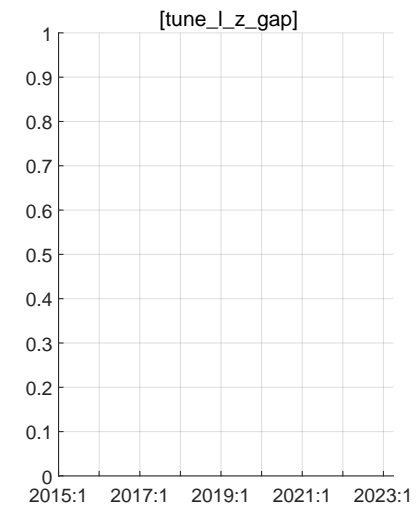
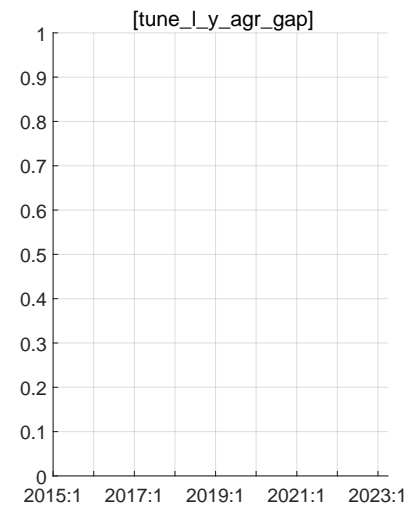
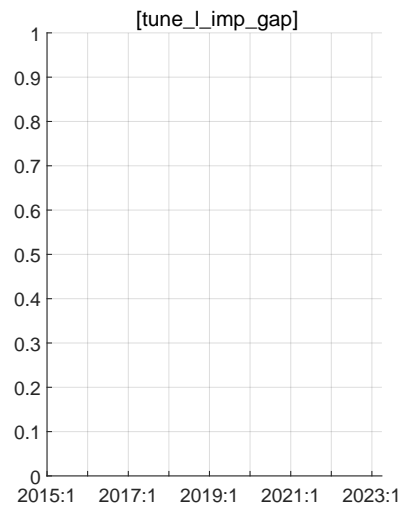
Observed data (page 8)

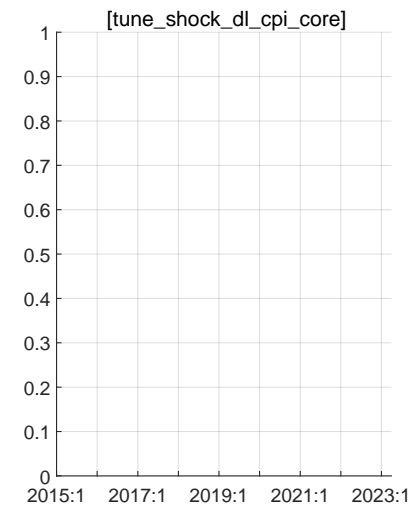
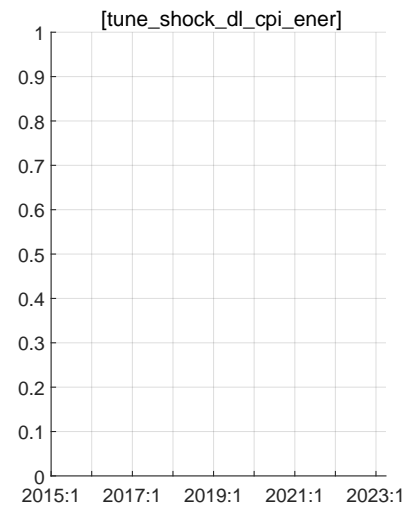
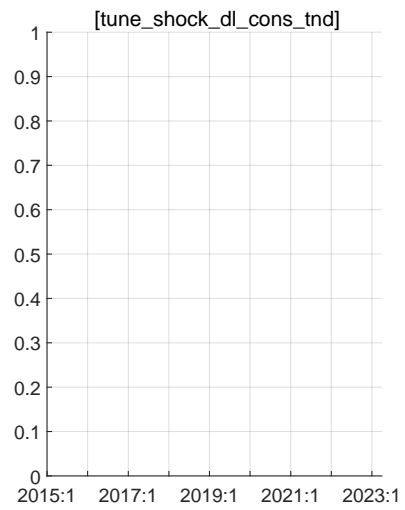
Observed data (page 9)

Observed data (page 10)

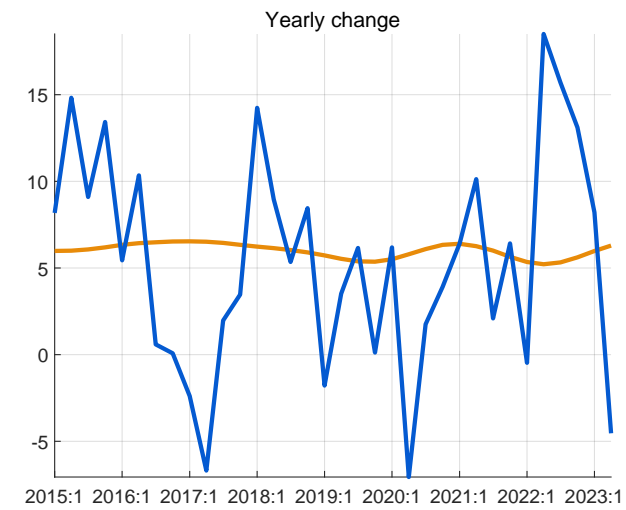
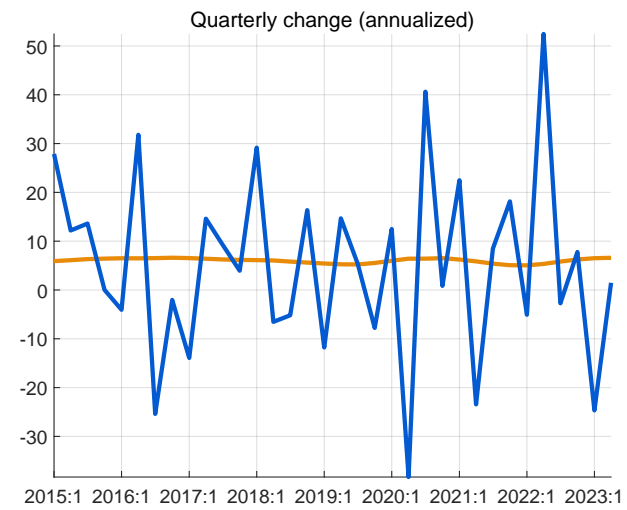
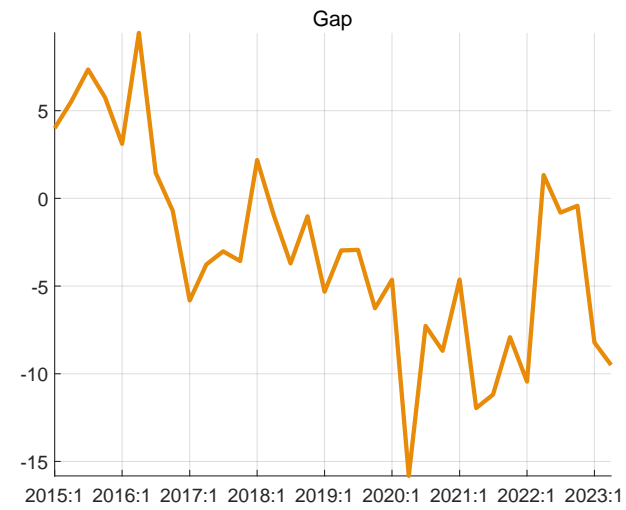
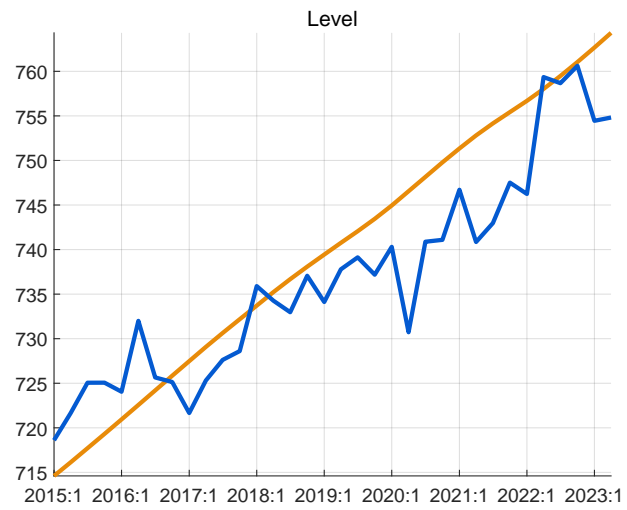


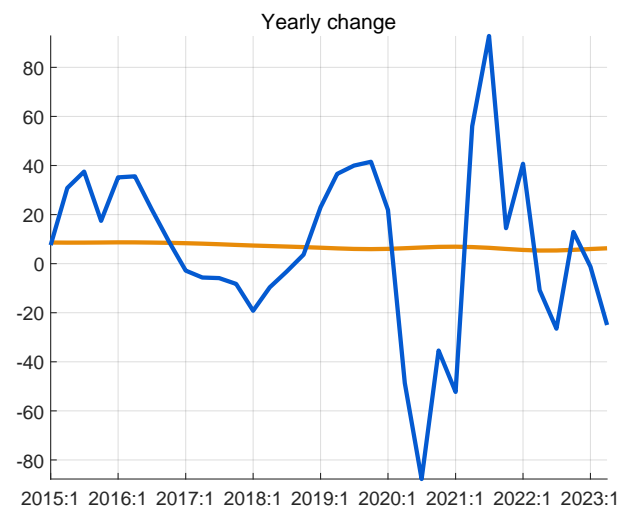
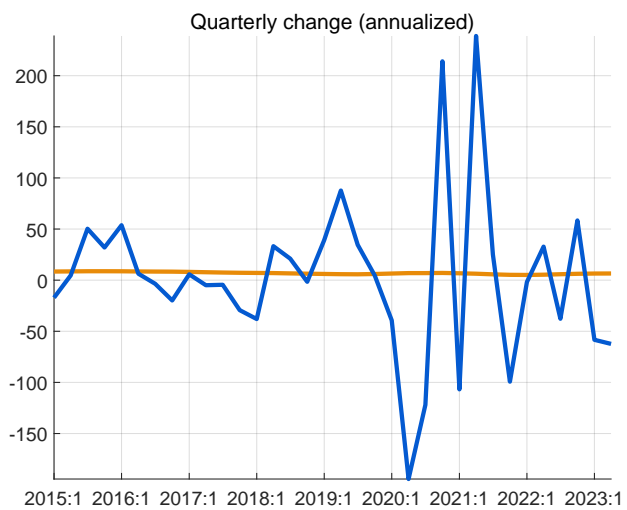
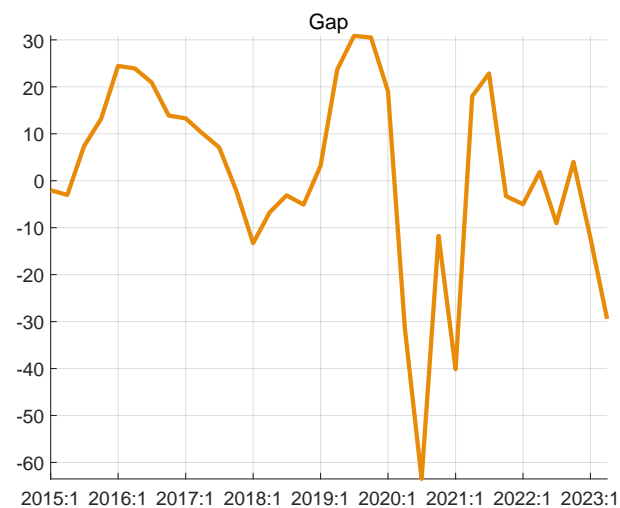
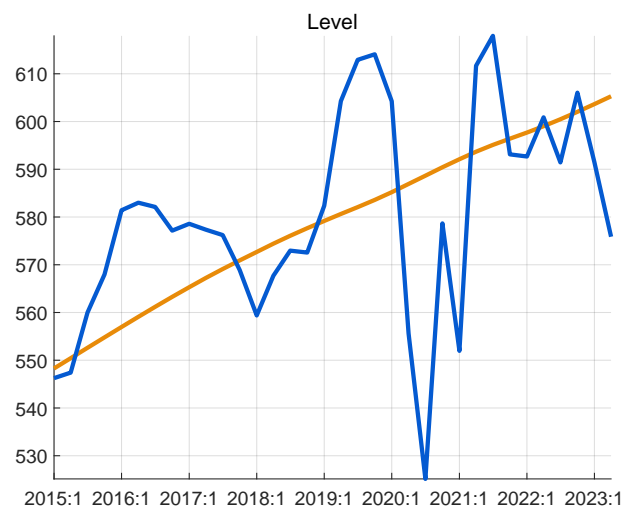
Observed data (page 11)



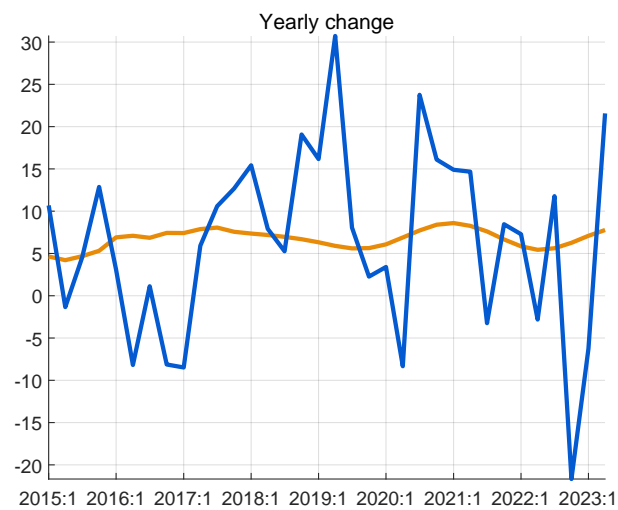
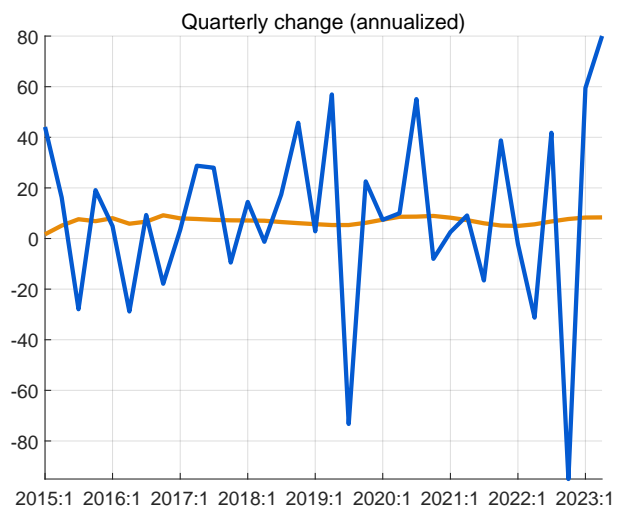
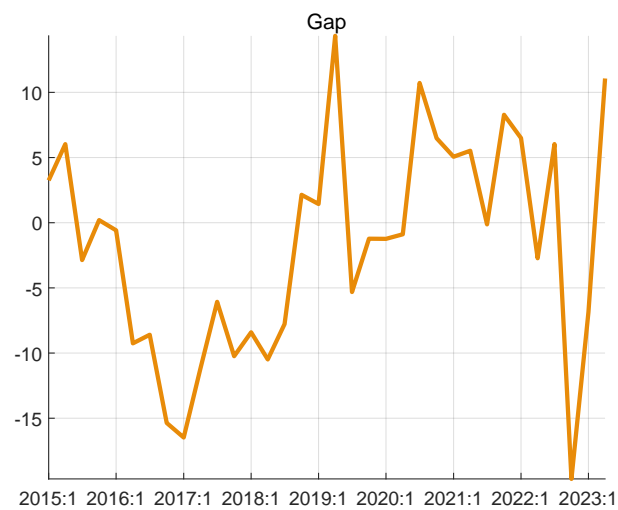
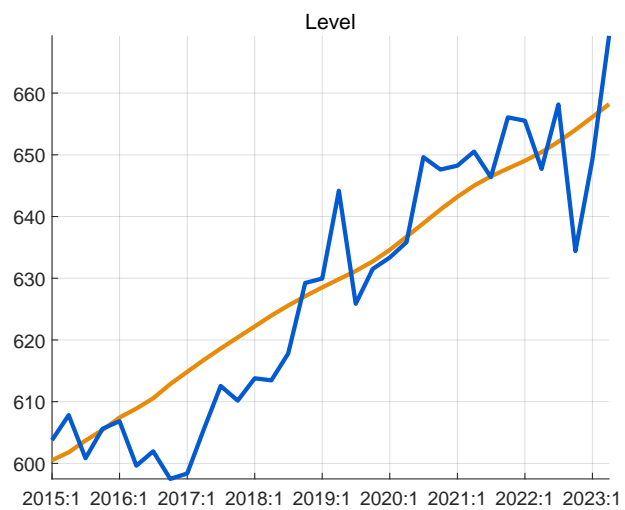
Observed data (page 12)

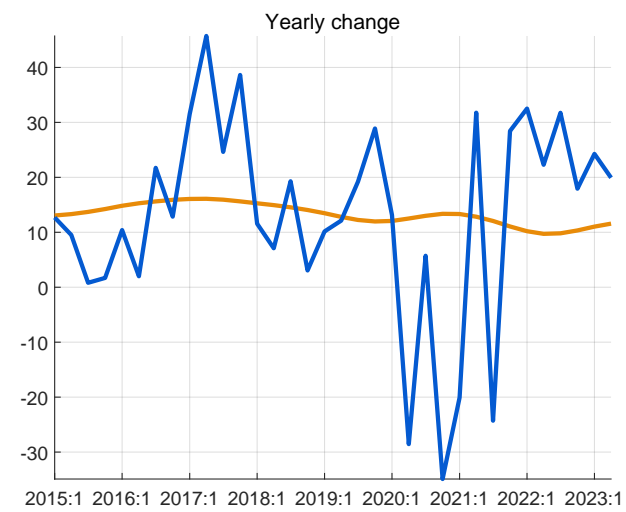
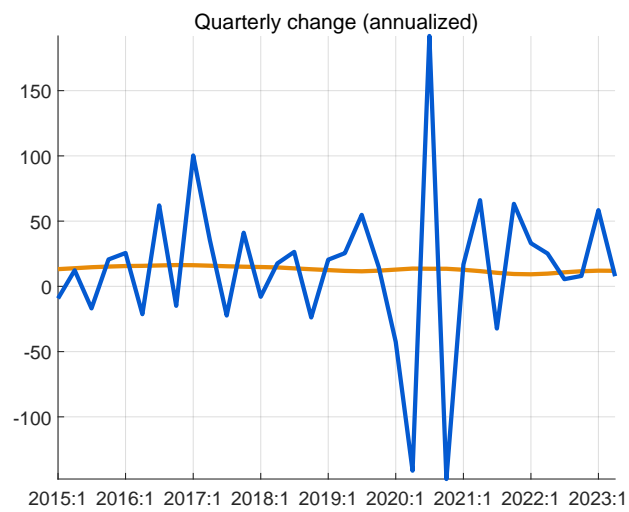
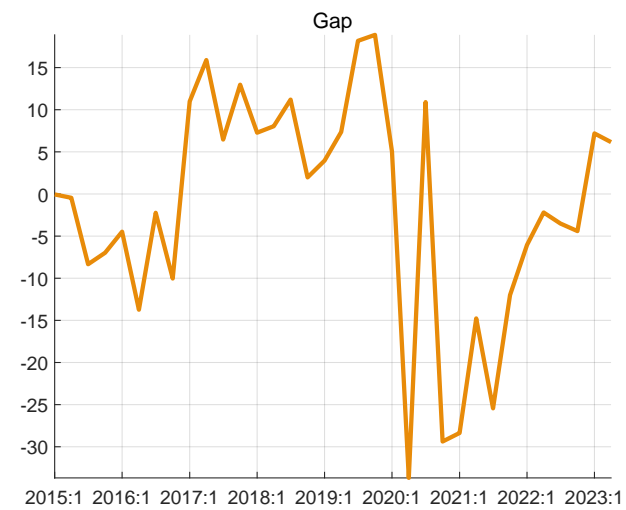
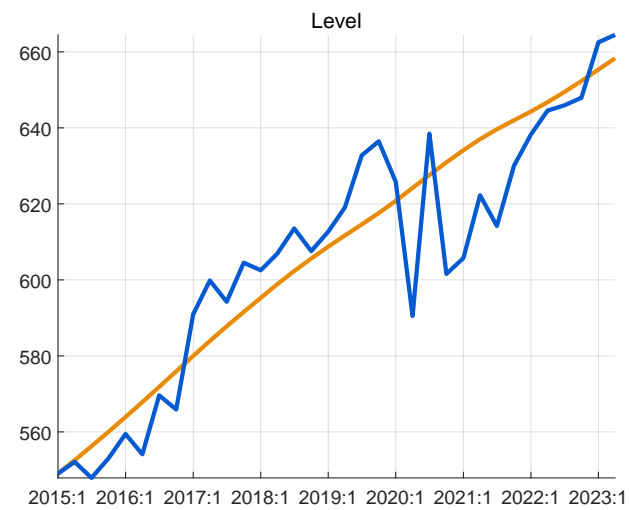
2 Trends and gaps

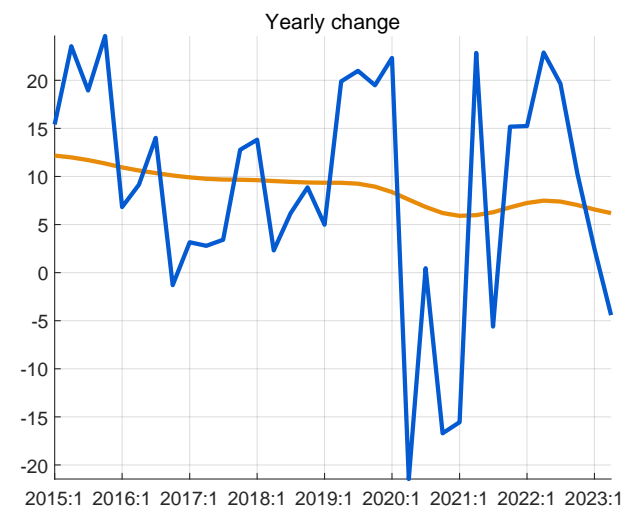
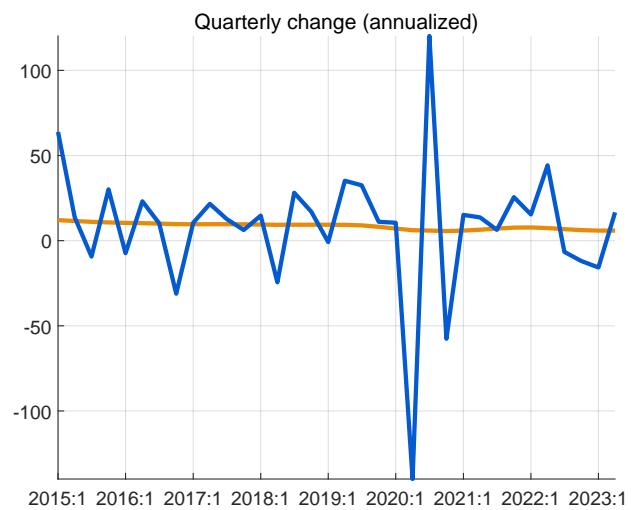
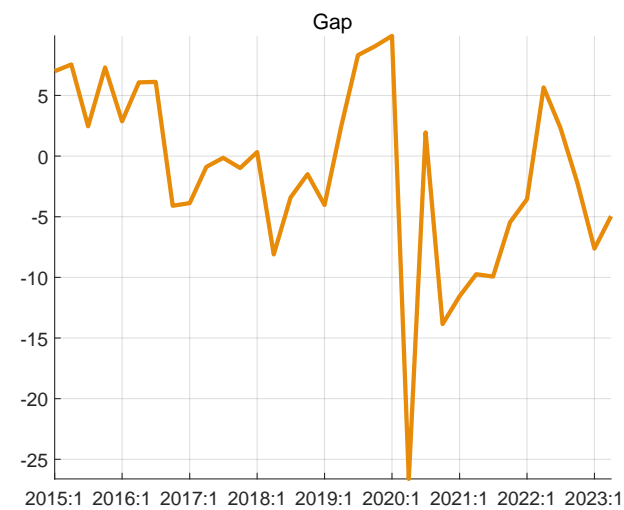
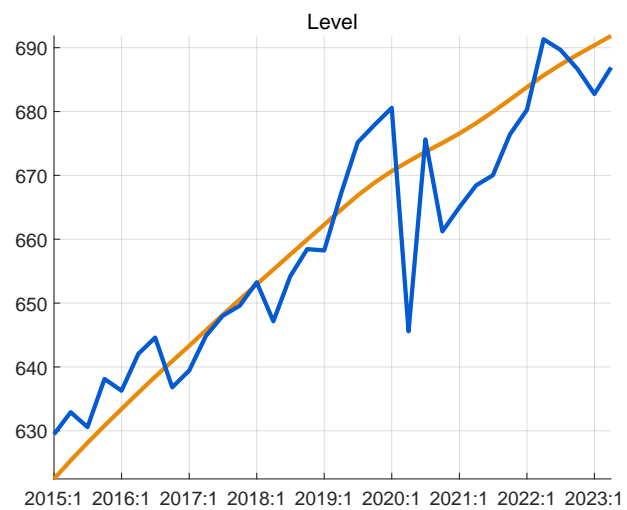
Consumption, $100 \cdot \log [l_cons]$ 

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

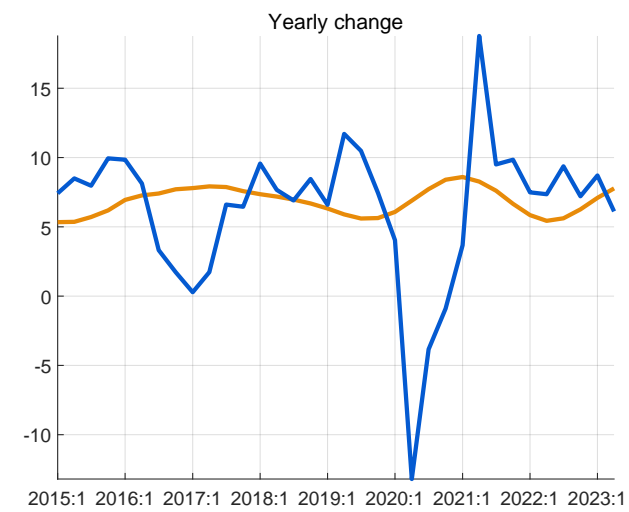
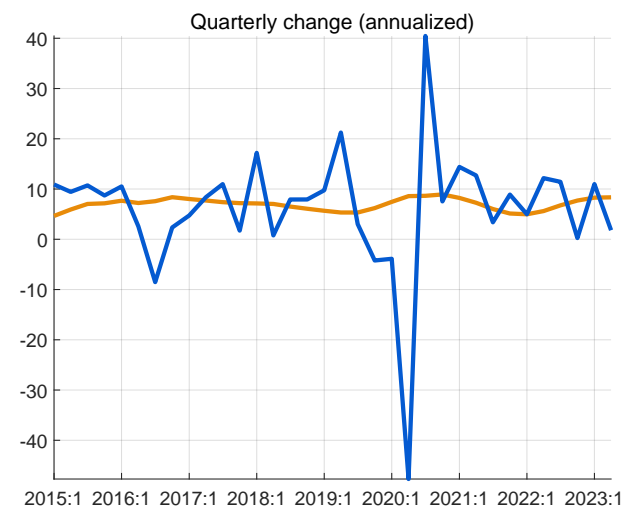
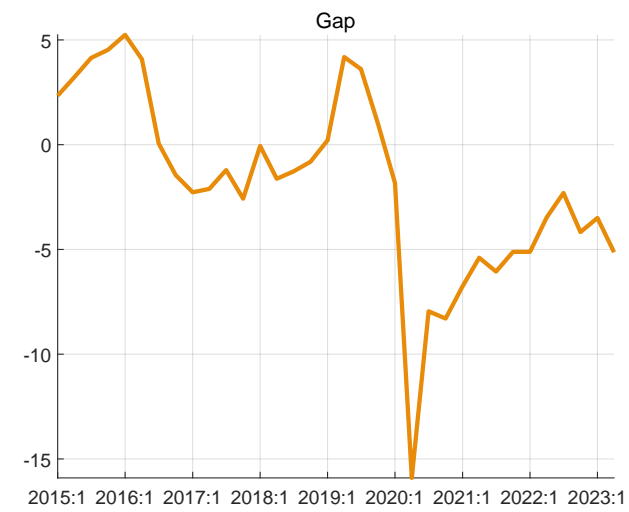
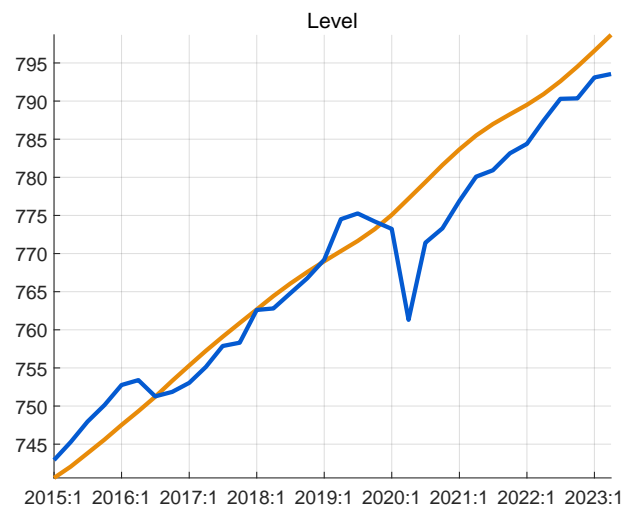
Gov. demand, 100*log [l_gdem]



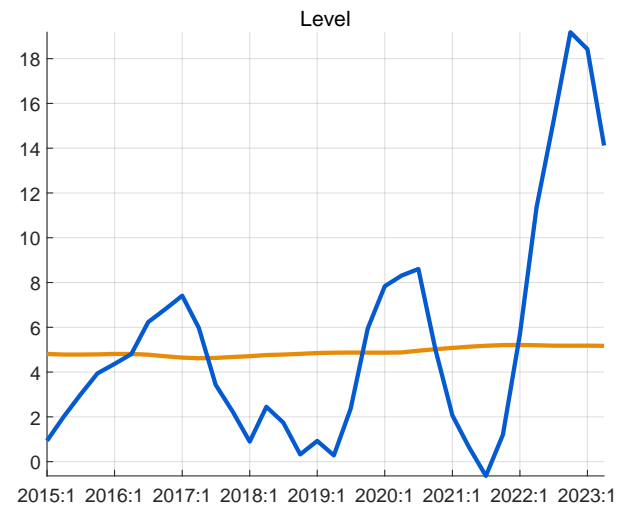
Export, 100*log [l_exp]

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

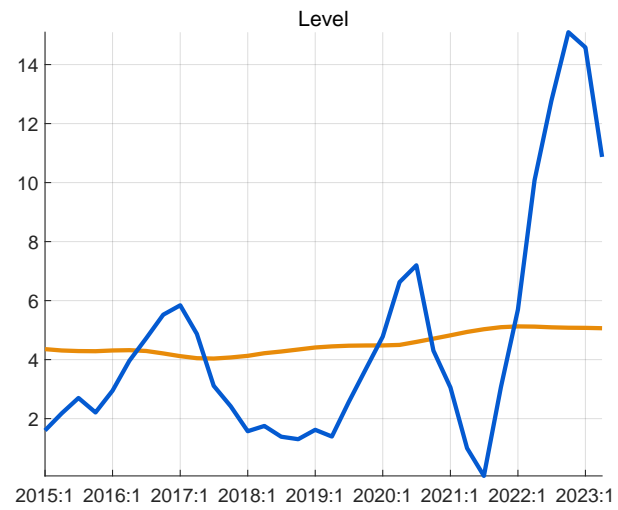
GDP, 100*log [l_y]



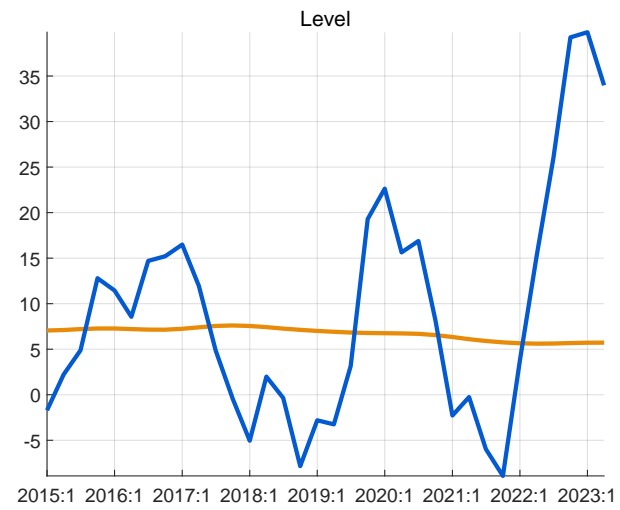
Headline CPI, YY % [d4l_cpi]



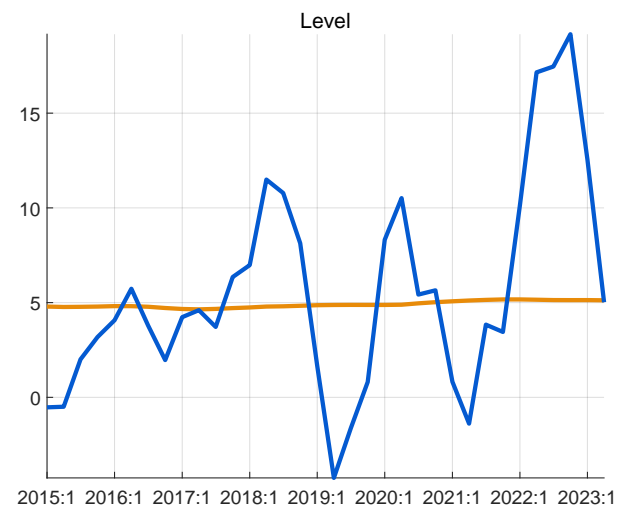
Core CPI, YY % [d4l_cpi_core]



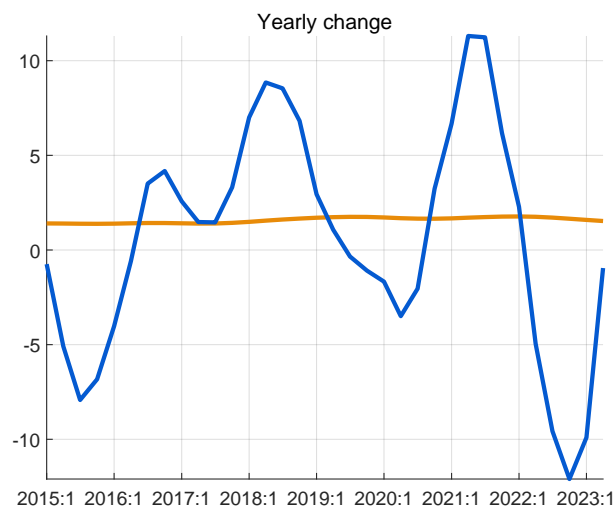
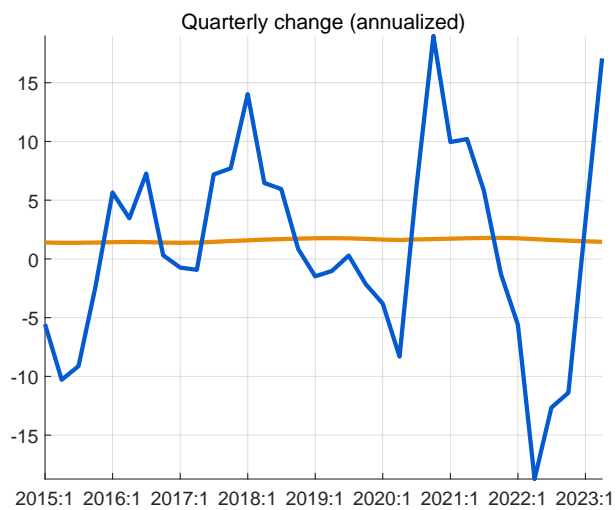
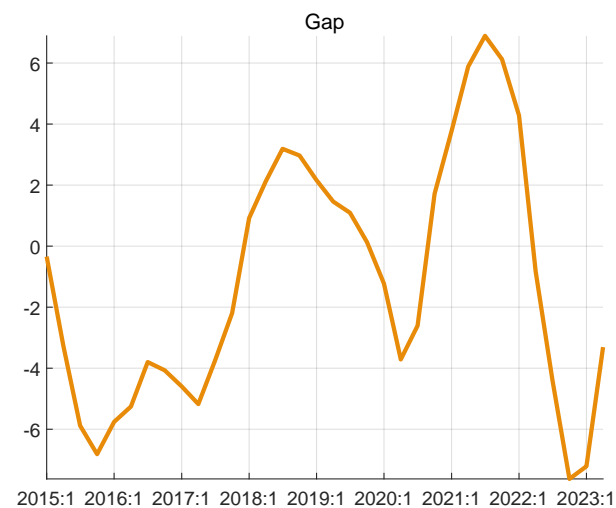
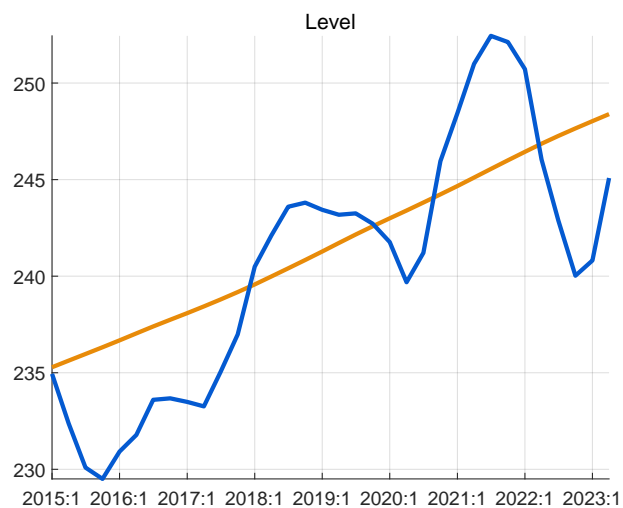
Food CPI, YY % [d4l_cpi_food]



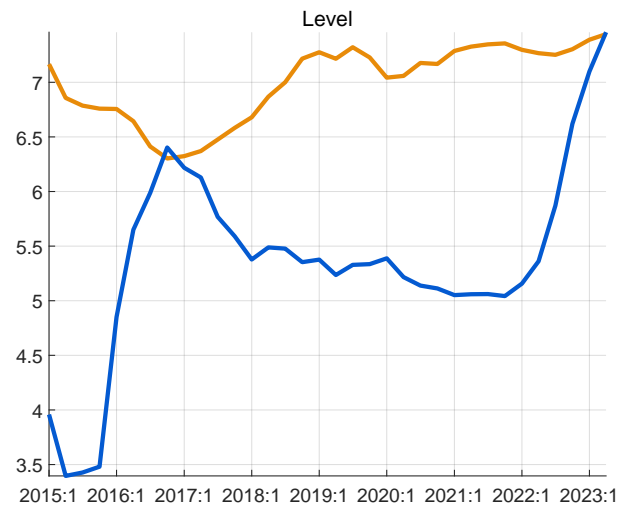
Energy CPI, YY % [d4l_cpi_ener]

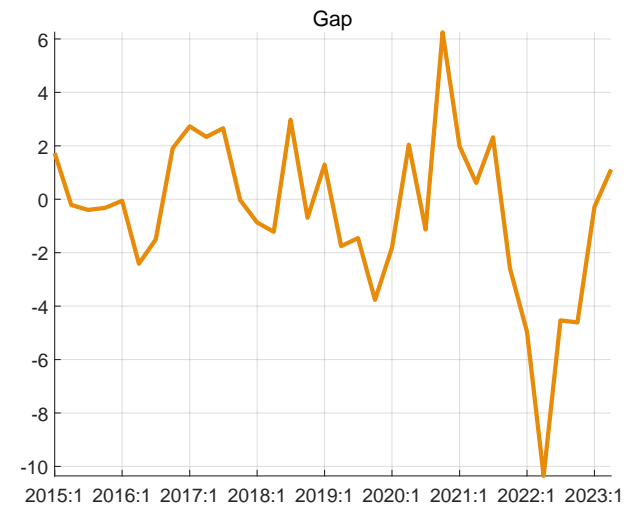
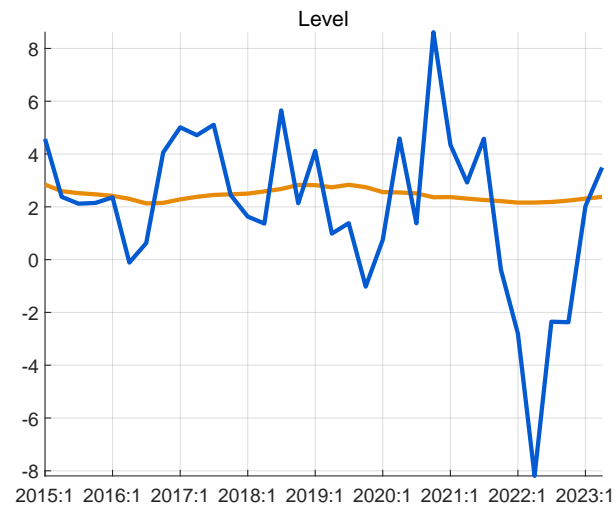


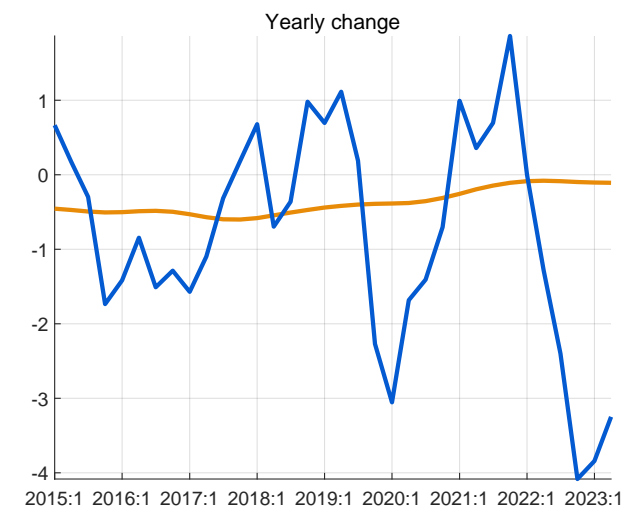
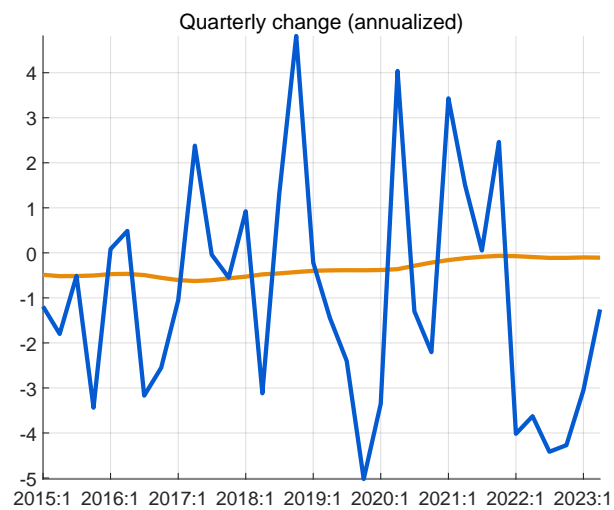
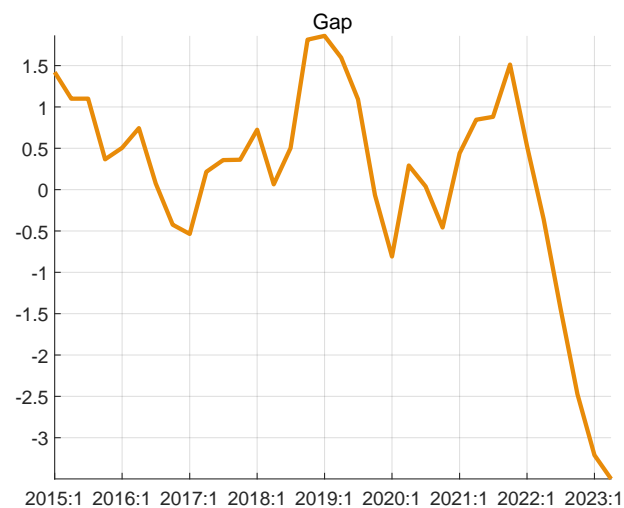
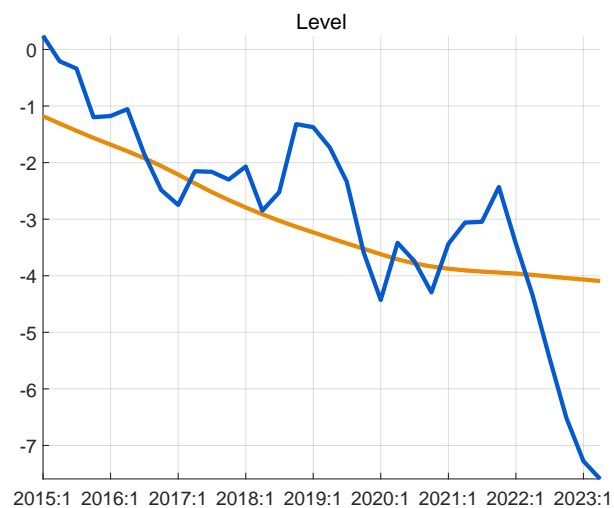
Real exchn. rate, 100*log [l_z]

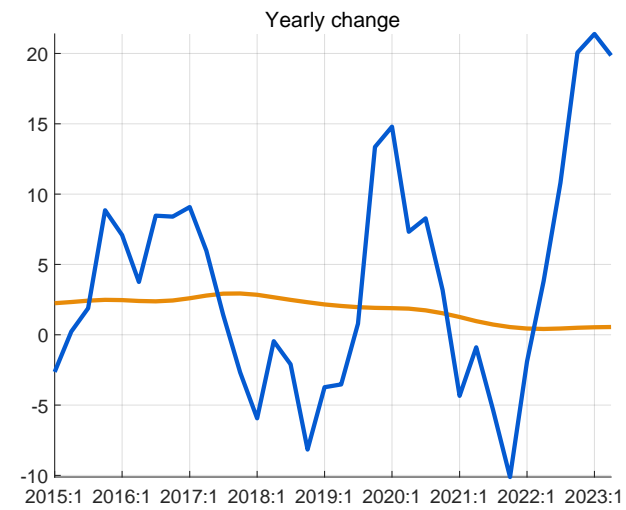
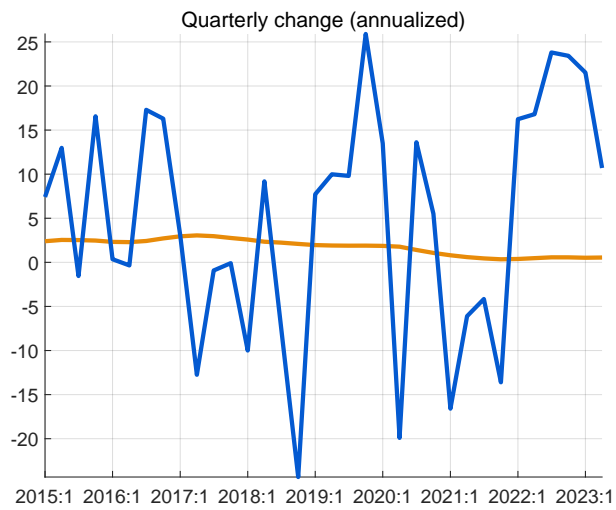
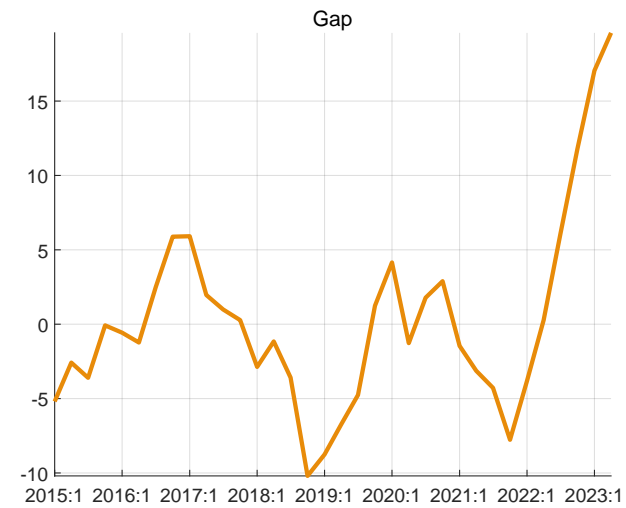
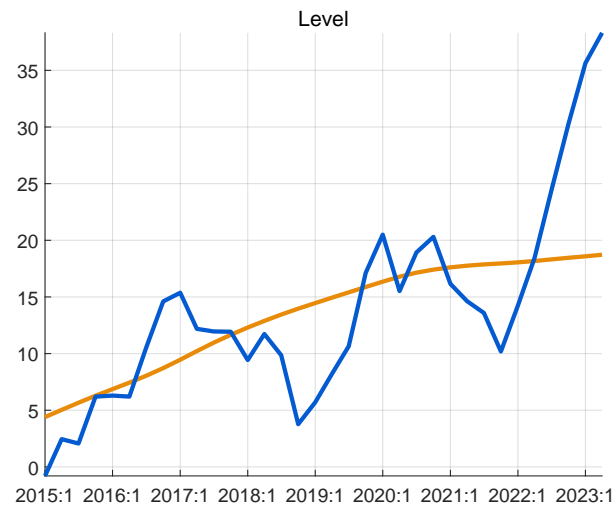


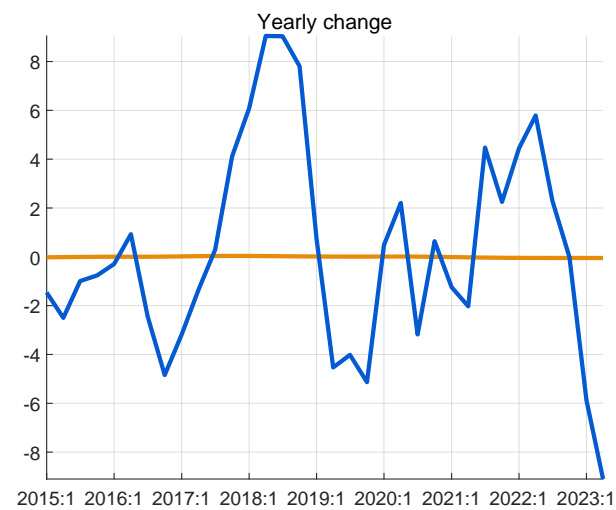
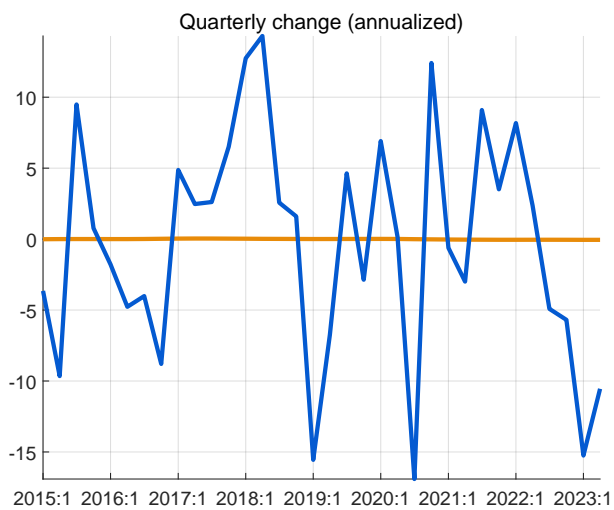
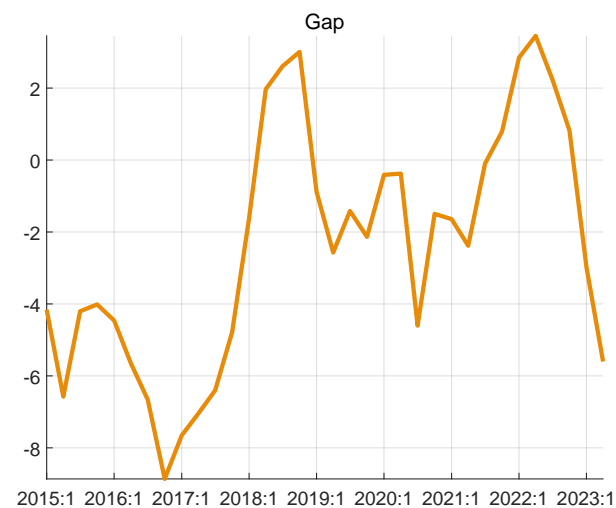
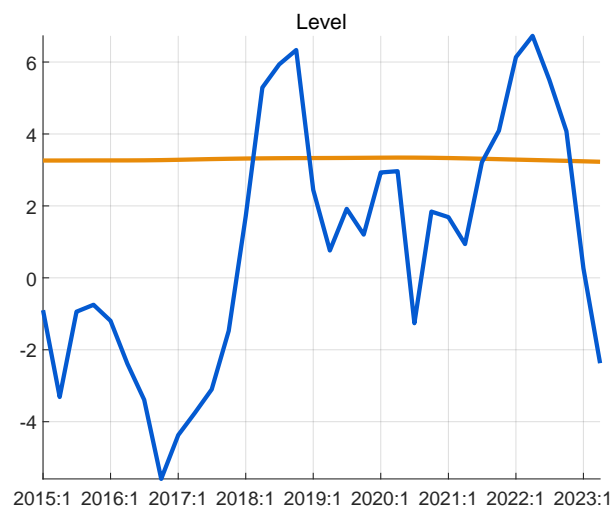
Policy rate (IB rate used), % [i]

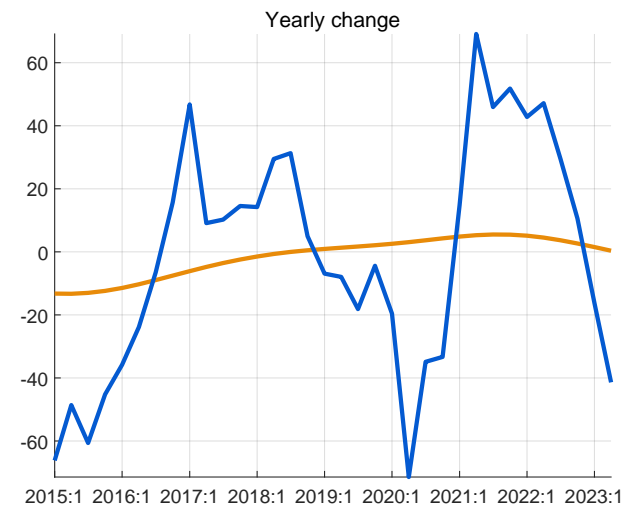
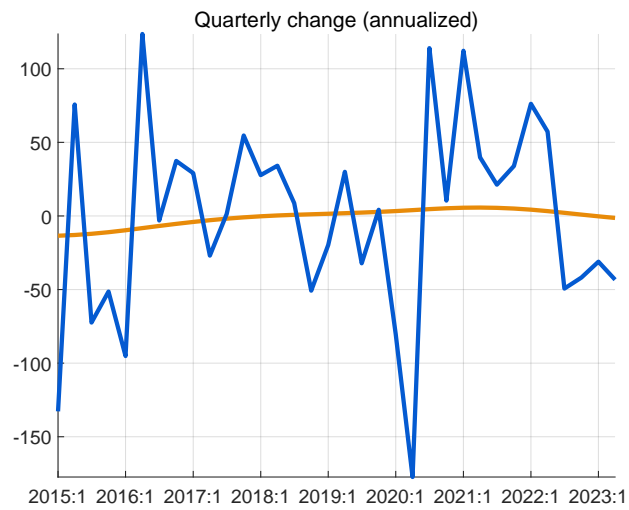
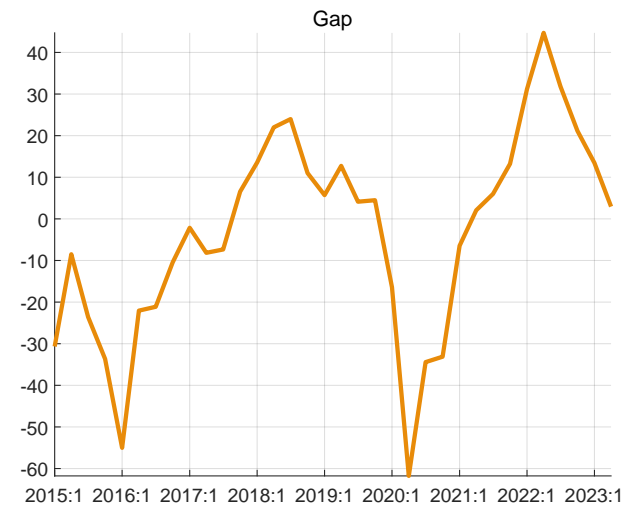
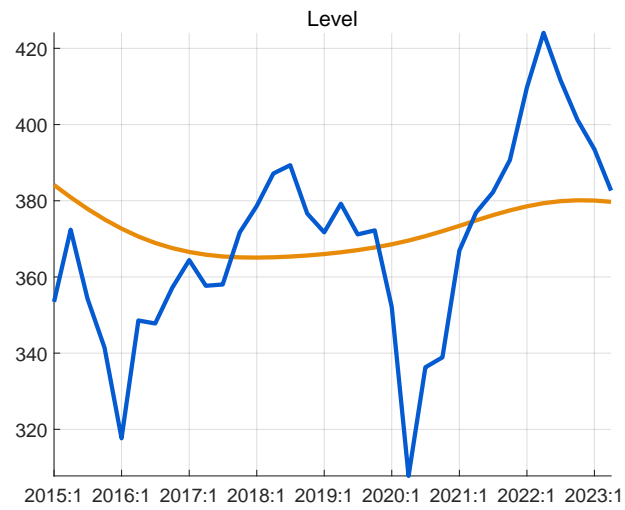


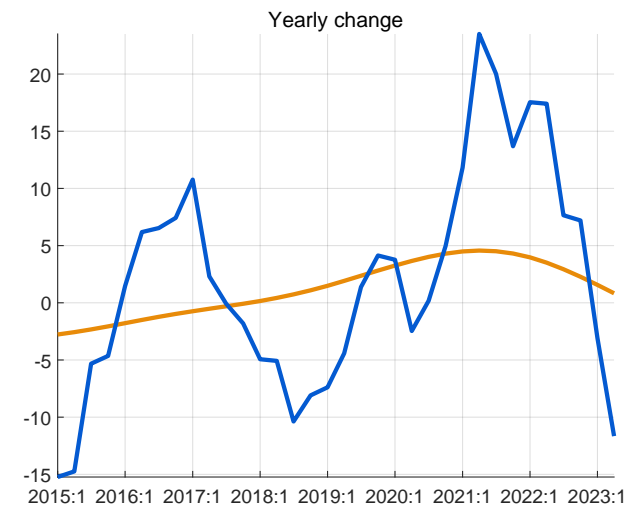
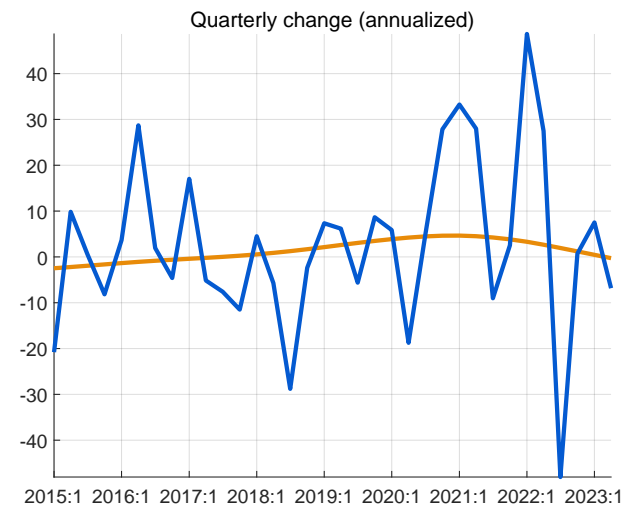
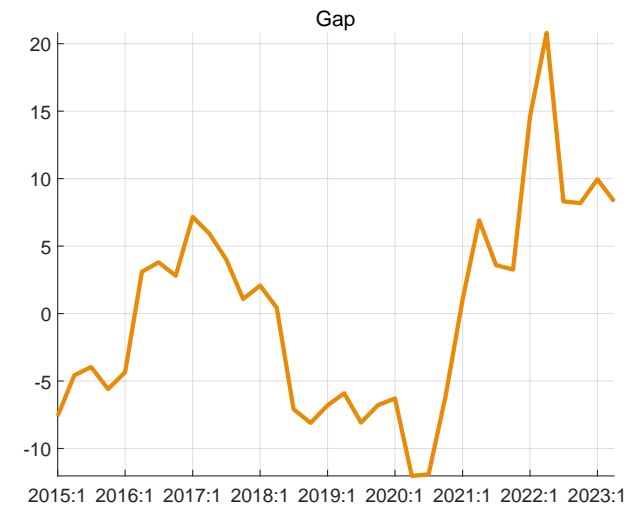
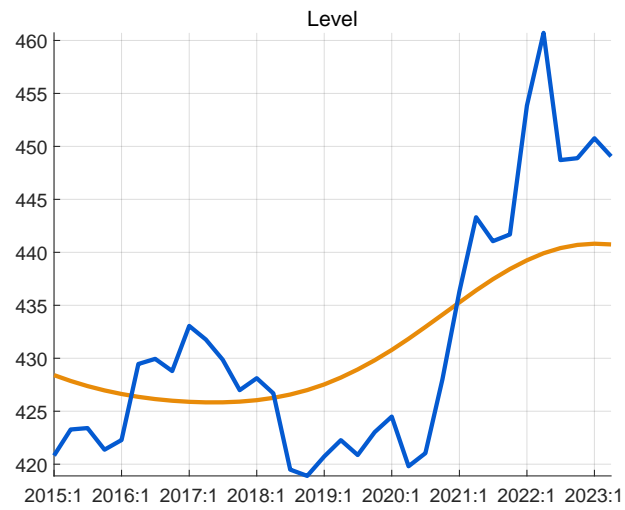
Real interest (policy) rate, % [r]

Core rel. price, $100 \cdot \log [l_rp_cpi_core]$ 

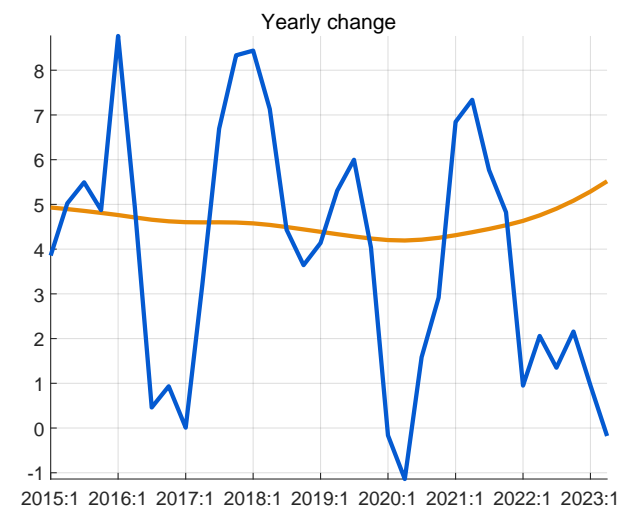
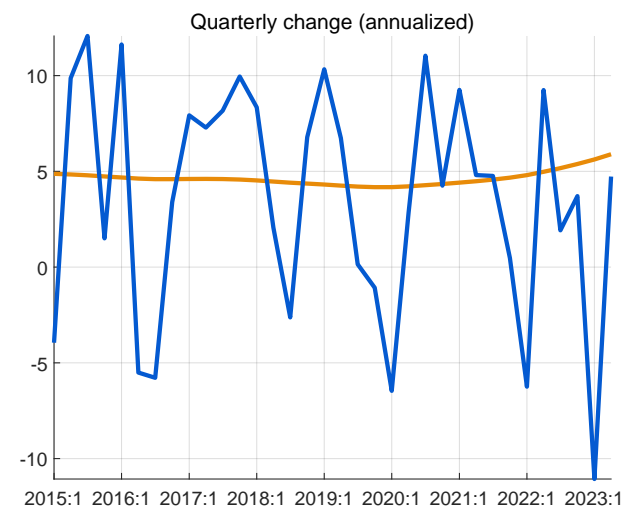
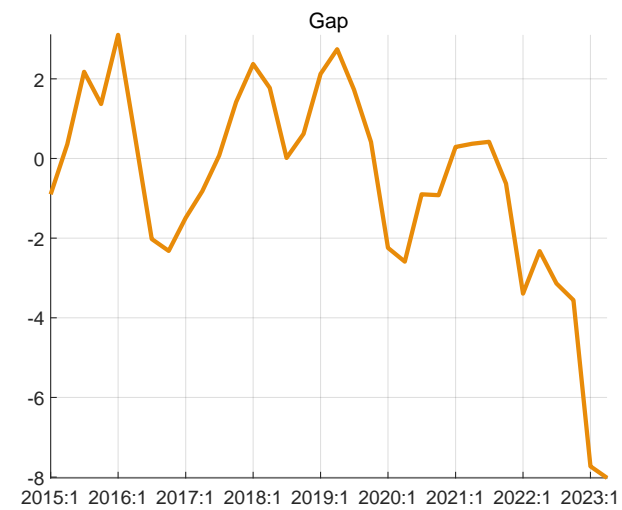
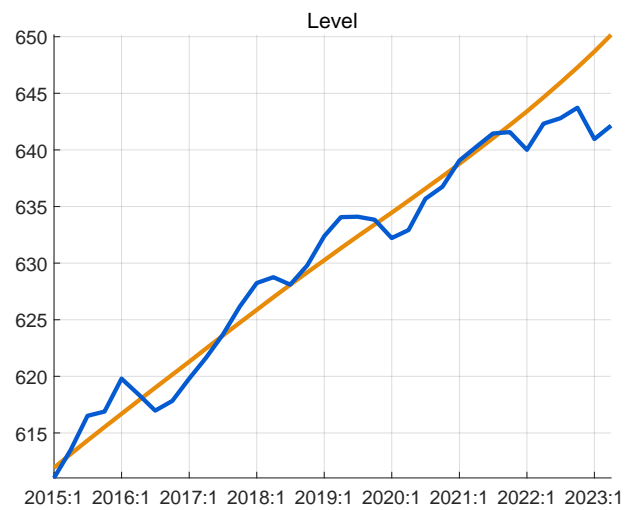
Food rel. price, $100 \cdot \log [l_rp_cpi_food]$ 

Energy rel. price, $100 \cdot \log [l_rp_cpi_ener]$ 

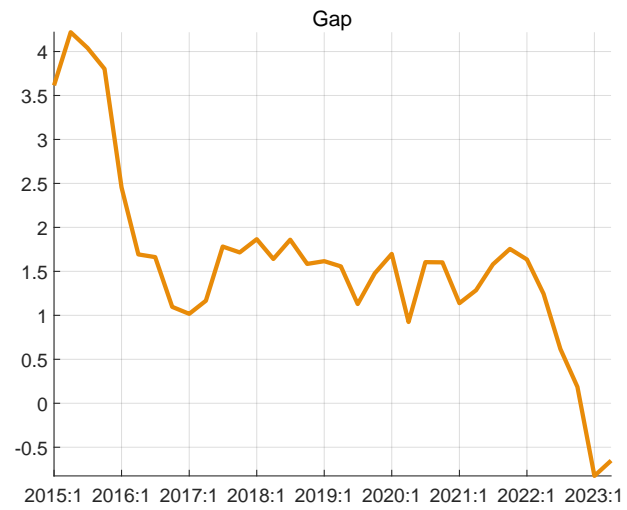
Foreign rel. ener. price, $100 \cdot \log [l_rp_enerstar]$ 

Foreign rel. food price, $100 \cdot \log [l_rp_foodstar]$ 

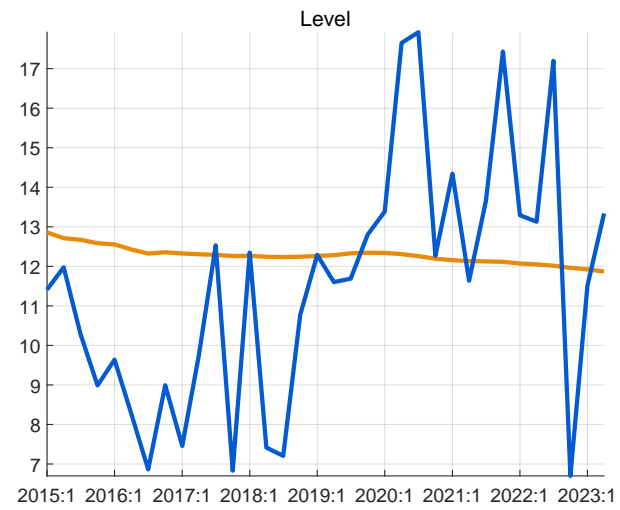
Agric. GDP, 100*log [l_y_agr]



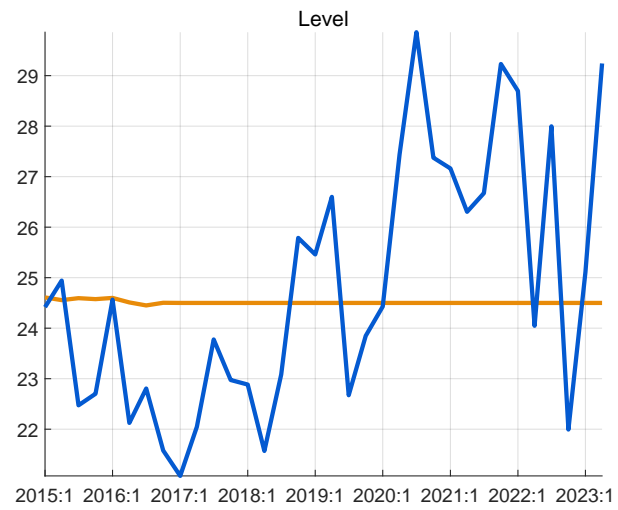
Lending premium, % [prem_d]

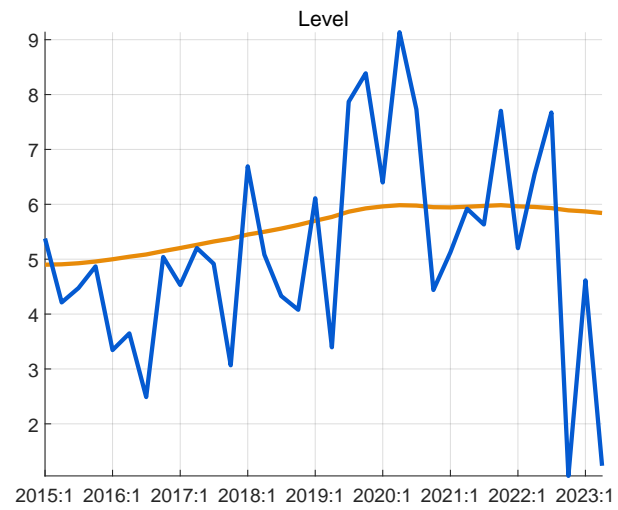


Budget deficit, % of GDP [def_y]

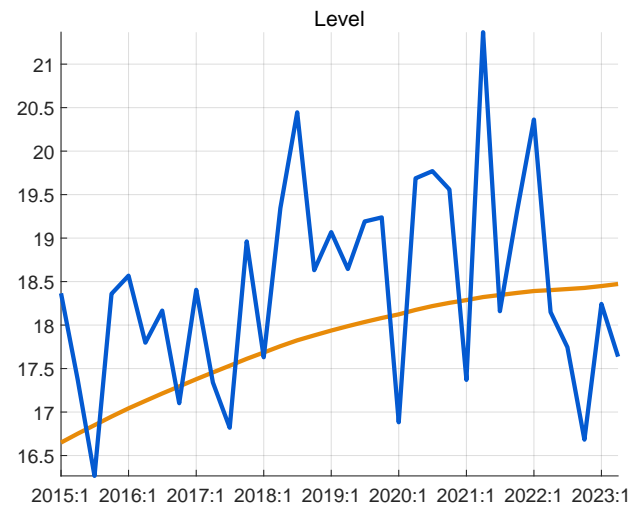


Govt. demand (G&S), % GDP [gdem_y]



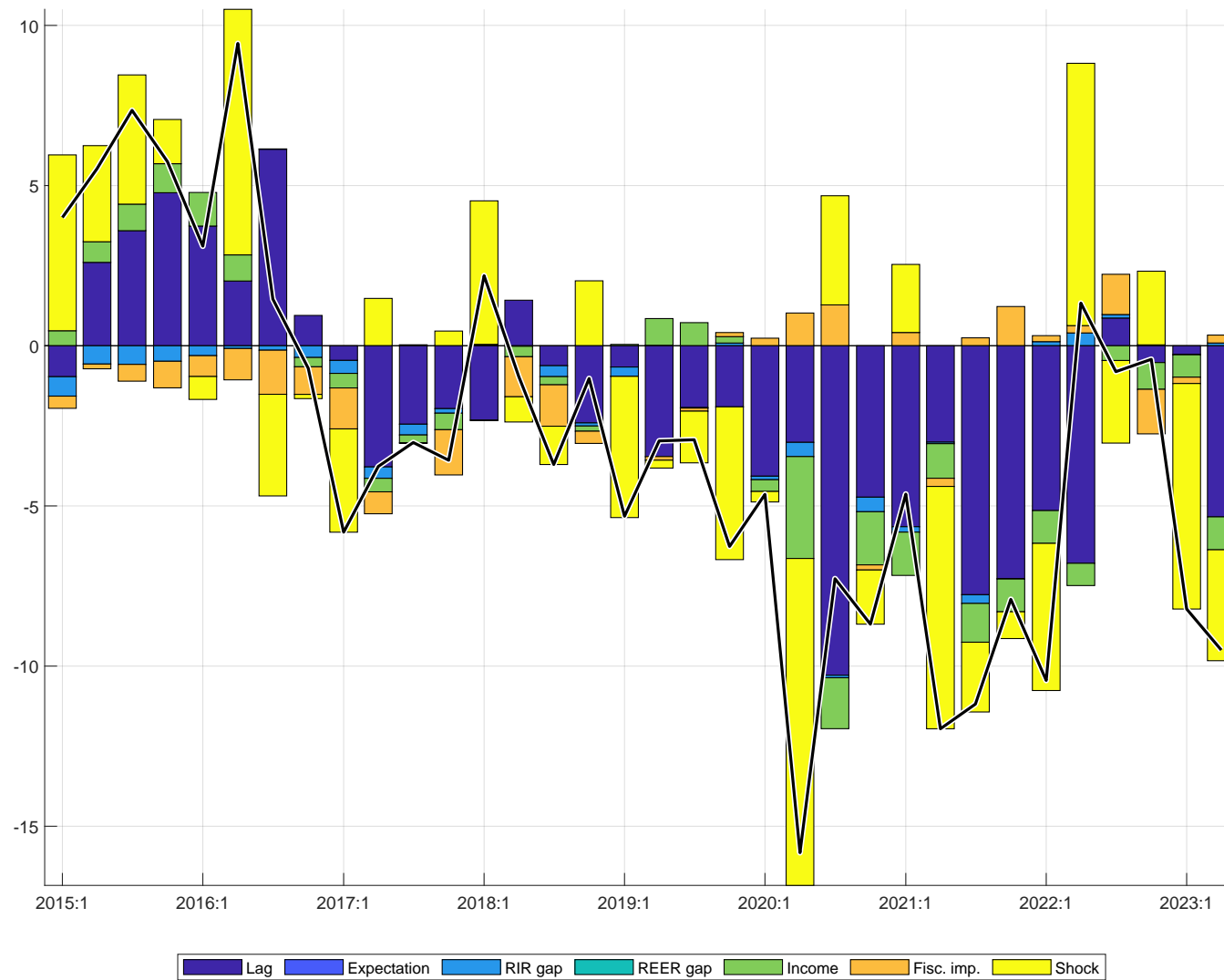
Other govt. exp., % to GDP [oexp_y]

Govt. rev., % of GDP [grev_y]

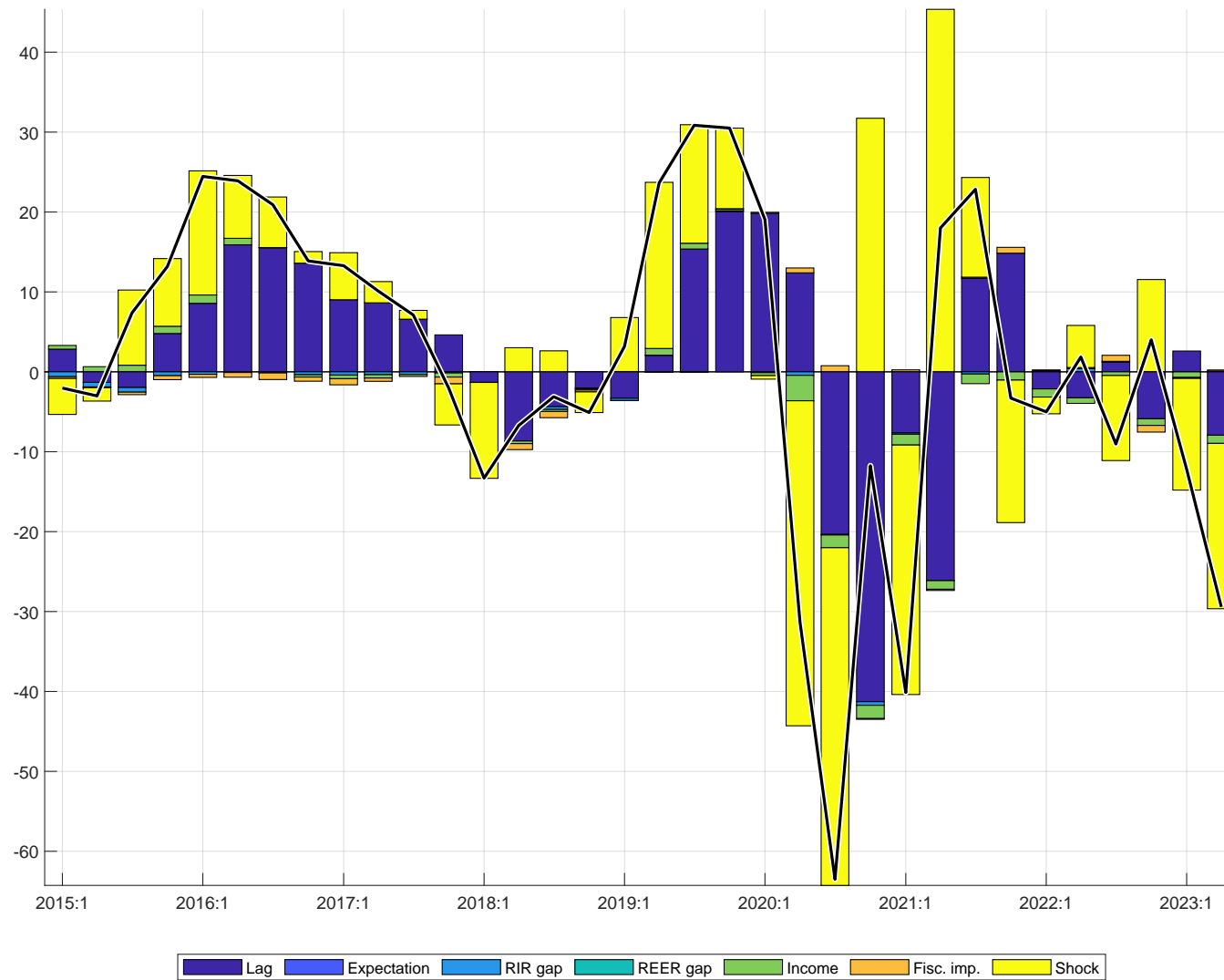


3 Decomposition of equations: charts

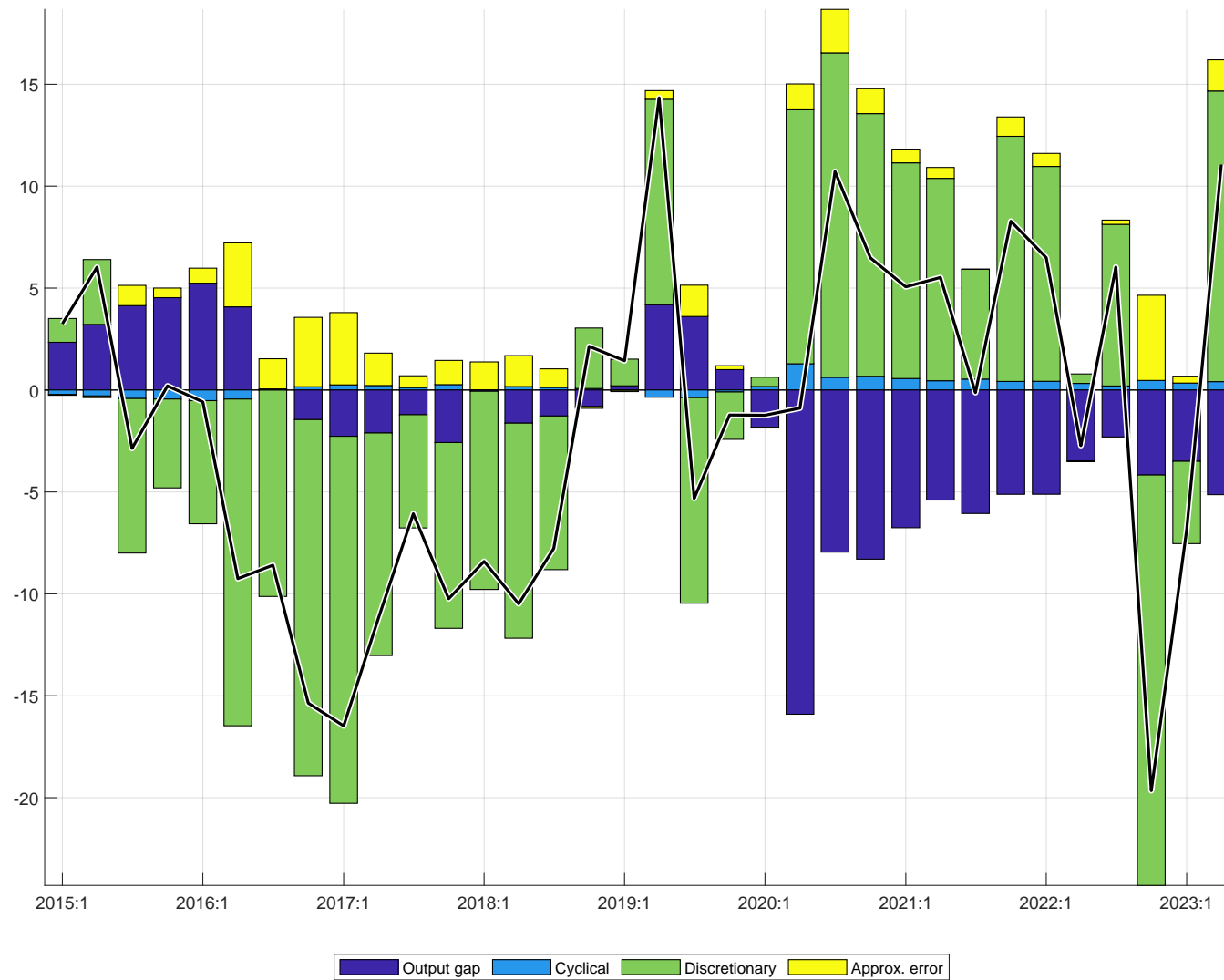
Consumption gap, % [l_cons_gap]

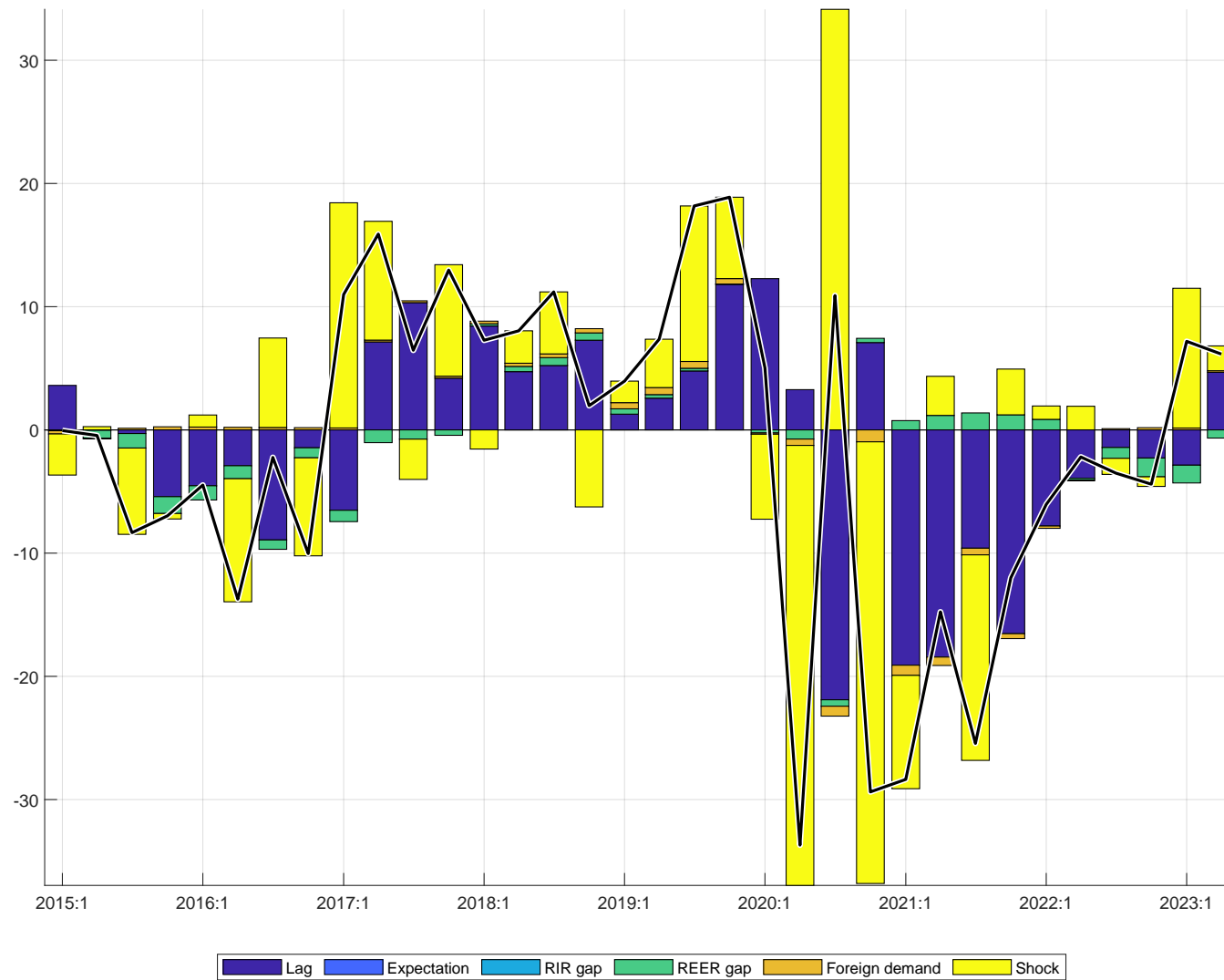


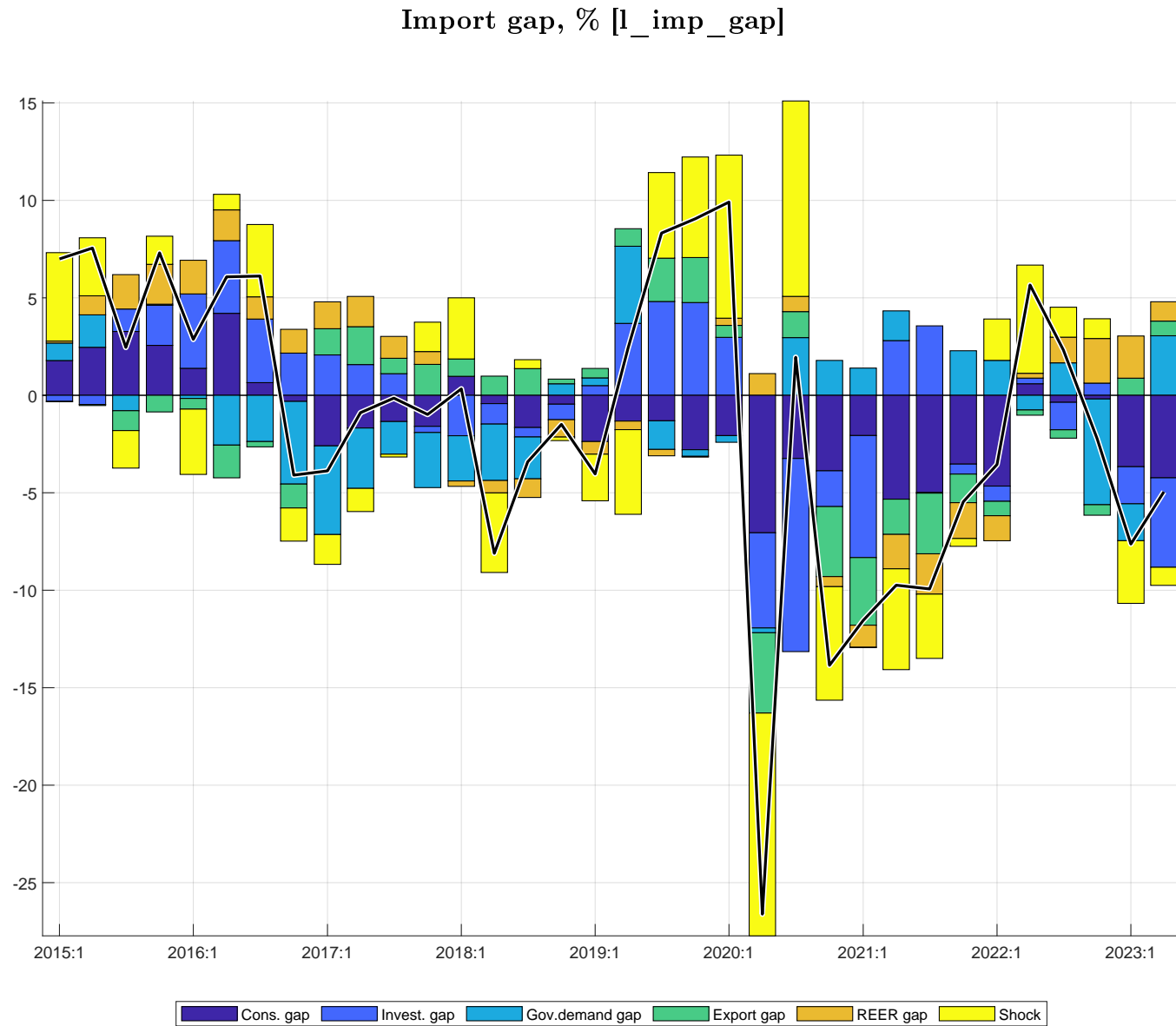
Investment gap, % [l_inv_gap]

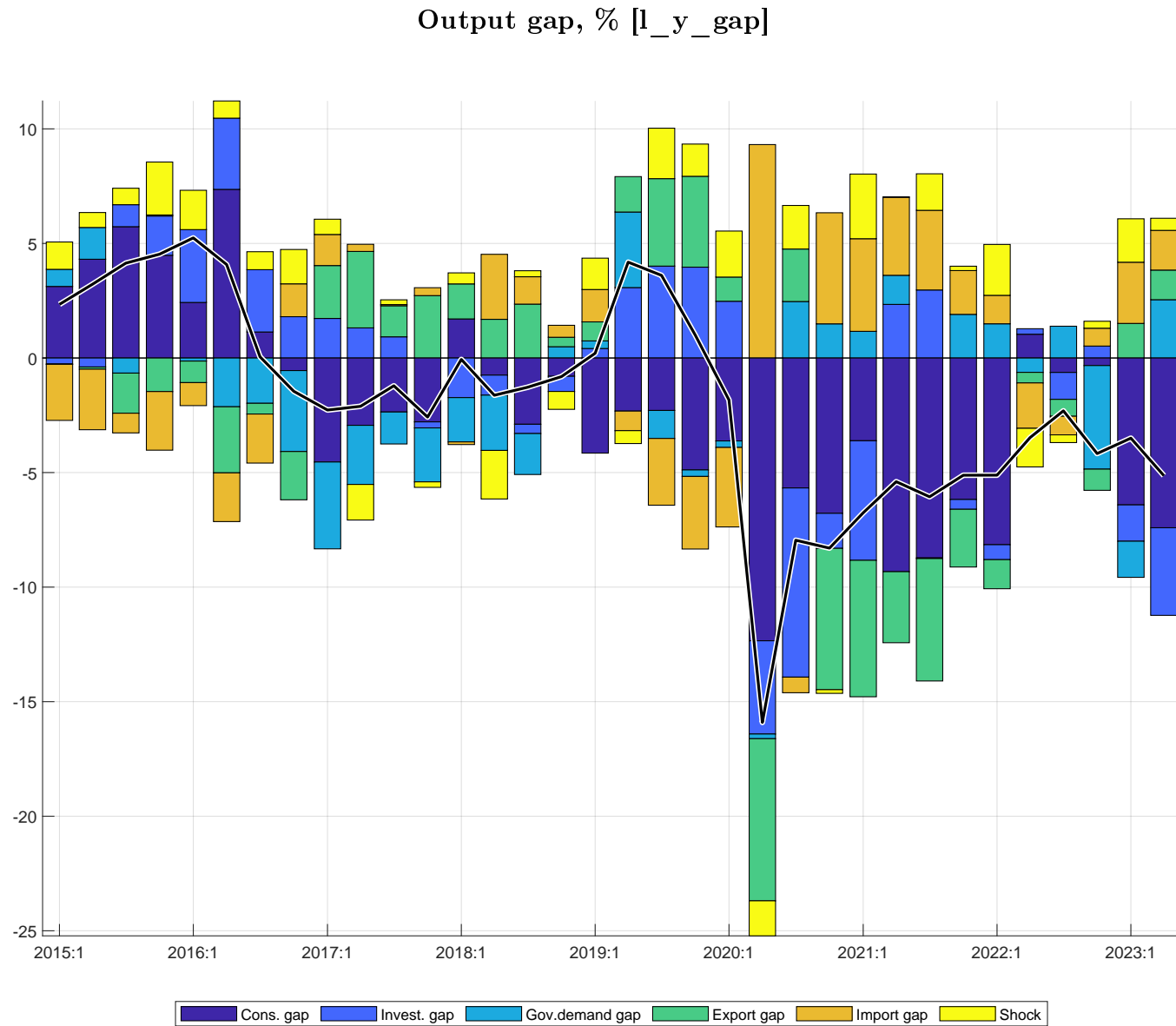


Gov. demand gap, % [l_gdem_gap]

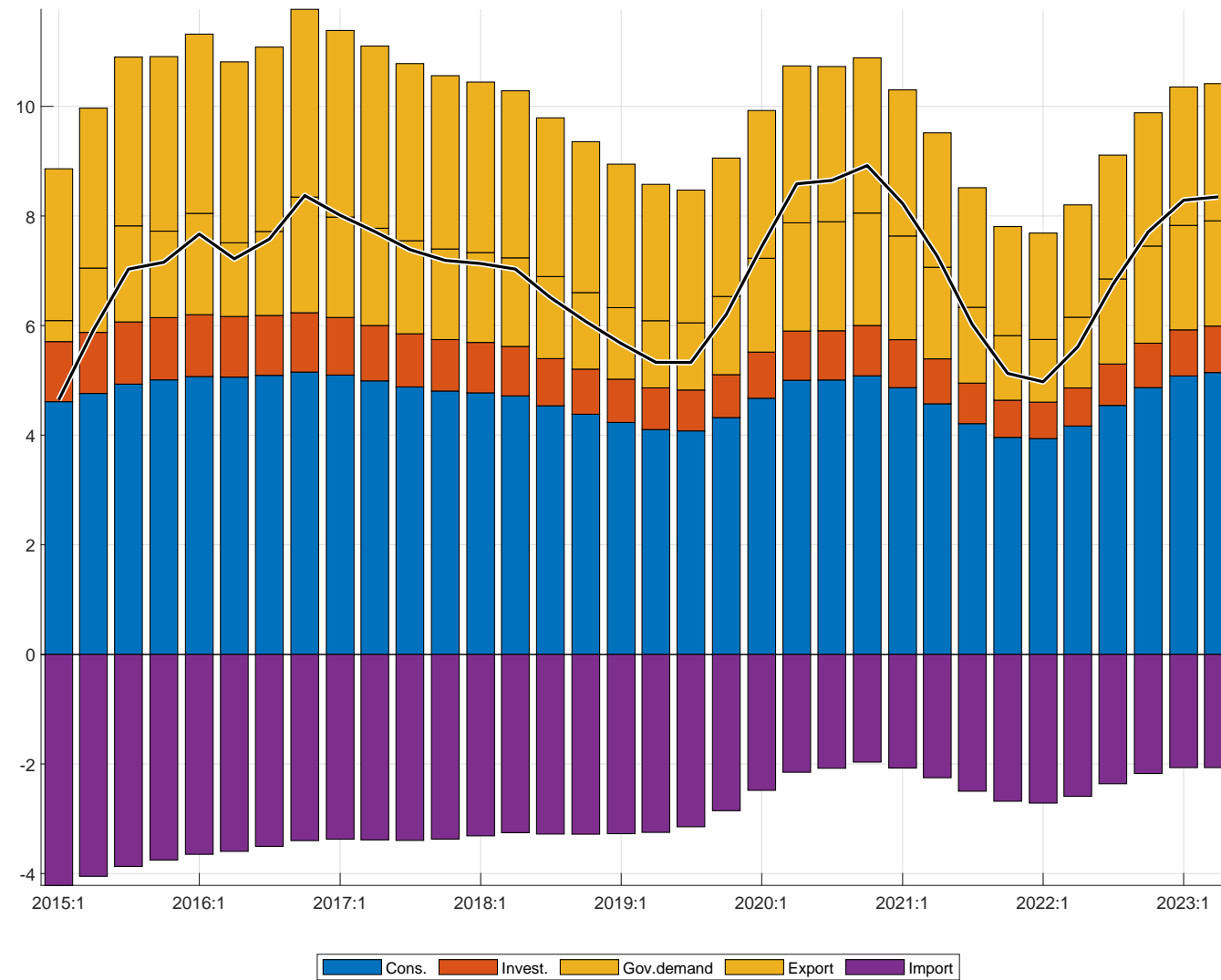


Export gap, % [l_exp_gap]

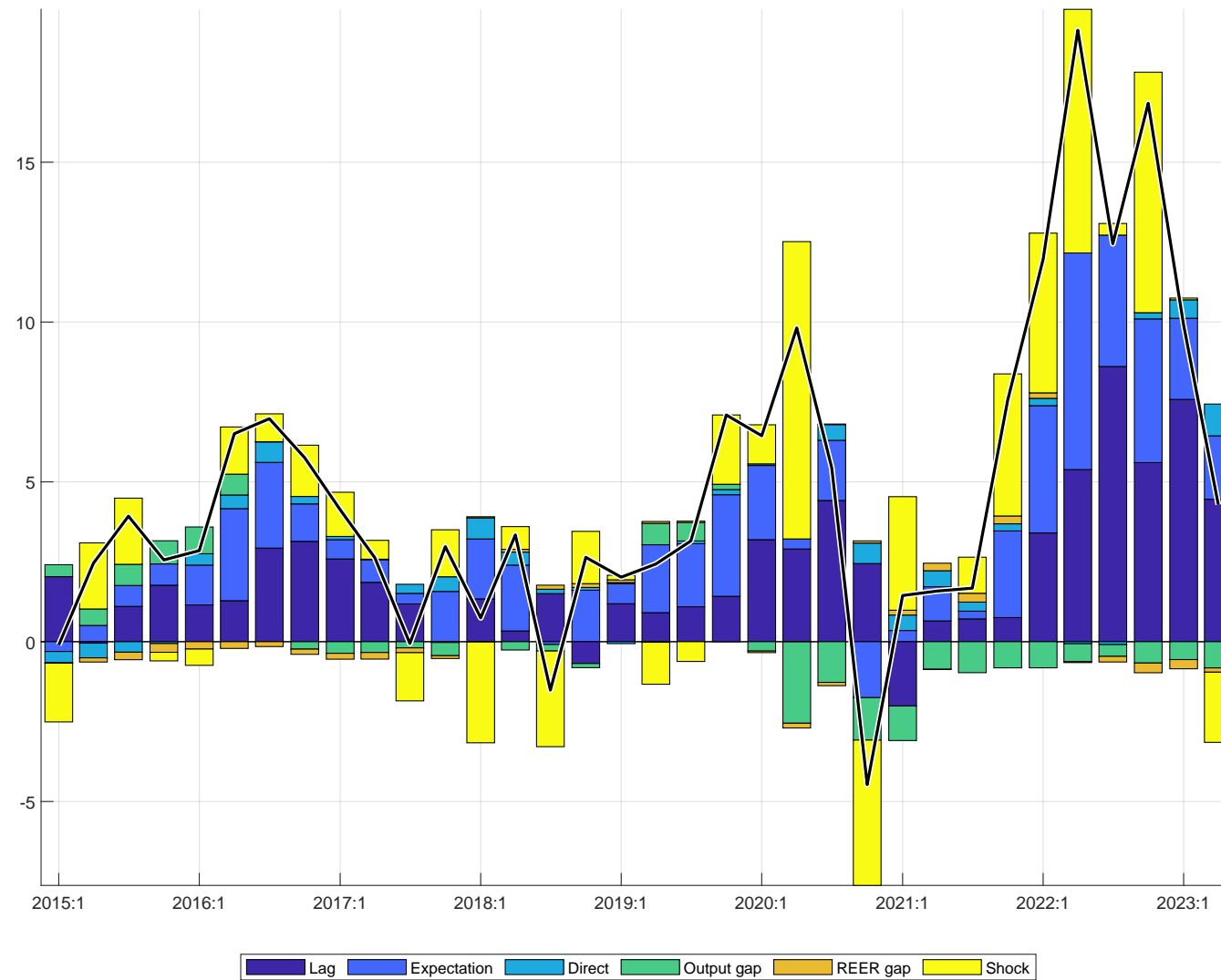




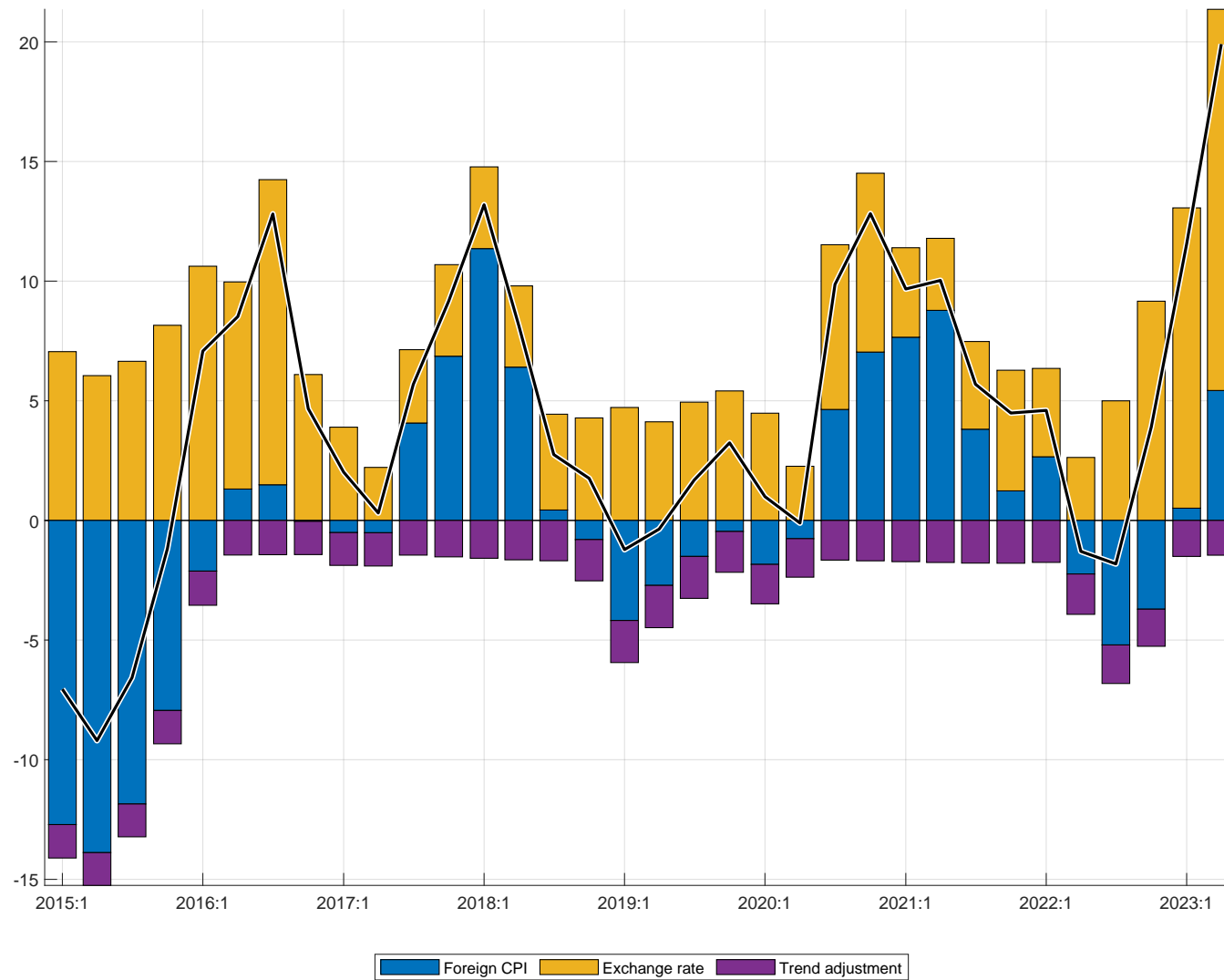
GDP tnd., ann. QQ % [dl_y_tnd]



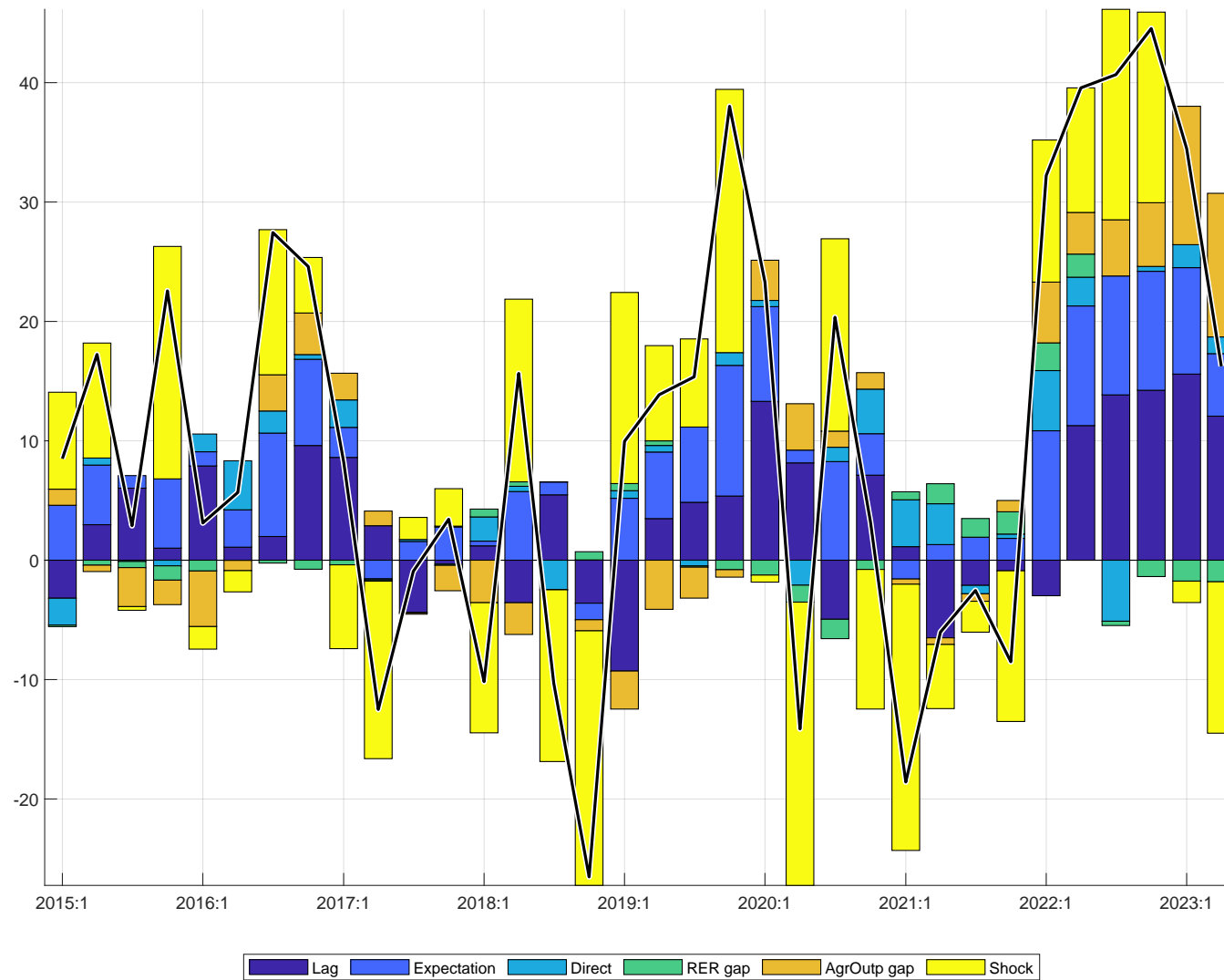
Core CPI, ann. QQ % [dl_cpi_core]



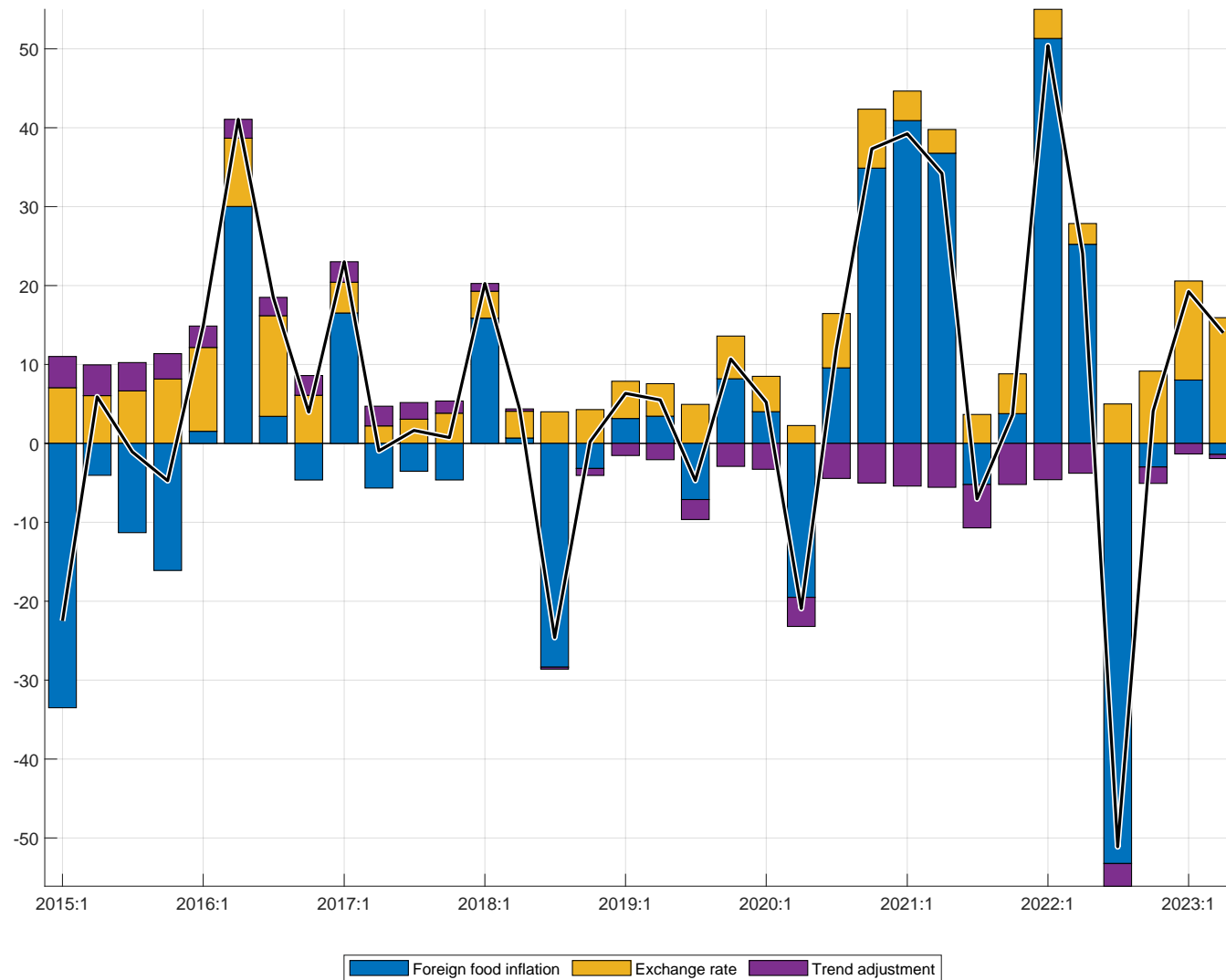
Dir. ext. eff. in core, ann. QQ % [dl_cpi_core_direct]



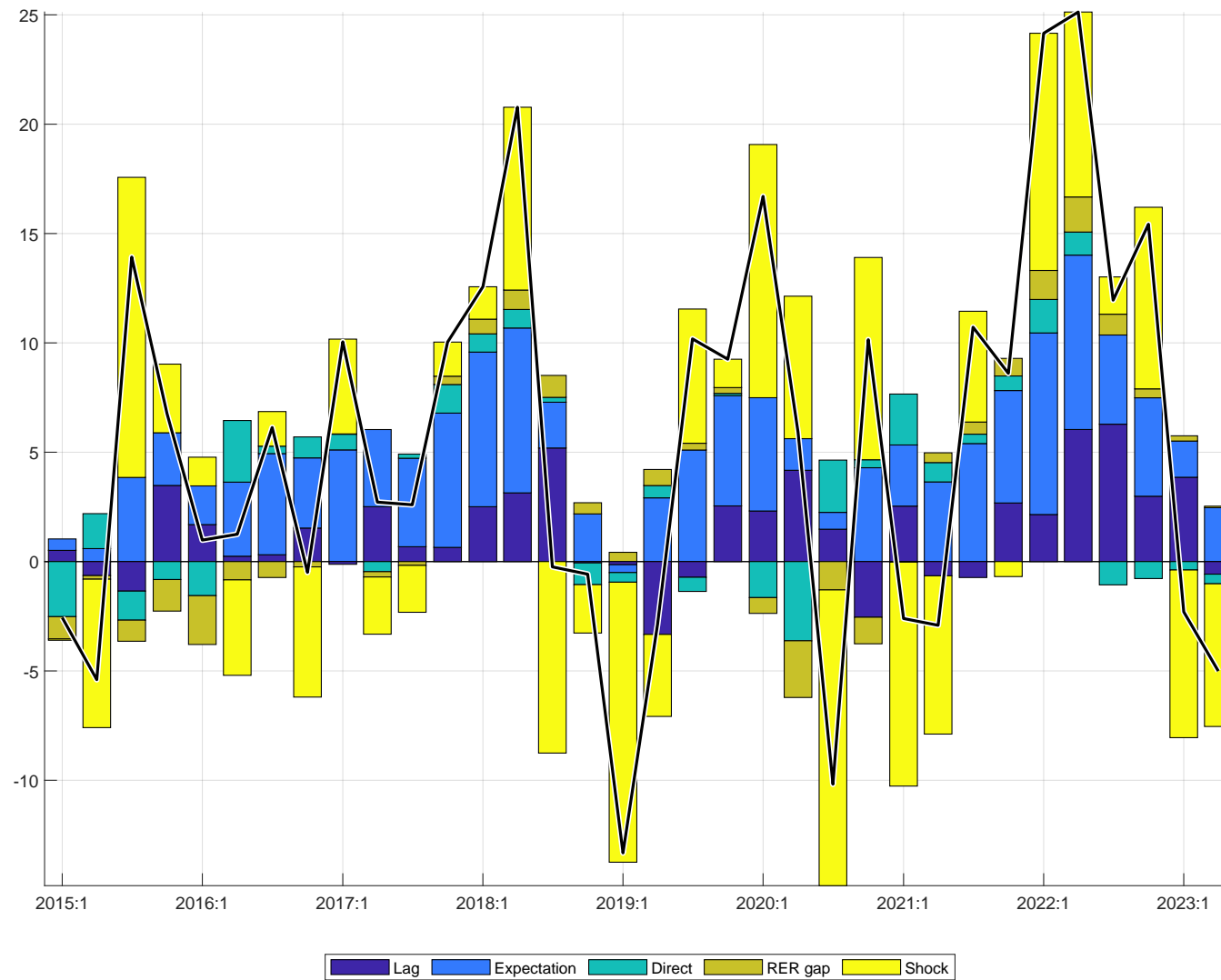
Food CPI, ann. QQ % [dl_cpi_food]



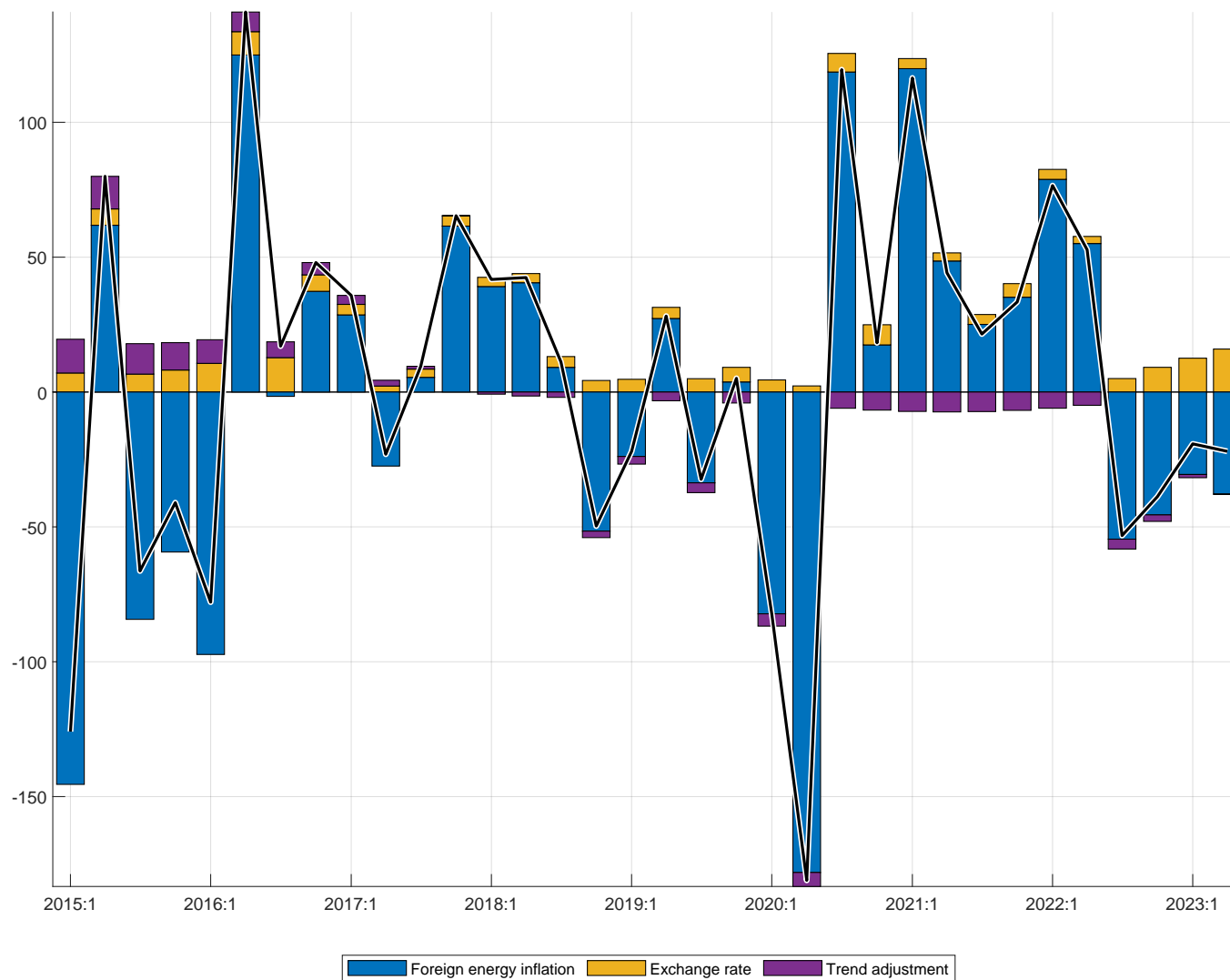
Dir. ext. eff. in food, ann. QQ % [dl_cpi_food_direct]



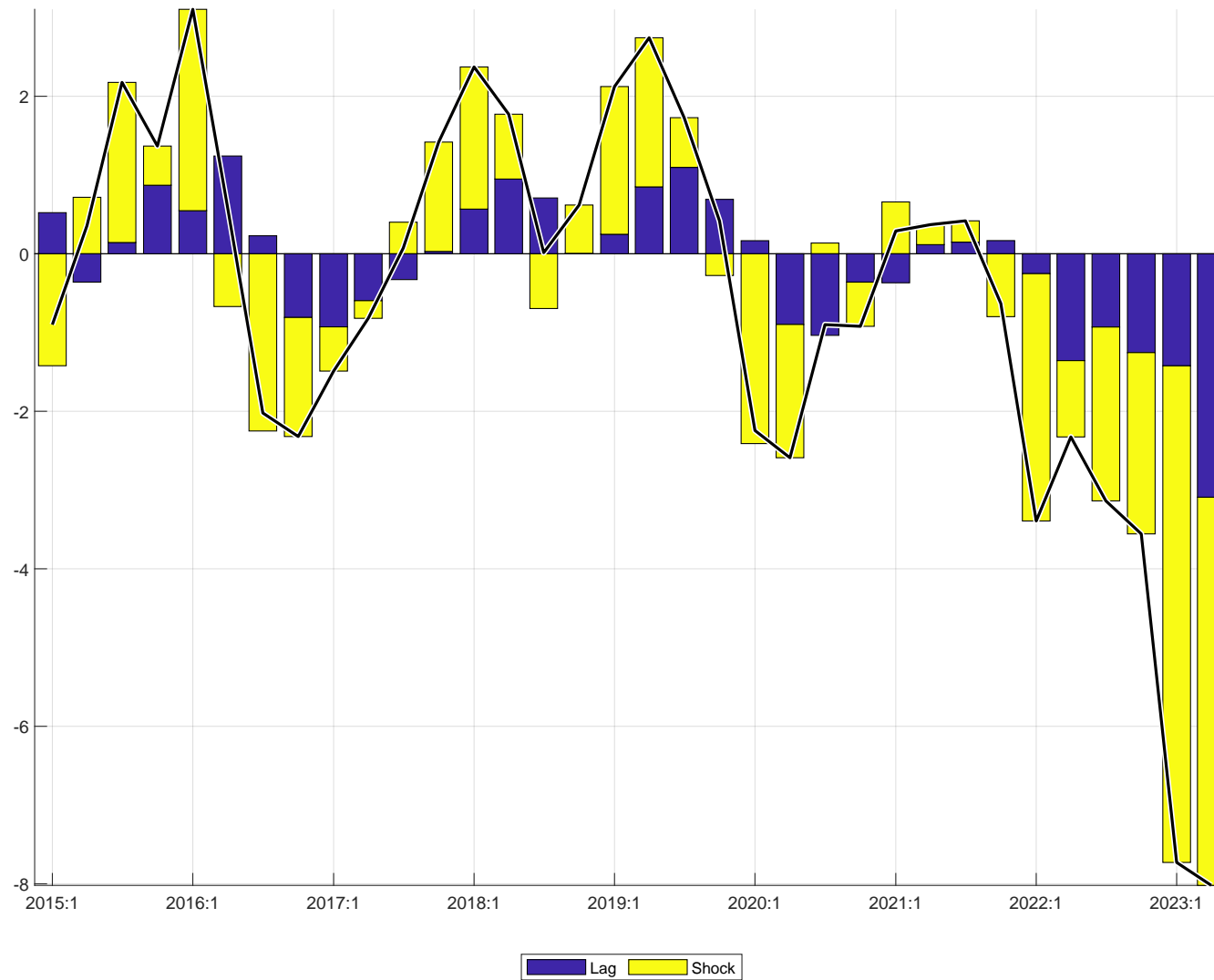
Energy CPI, ann. QQ % [dl_cpi_ener]



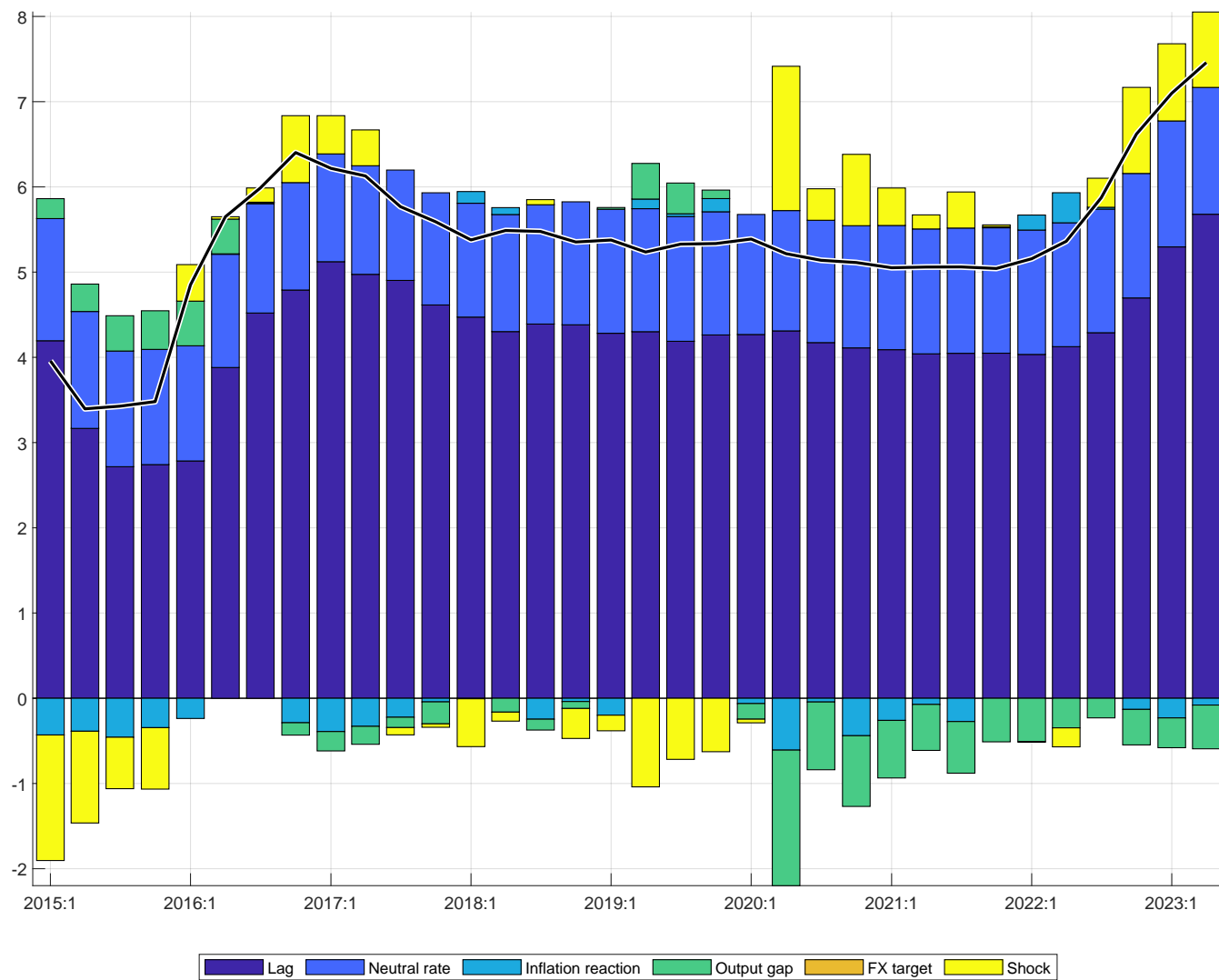
Dir. ext. eff. in energy, ann. QQ % [dl_cpi_ener_direct]



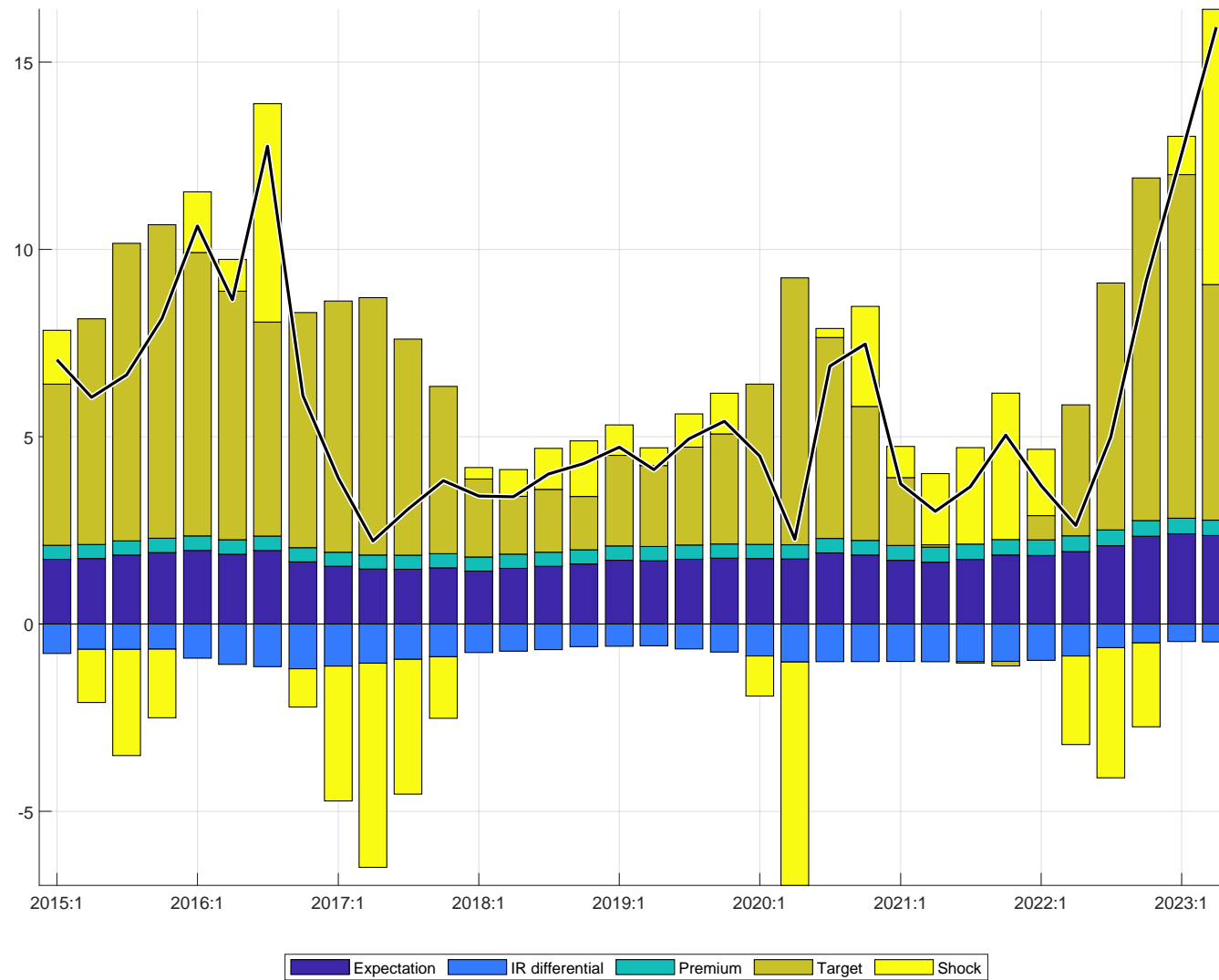
Agric. output gap, % [l_y_agr_gap]



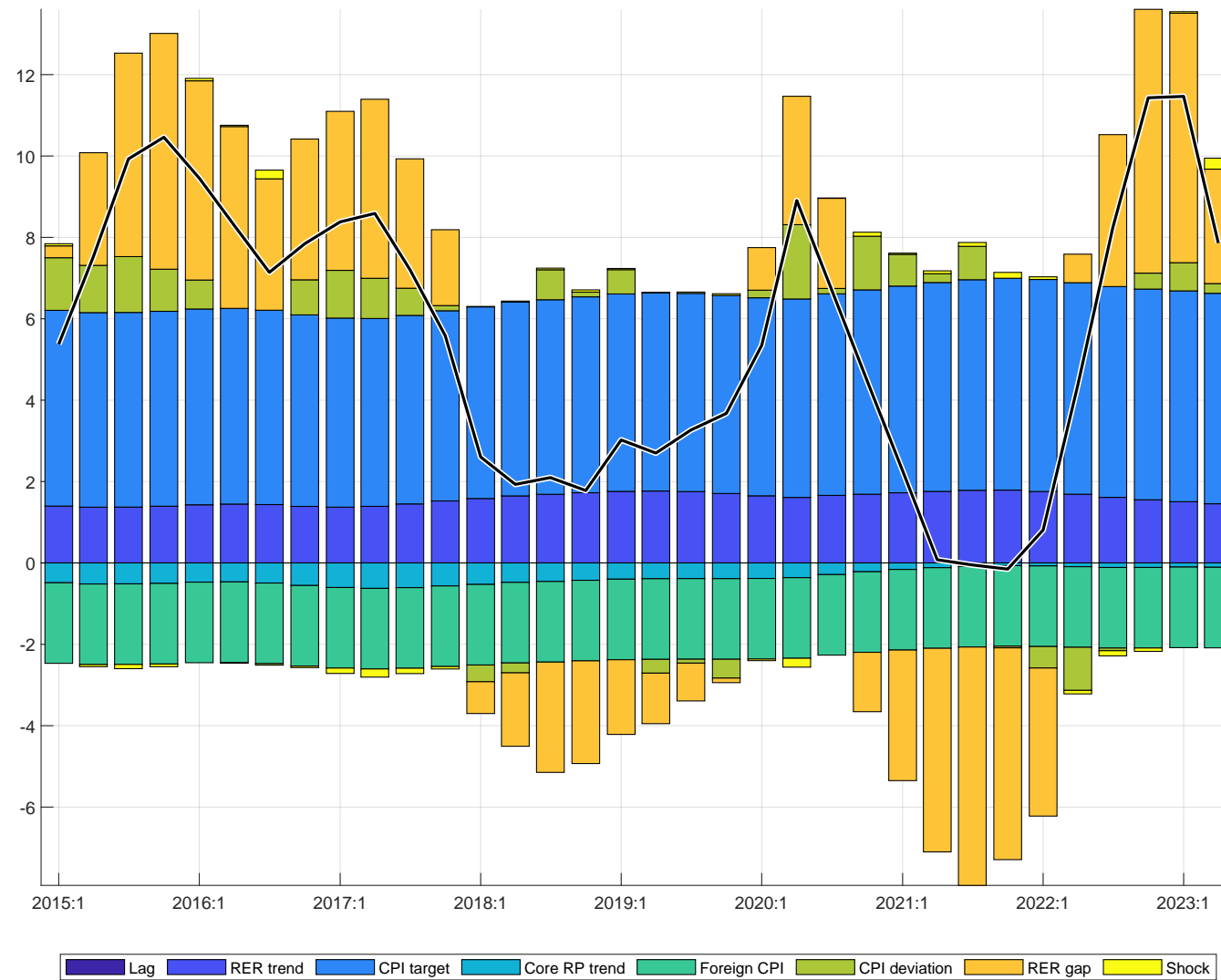
Policy rate (IB rate used), % [i]

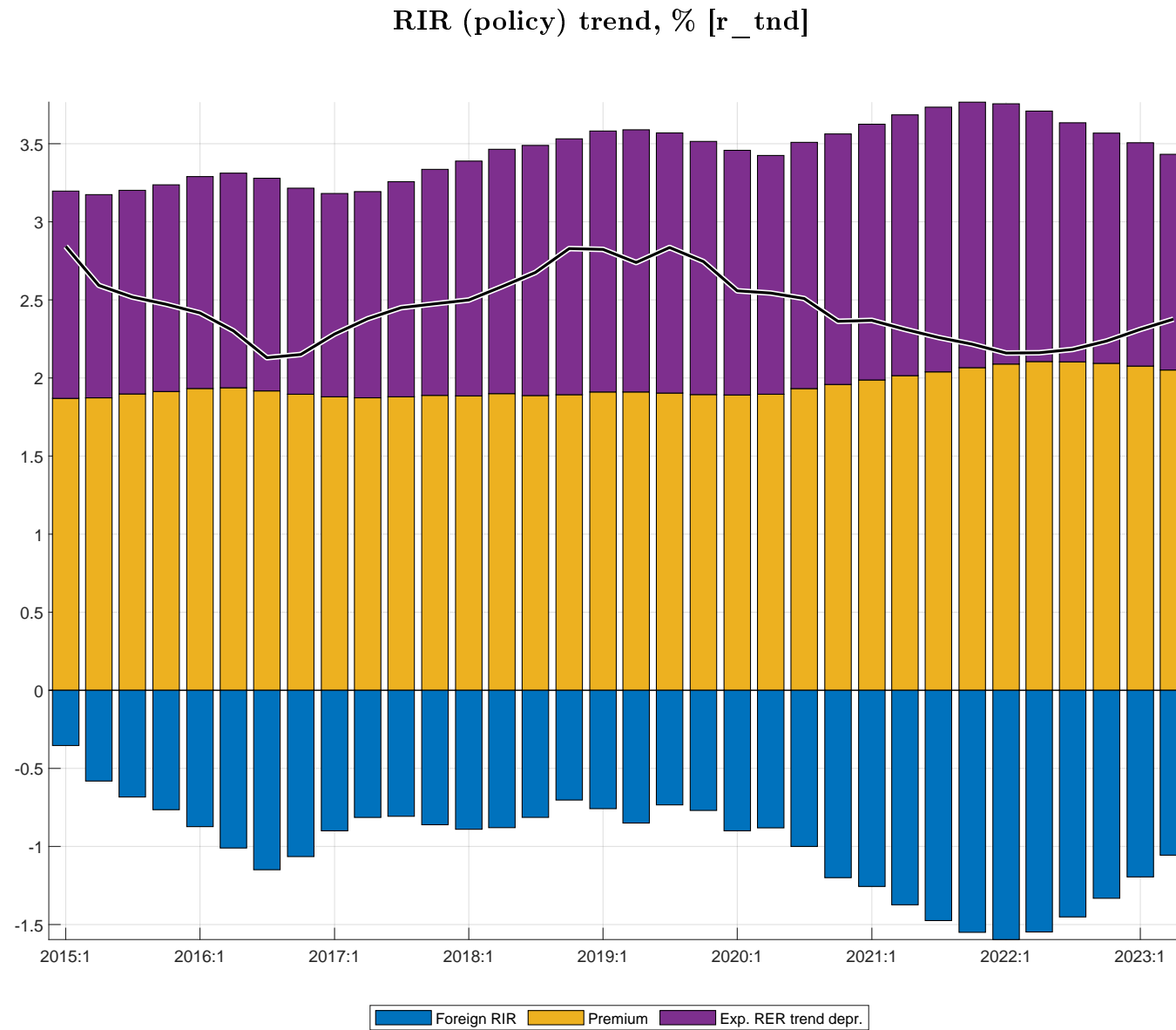


Exchange rate, QQ annualized % [dl_s]

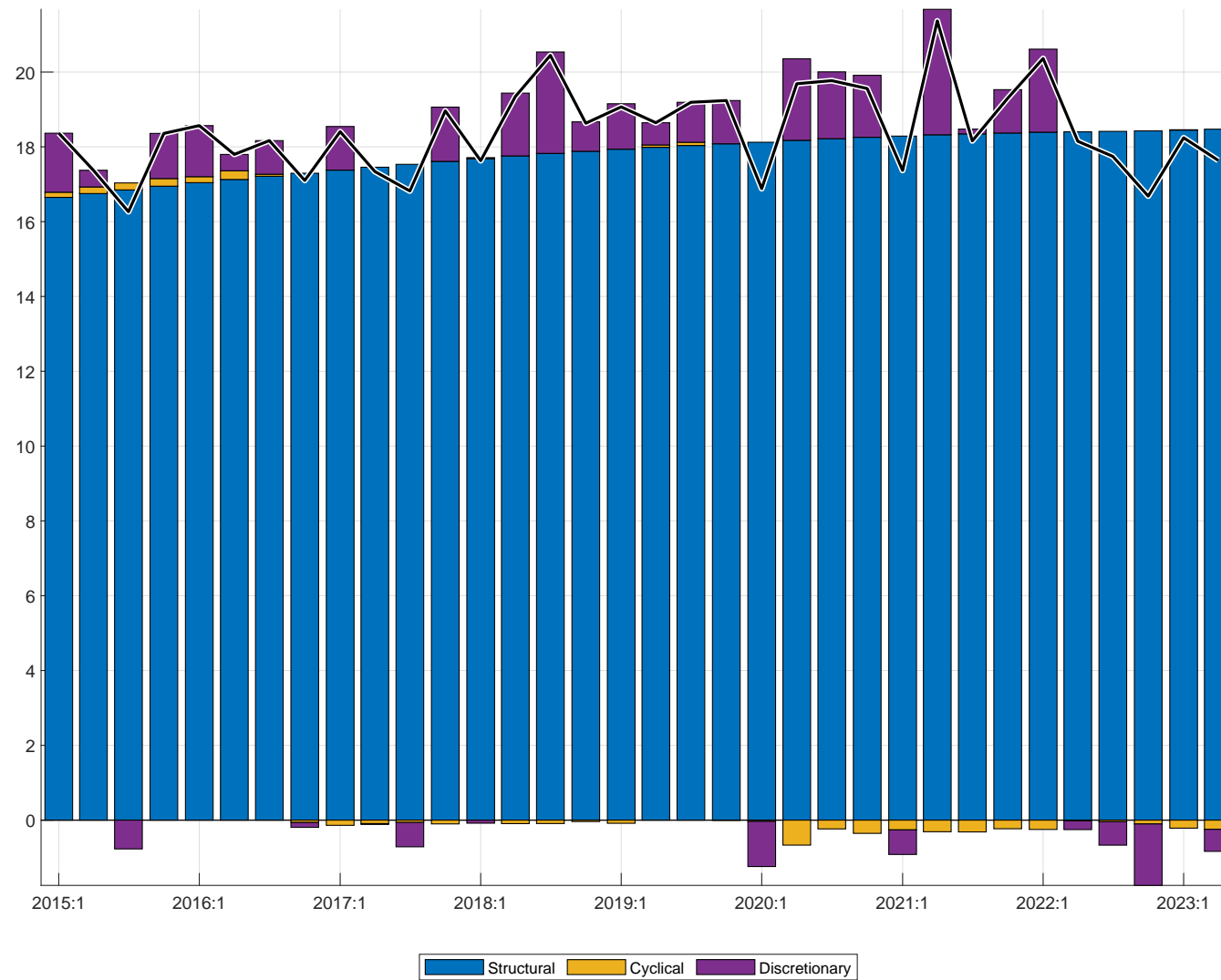


Exchange rate target, QQ % [dl_s_tar]

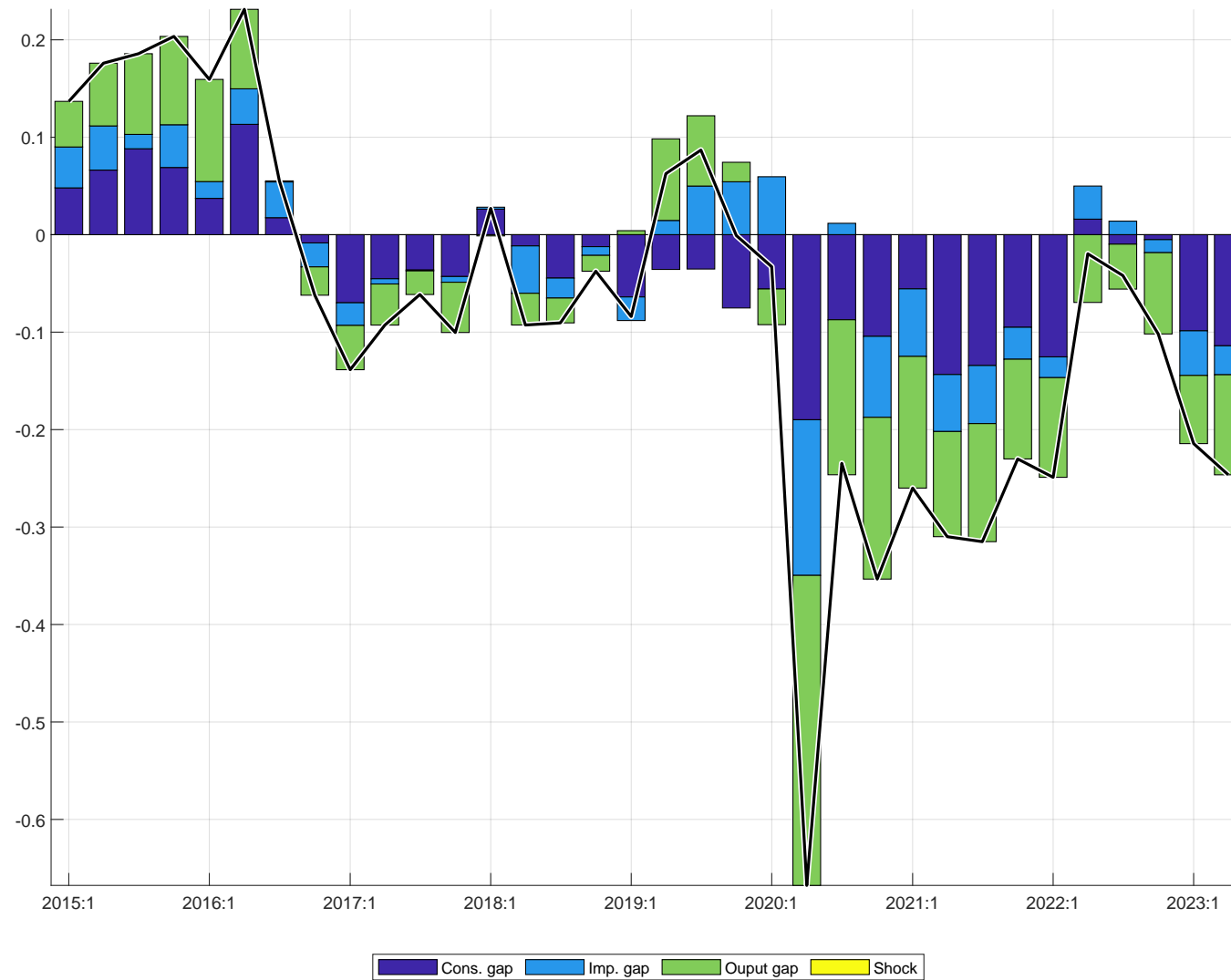




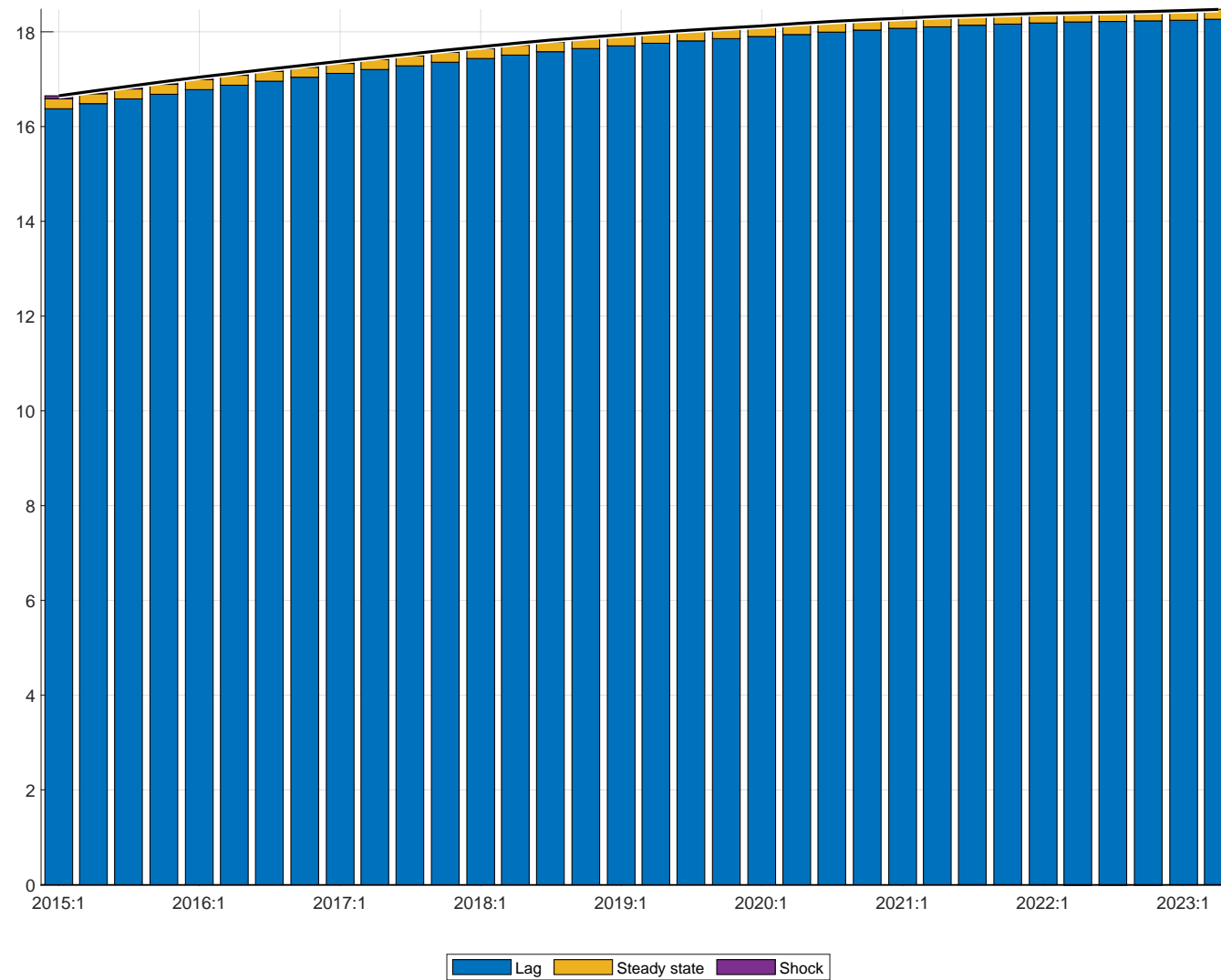
Govt. rev., % of GDP [grev_y]



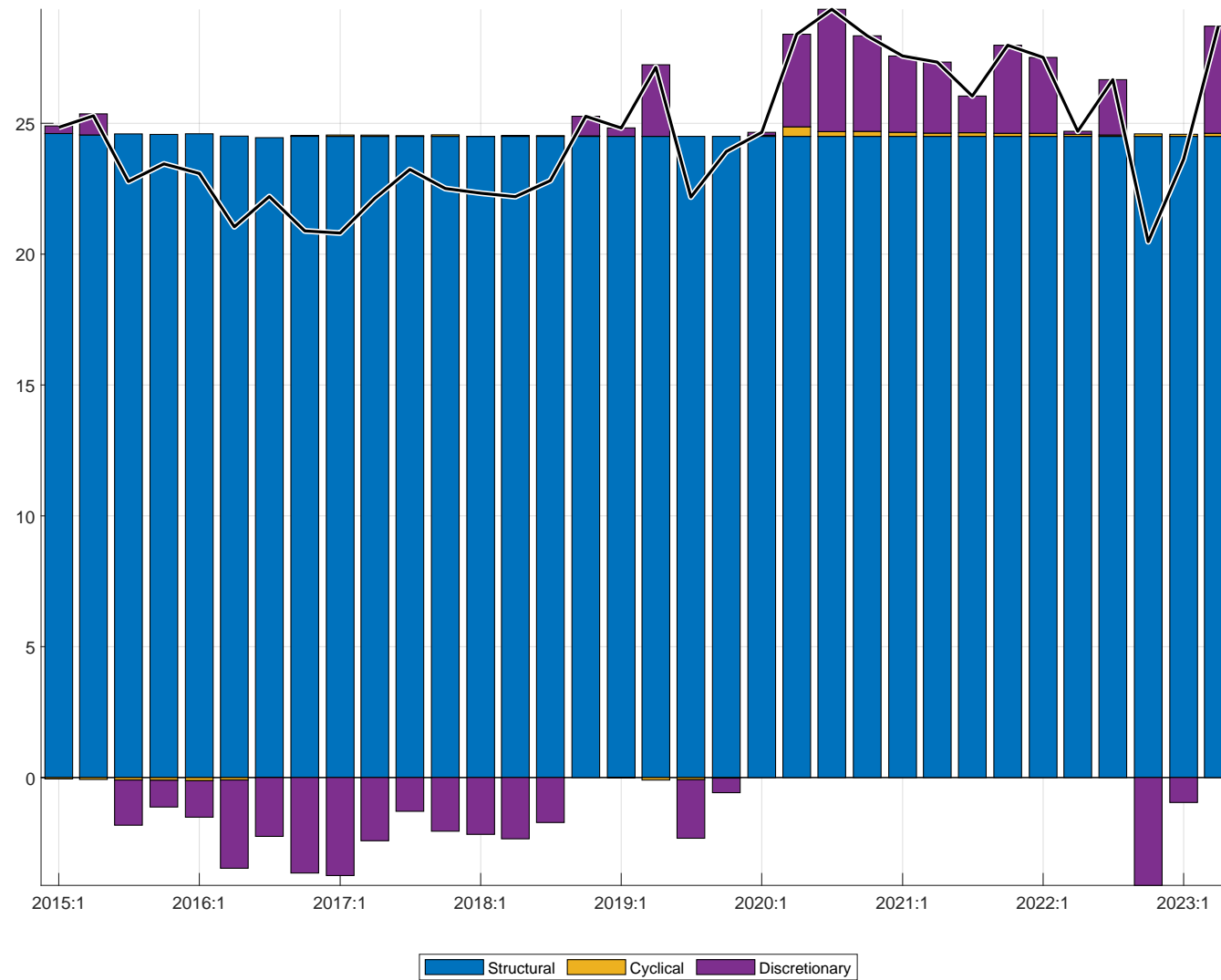
Cyc. govt. rev., % of GDP [grev_y_cyc]



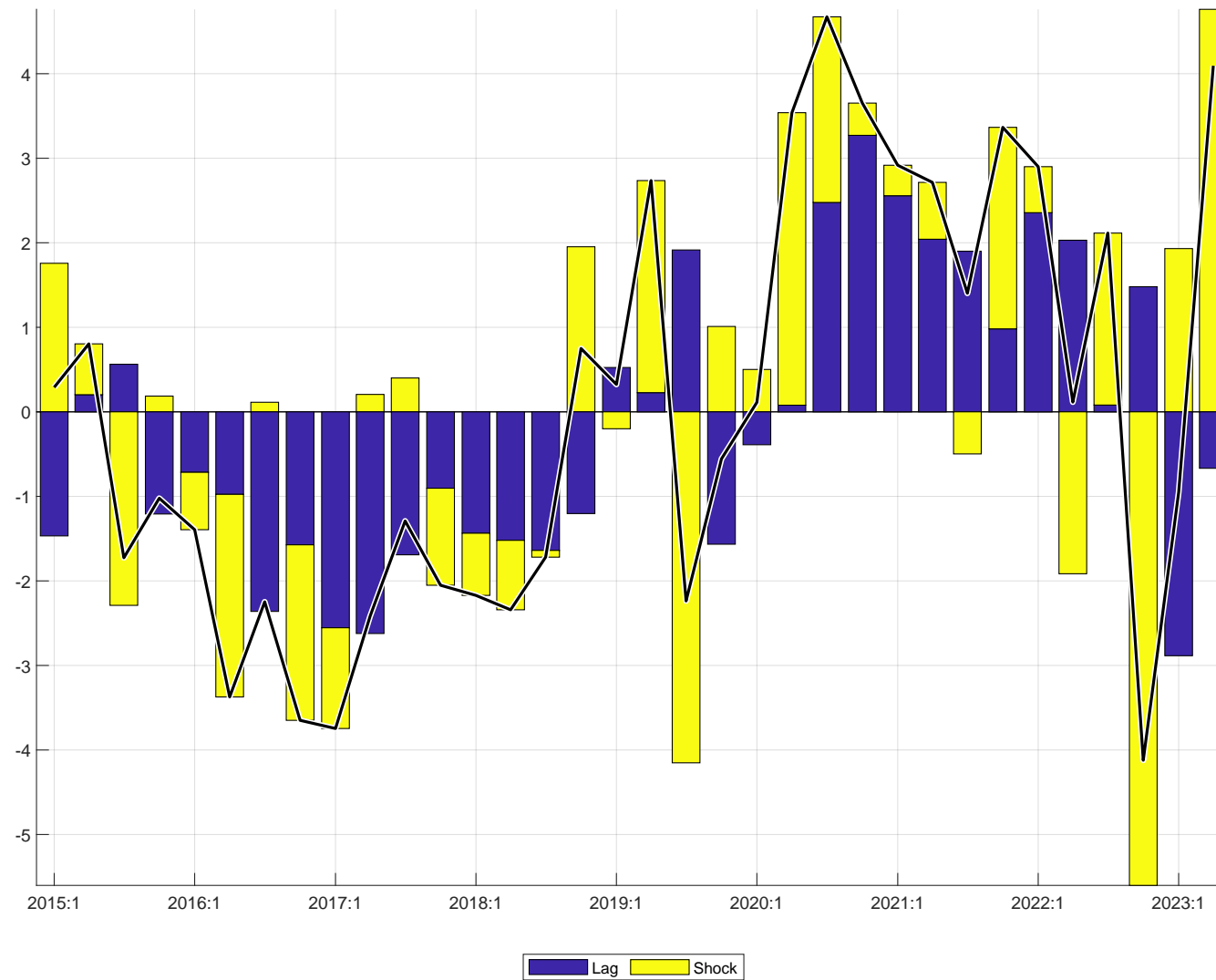
Struct. govt. rev., % of GDP [grev_y_str]



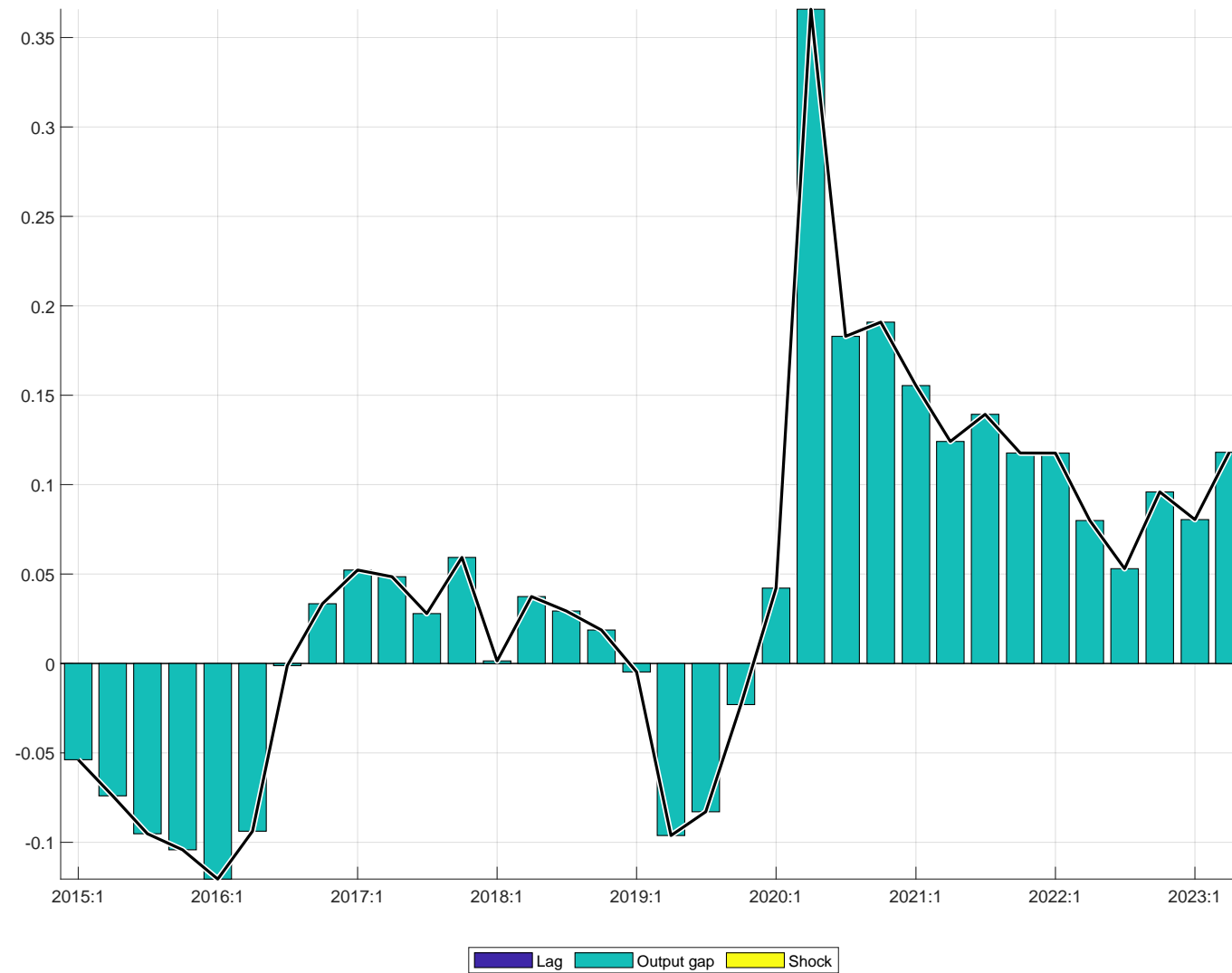
Govt. demand (G&S), % GDP [gdem_y]



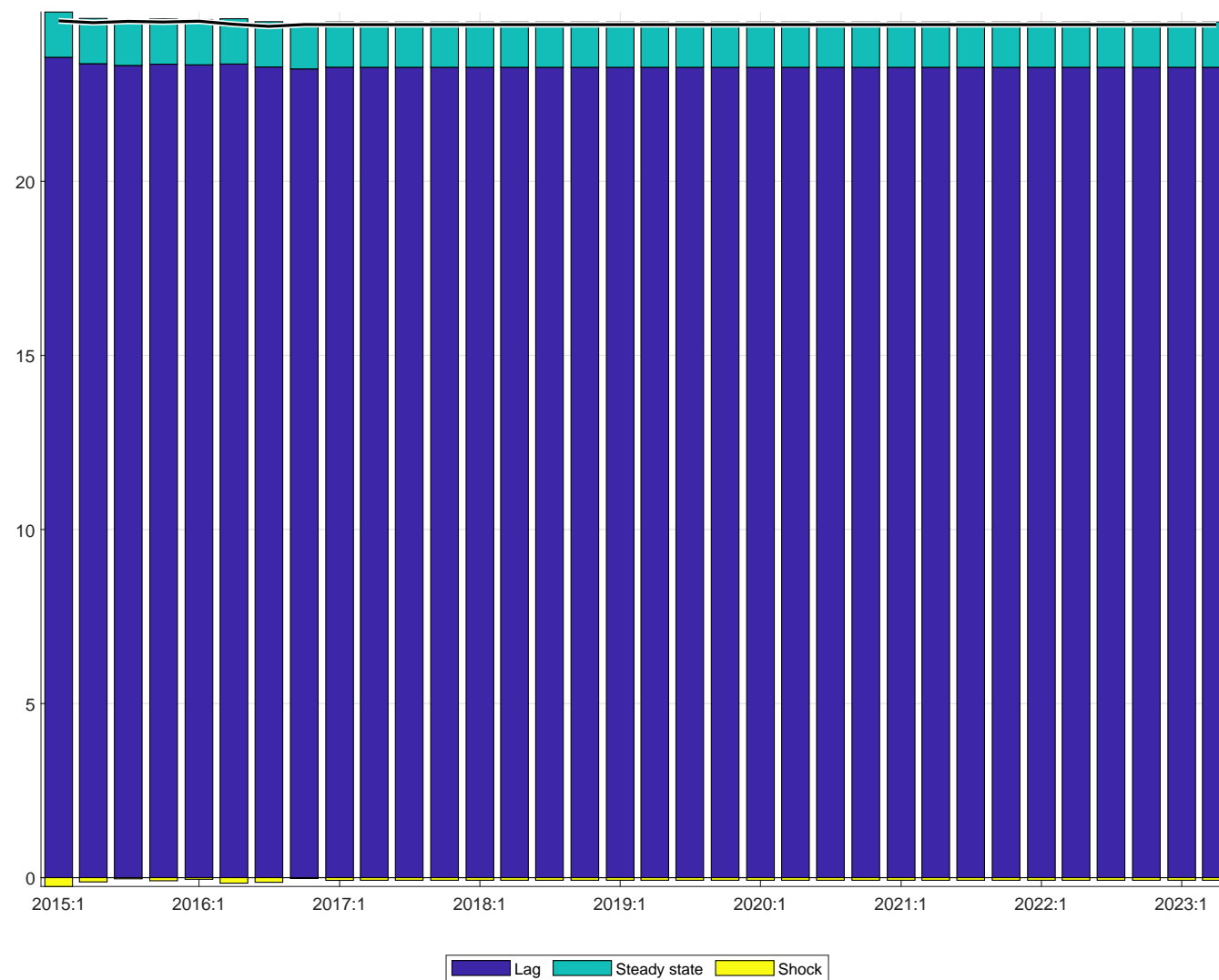
Discr. govt. demand (G&S), % GDP [gdem_y_discr]



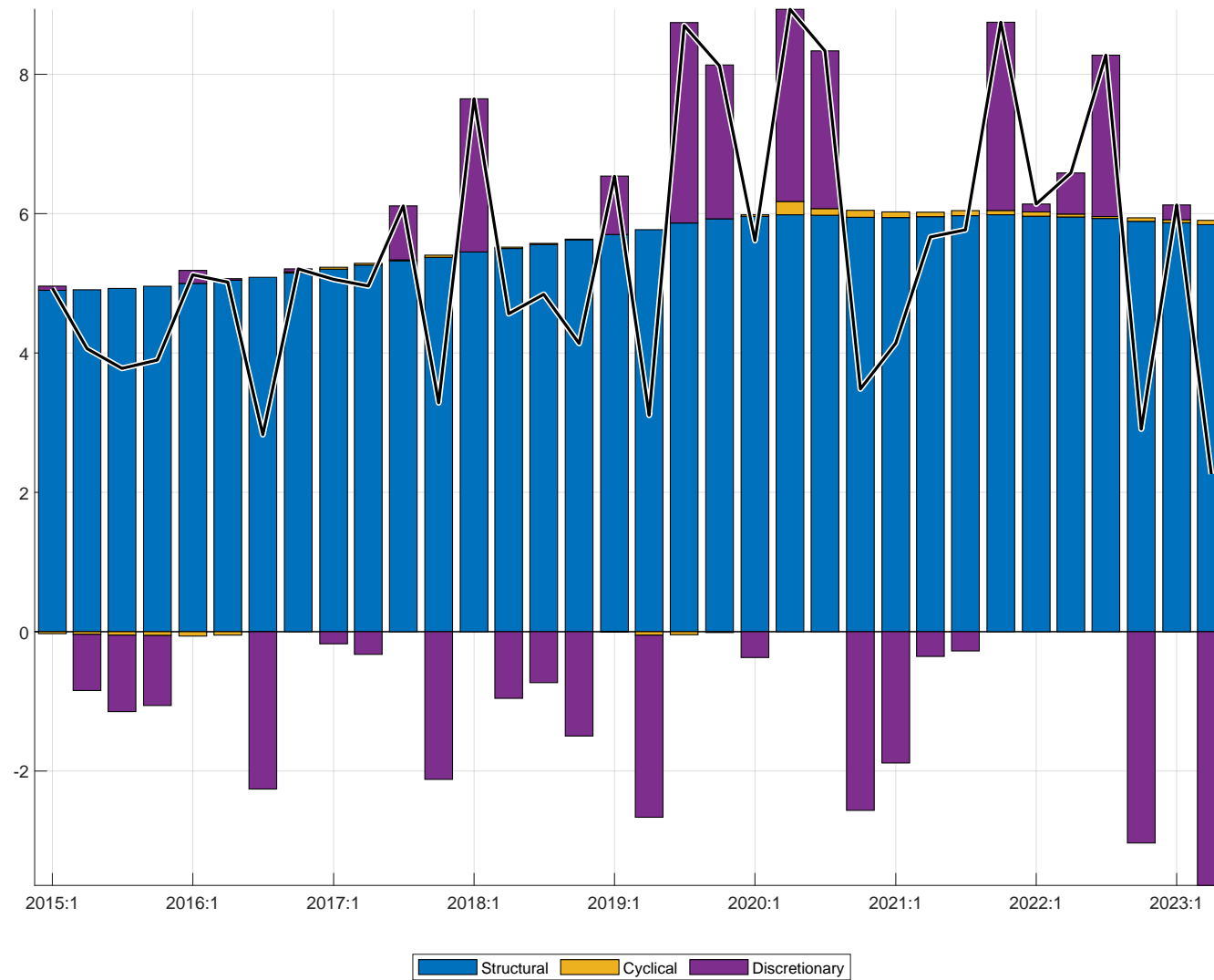
Cyc. govt. demand (G&S), % GDP [gdem_y_cyc]



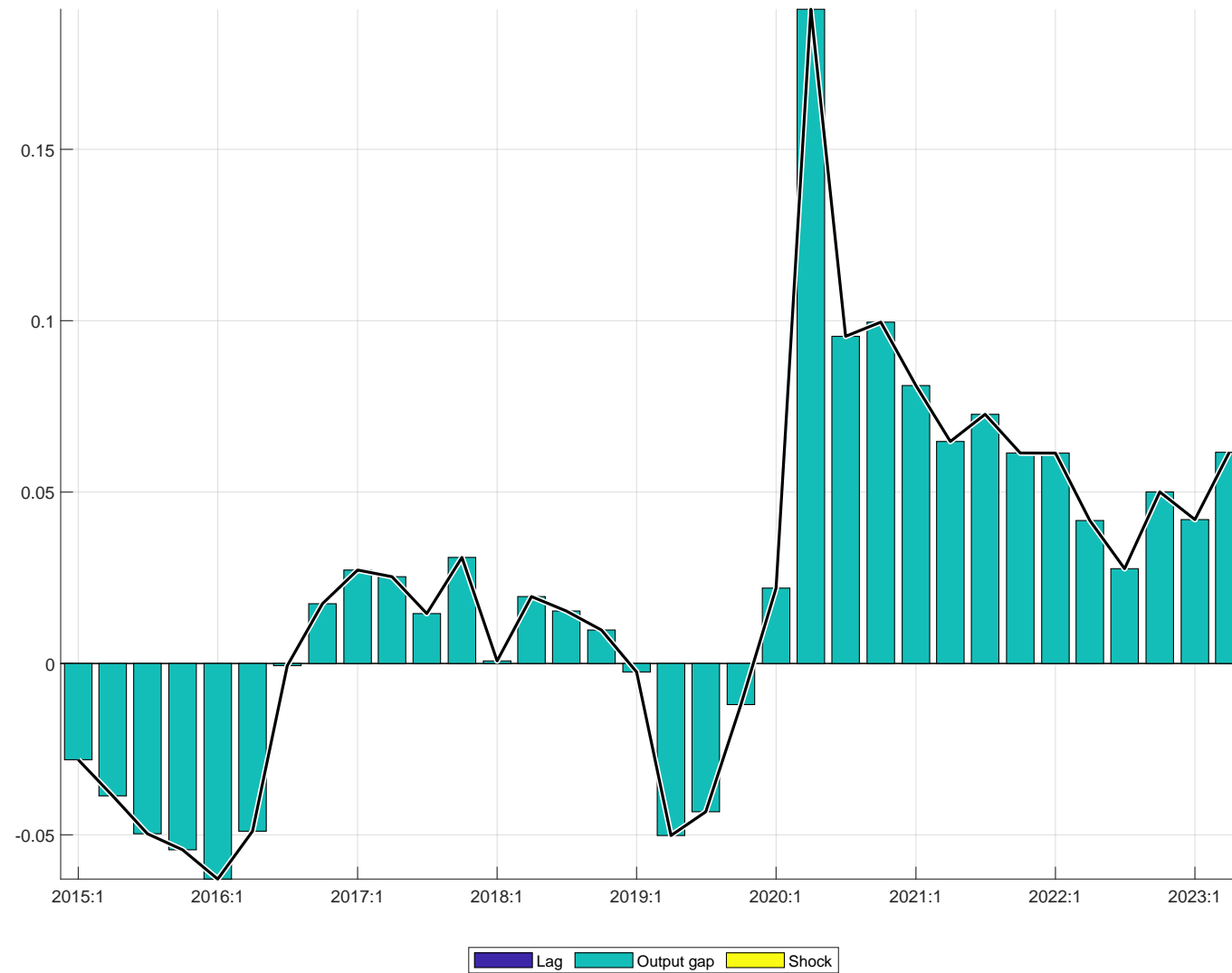
Struct. govt. demand (G&S), % GDP [gdem_y_str]



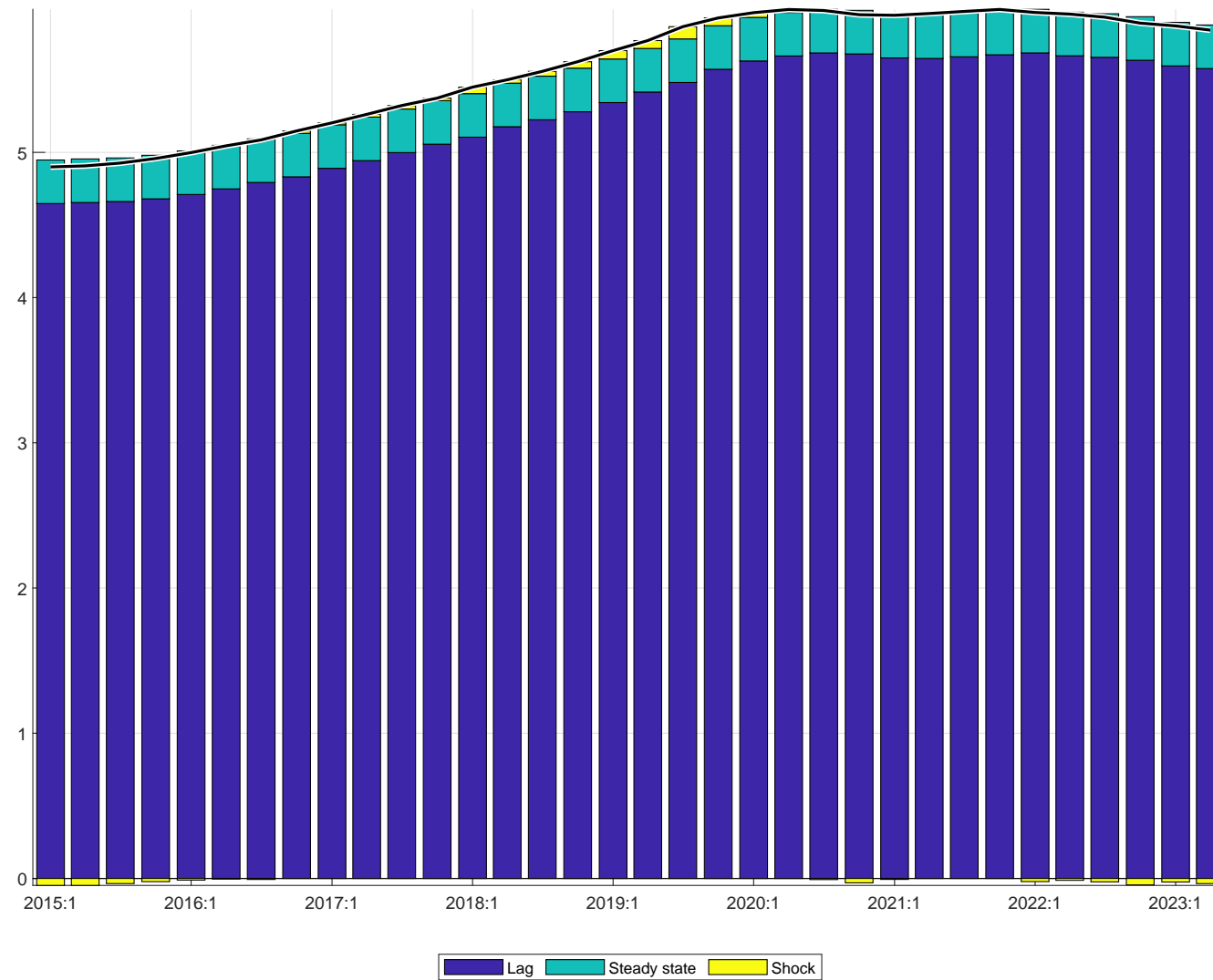
Other govt. exp., % to GDP [oexp_y]



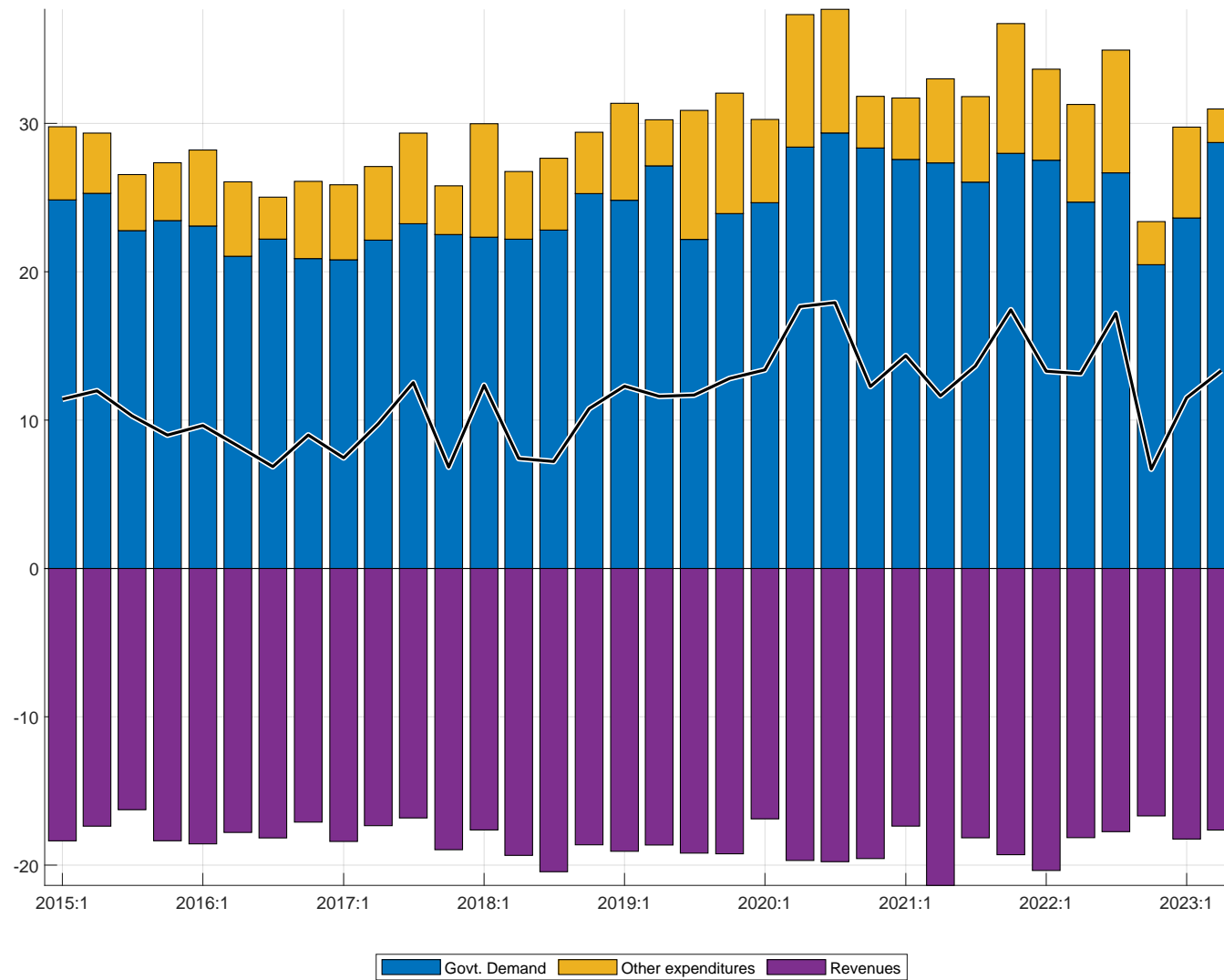
Cyc. other govt. exp., % to GDP [oexp_y_cyc]



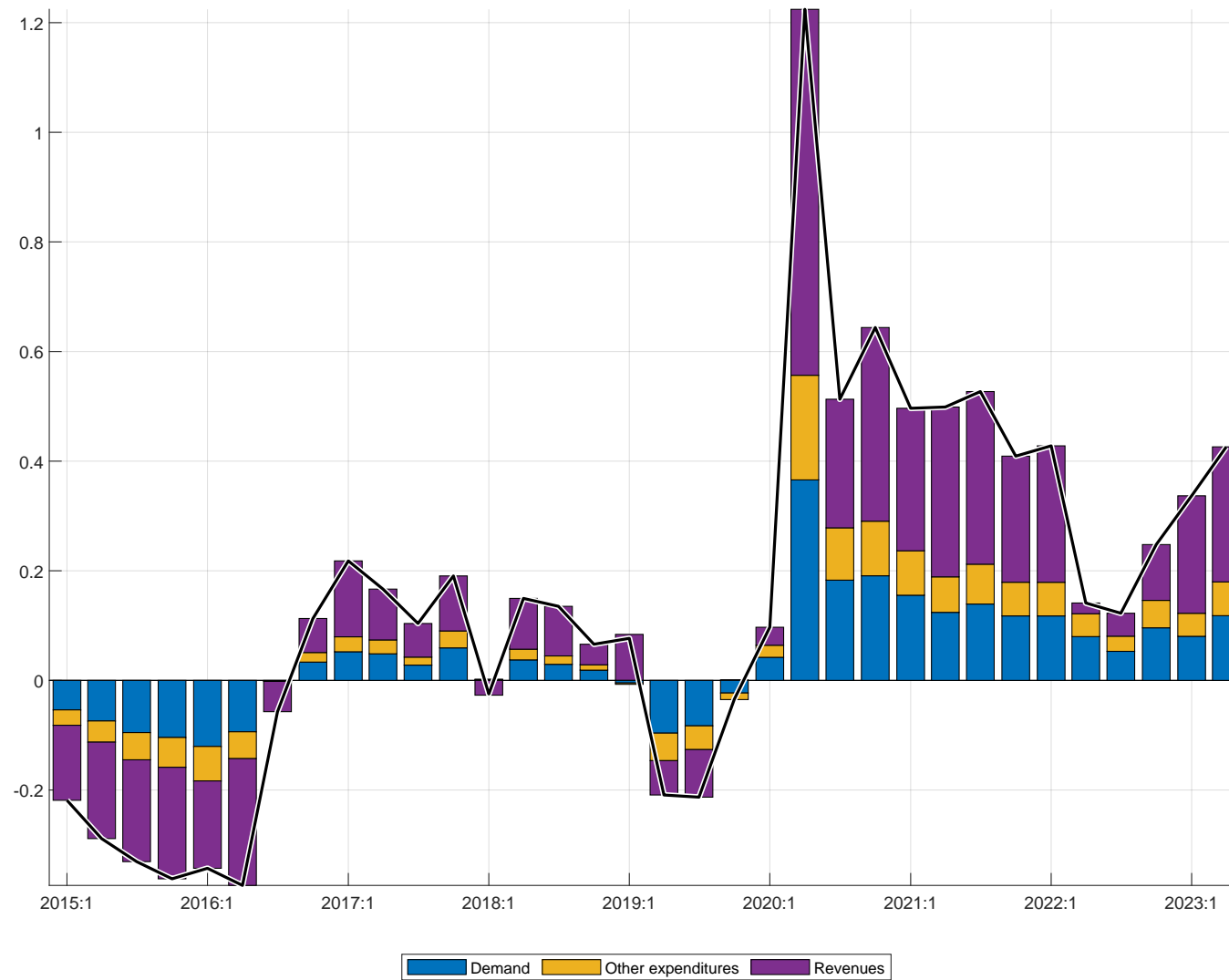
Struct. other govt. exp., % to GDP [oexp_y_str]



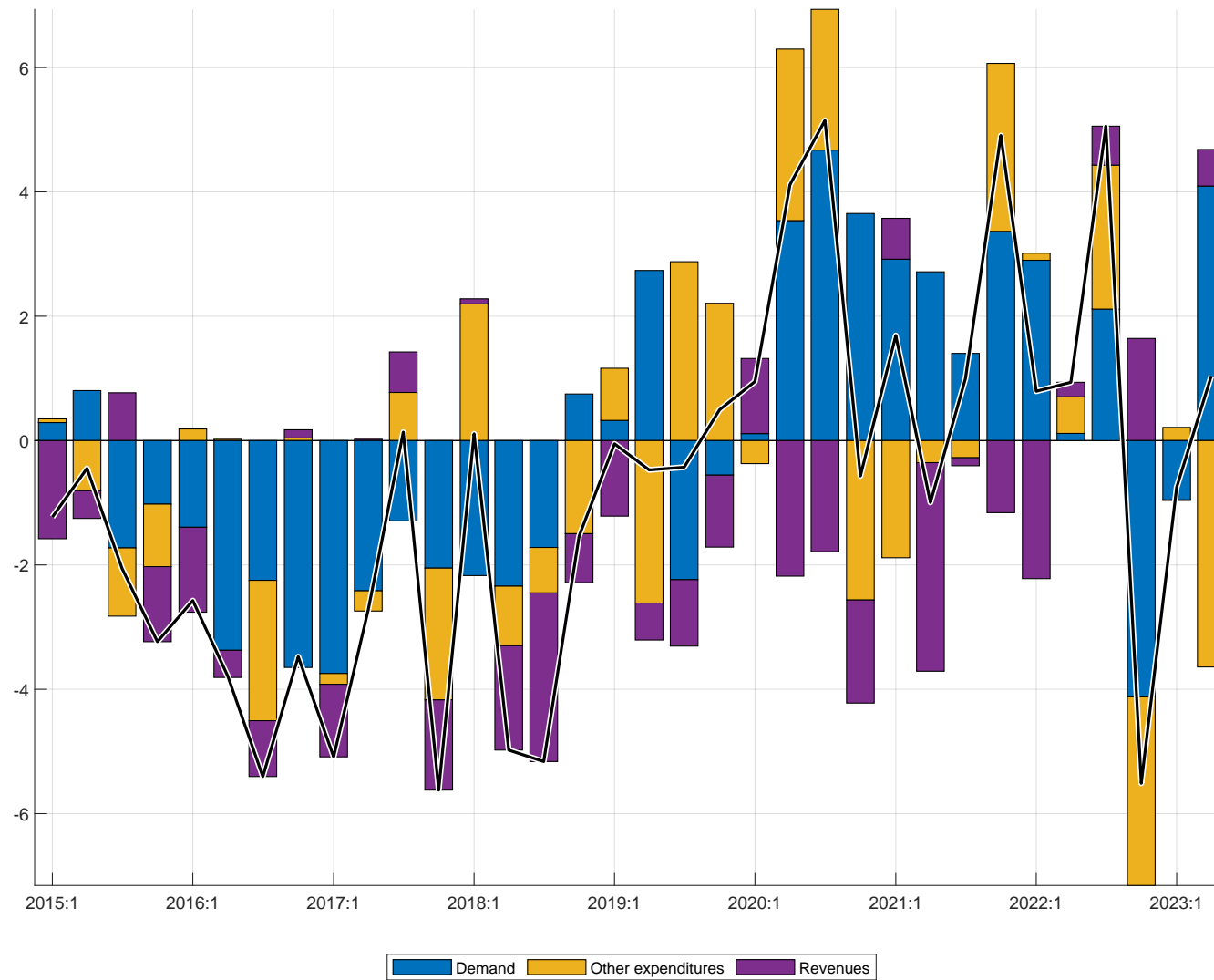
Budget deficit, % of GDP [def_y]



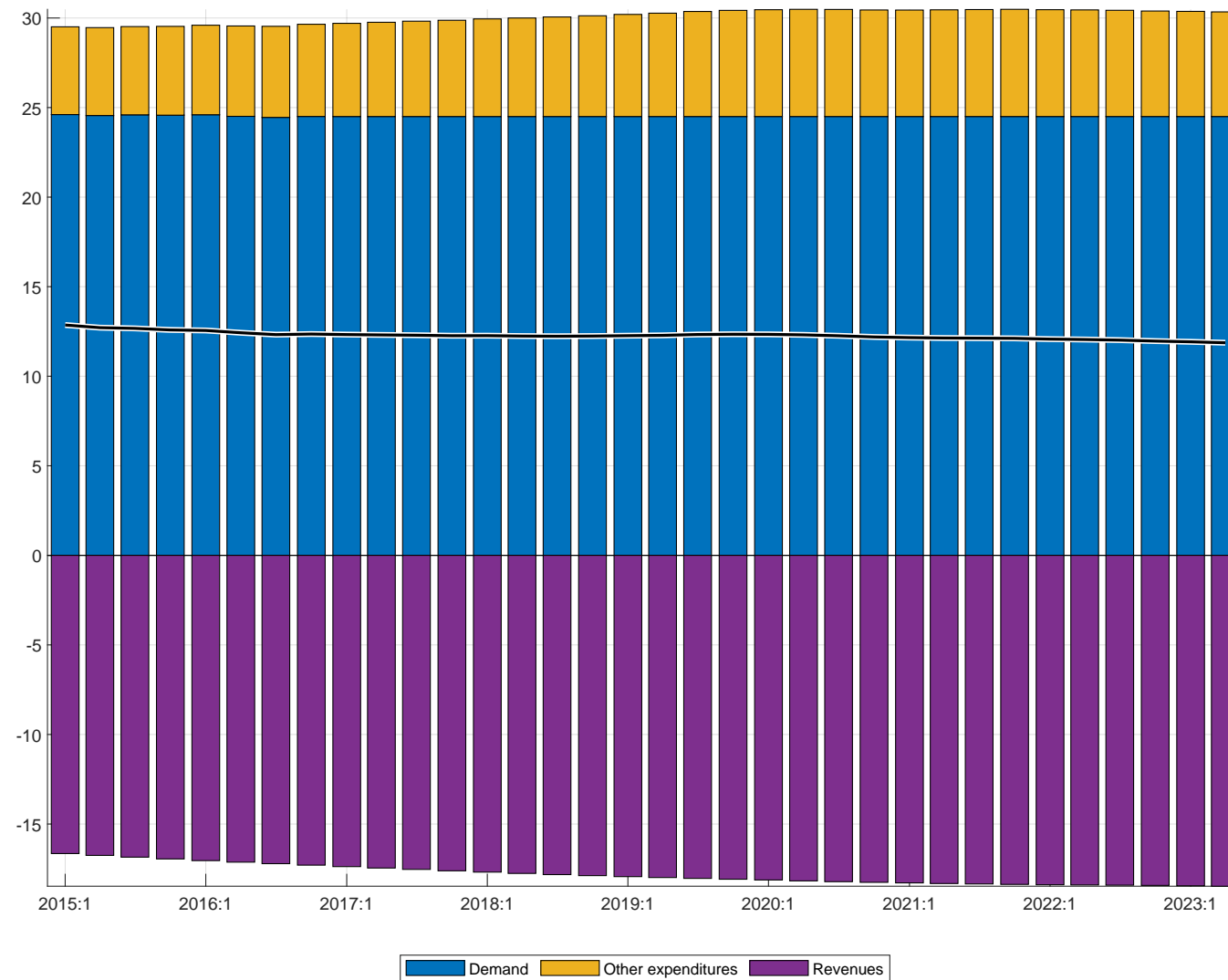
Cyc. deficit, % of GDP [def_y_cyc]



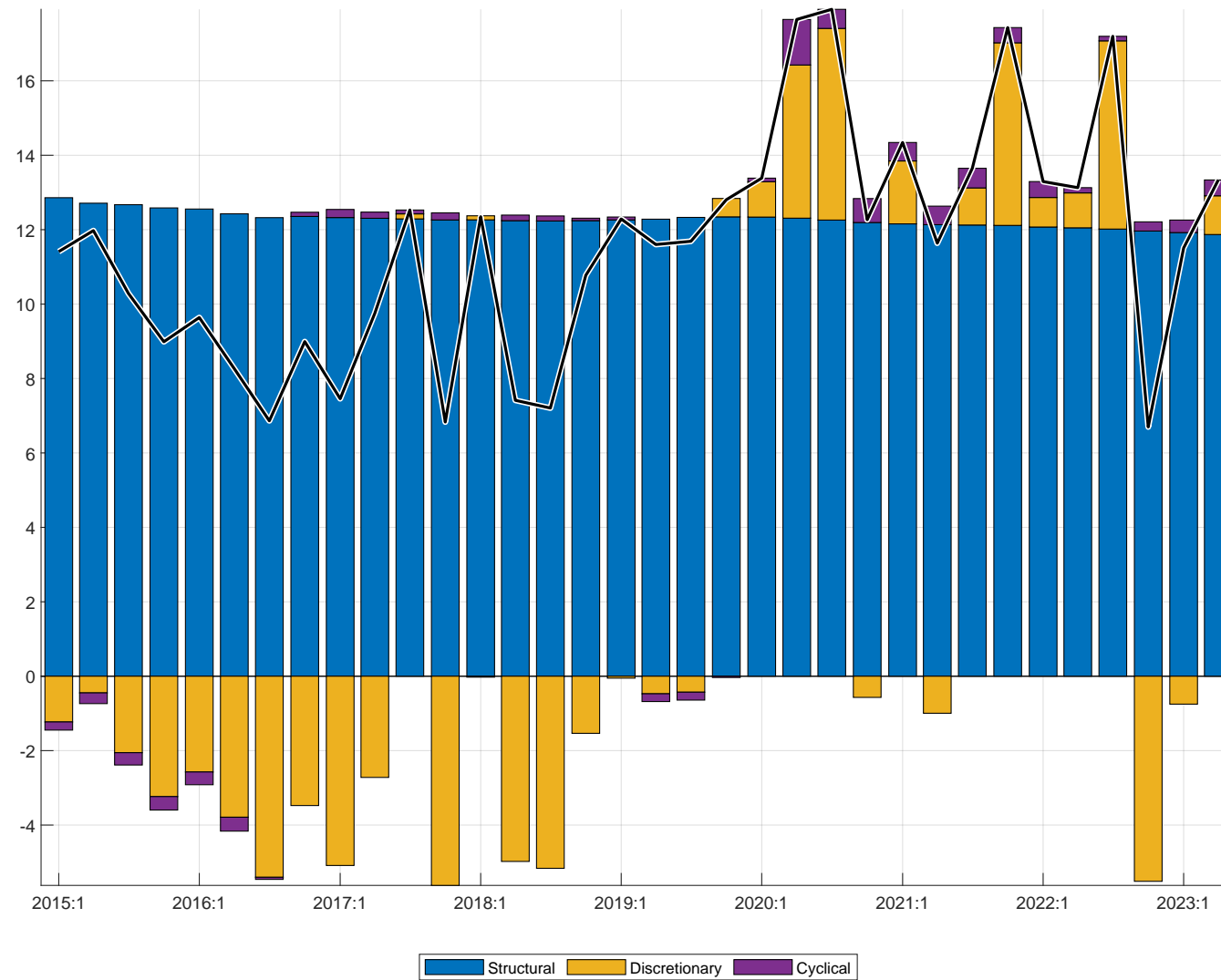
Discr. deficit, % of GDP [def_y_discr]

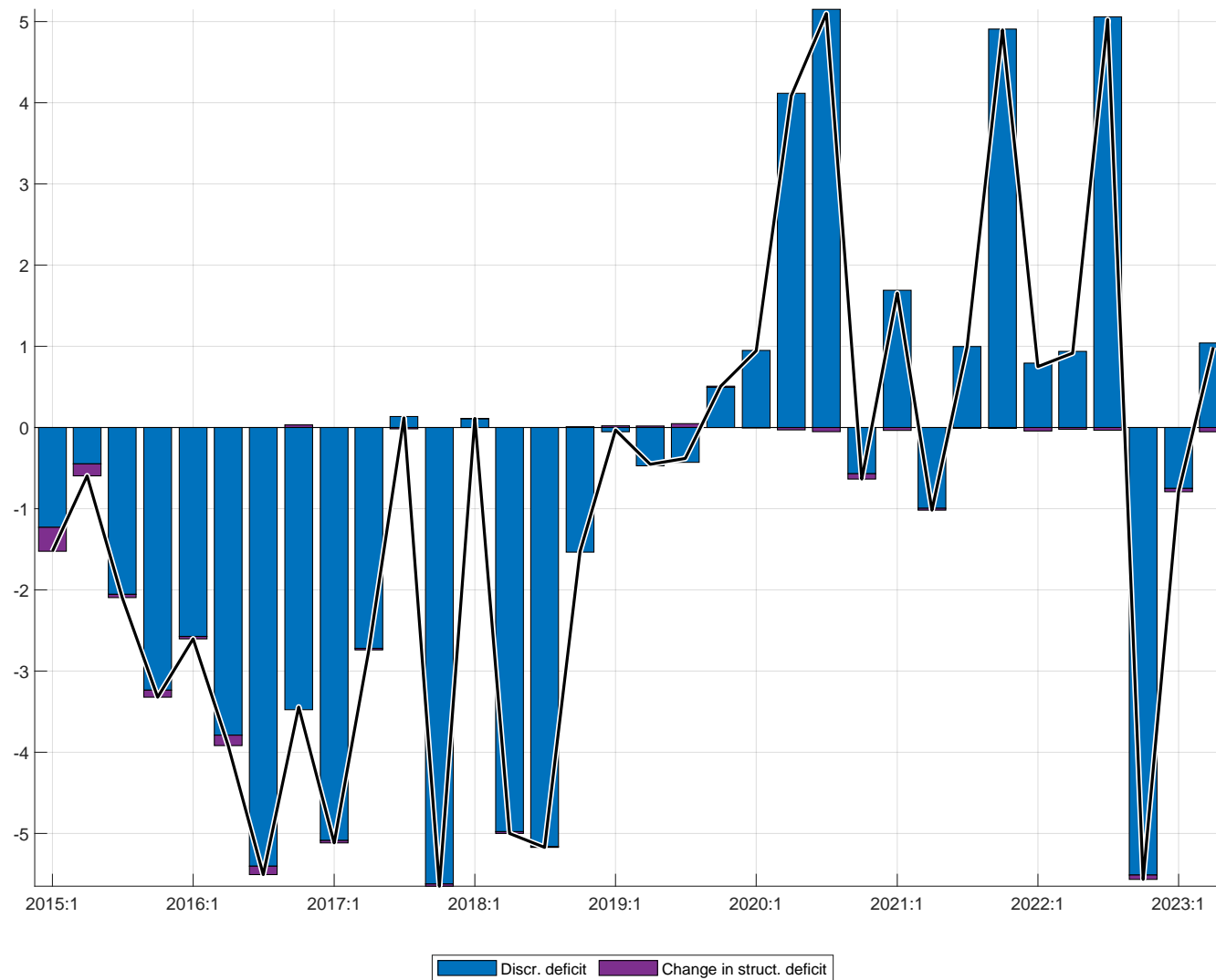


Struct. deficit, % of GDP [def_y_str]

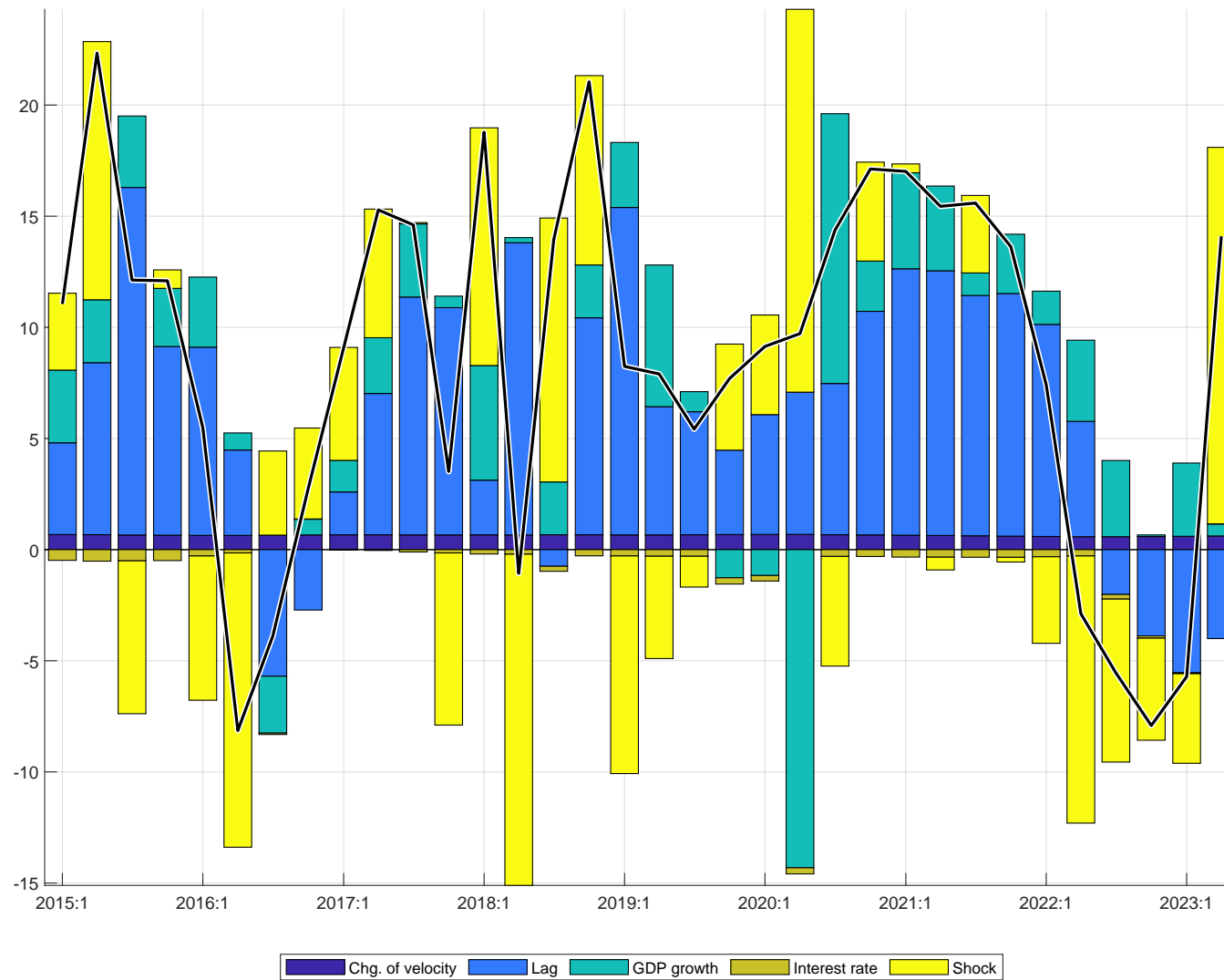


Budget deficit, % of GDP [def_y_scd]



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 |
|-------------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|
| Lag | −0.66 | −3.46 | −1.93 | −1.91 | −4.07 | −3.02 | −10.29 | −4.73 | −5.65 | −3.01 | −7.77 | −7.27 | −5.15 | −6.79 | 0.86 | −0.53 | −0.28 | −5.34 |
| 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 |
| RIR gap | −0.28 | 0.01 | −0.02 | 0.08 | −0.11 | −0.44 | −0.08 | −0.45 | −0.17 | −0.05 | −0.27 | −0.01 | 0.13 | 0.40 | 0.11 | 0.03 | −0.01 | 0.09 |
| 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 |
| Income | 0.04 | 0.84 | 0.72 | 0.20 | −0.37 | −3.18 | −1.59 | −1.66 | −1.35 | −1.08 | −1.21 | −1.02 | −1.02 | −0.70 | −0.46 | −0.83 | −0.70 | −1.03 |
| Fisc. imp. | −0.01 | −0.11 | −0.10 | 0.13 | 0.24 | 1.02 | 1.27 | −0.16 | 0.41 | −0.25 | 0.25 | 1.22 | 0.19 | 0.23 | 1.26 | −1.39 | −0.20 | 0.25 |
| Shock | −4.41 | −0.25 | −1.61 | −4.77 | −0.33 | −10.21 | 3.41 | −1.69 | 2.12 | −7.57 | −2.18 | −0.84 | −4.59 | 8.19 | −2.58 | 2.30 | −7.04 | −3.46 |
| Total | −5.32 | −2.97 | −2.93 | −6.26 | −4.64 | −15.82 | −7.27 | −8.69 | −4.63 | −11.96 | −11.19 | −7.92 | −10.45 | 1.33 | −0.81 | −0.42 | −8.22 | −9.50 |

Investment gap, % [l_inv_gap]

| | 2019Q1 | 2019Q2 | 2019Q3 | 2019Q4 | 2020Q1 | 2020Q2 | 2020Q3 | 2020Q4 | 2021Q1 | 2021Q2 | 2021Q3 | 2021Q4 | 2022Q1 | 2022Q2 | 2022Q3 | 2022Q4 | 2023Q1 | 2023Q2 |
|-------------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|
| Lag | -3.31 | 2.07 | 15.37 | 20.05 | 19.83 | 12.38 | -20.34 | -41.28 | -7.64 | -26.09 | 11.70 | 14.84 | -2.14 | -3.26 | 1.20 | -5.87 | 2.60 | -7.93 |
| 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 |
| RIR gap | -0.28 | 0.01 | -0.02 | 0.08 | -0.11 | -0.44 | -0.08 | -0.45 | -0.17 | -0.05 | -0.27 | -0.01 | 0.13 | 0.40 | 0.11 | 0.03 | -0.01 | 0.09 |
| 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 |
| Income | 0.04 | 0.84 | 0.72 | 0.20 | -0.37 | -3.18 | -1.59 | -1.66 | -1.35 | -1.08 | -1.21 | -1.02 | -1.02 | -0.70 | -0.46 | -0.83 | -0.70 | -1.03 |
| Fisc. imp. | -0.00 | -0.07 | -0.06 | 0.08 | 0.14 | 0.61 | 0.76 | -0.10 | 0.25 | -0.15 | 0.15 | 0.73 | 0.11 | 0.14 | 0.75 | -0.83 | -0.12 | 0.15 |
| Shock | 6.75 | 20.79 | 14.83 | 10.09 | -0.44 | -40.67 | -42.26 | 31.73 | -31.22 | 45.37 | 12.47 | -17.83 | -2.09 | 5.27 | -10.64 | 11.52 | -13.98 | -20.69 |
| Total | 3.19 | 23.65 | 30.85 | 30.50 | 19.05 | -31.30 | -63.51 | -11.76 | -40.13 | 18.00 | 22.84 | -3.29 | -5.01 | 1.85 | -9.04 | 4.01 | -12.20 | -29.41 |

Gov. demand gap, % [l_gdem_gap]

| | 2019Q1 | 2019Q2 | 2019Q3 | 2019Q4 | 2020Q1 | 2020Q2 | 2020Q3 | 2020Q4 | 2021Q1 | 2021Q2 | 2021Q3 | 2021Q4 | 2022Q1 | 2022Q2 | 2022Q3 | 2022Q4 | 2023Q1 | 2023Q2 |
|---------------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|
| Output gap | 0.21 | 4.18 | 3.61 | 1.00 | -1.83 | -15.91 | -7.95 | -8.30 | -6.76 | -5.40 | -6.06 | -5.12 | -5.11 | -3.48 | -2.30 | -4.17 | -3.50 | -5.13 |
| Cyclical | -0.02 | -0.35 | -0.37 | -0.10 | 0.17 | 1.29 | 0.62 | 0.67 | 0.56 | 0.45 | 0.53 | 0.42 | 0.43 | 0.32 | 0.20 | 0.47 | 0.34 | 0.41 |
| Discretionary | 1.31 | 10.08 | -10.09 | -2.32 | 0.46 | 12.46 | 15.92 | 12.89 | 10.58 | 9.93 | 5.39 | 12.03 | 10.54 | 0.46 | 7.93 | -20.13 | -4.04 | 14.26 |
| Approx. error | -0.06 | 0.43 | 1.54 | 0.19 | -0.03 | 1.27 | 2.13 | 1.22 | 0.67 | 0.53 | 0.01 | 0.95 | 0.64 | -0.04 | 0.21 | 4.18 | 0.34 | 1.53 |
| Total | 1.44 | 14.34 | -5.32 | -1.23 | -1.24 | -0.89 | 10.72 | 6.48 | 5.06 | 5.52 | -0.13 | 8.28 | 6.49 | -2.73 | 6.03 | -19.65 | -6.86 | 11.07 |

Export gap, % [l_exp_gap]

| | 2019Q1 | 2019Q2 | 2019Q3 | 2019Q4 | 2020Q1 | 2020Q2 | 2020Q3 | 2020Q4 | 2021Q1 | 2021Q2 | 2021Q3 | 2021Q4 | 2022Q1 | 2022Q2 | 2022Q3 | 2022Q4 | 2023Q1 | 2023Q2 |
|----------------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|
| Lag | 1.28 | 2.57 | 4.79 | 11.81 | 12.28 | 3.27 | -21.90 | 7.09 | -19.10 | -18.44 | -9.60 | -16.54 | -7.80 | -3.93 | -1.43 | -2.28 | -2.86 | 4.67 |
| 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 |
| 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 |
| REER gap | 0.43 | 0.29 | 0.22 | 0.03 | -0.25 | -0.74 | -0.52 | 0.34 | 0.75 | 1.18 | 1.38 | 1.22 | 0.86 | -0.16 | -0.88 | -1.53 | -1.44 | -0.66 |
| Foreign demand | 0.50 | 0.57 | 0.55 | 0.44 | -0.10 | -0.52 | -0.80 | -0.97 | -0.83 | -0.68 | -0.54 | -0.40 | -0.19 | -0.02 | 0.10 | 0.18 | 0.15 | 0.13 |
| Shock | 1.75 | 3.92 | 12.62 | 6.61 | -6.90 | -35.71 | 34.13 | -35.84 | -9.20 | 3.17 | -16.68 | 3.71 | 1.09 | 1.92 | -1.30 | -0.78 | 11.34 | 2.02 |
| Total | 3.96 | 7.36 | 18.18 | 18.88 | 5.03 | -33.70 | 10.91 | -29.38 | -28.36 | -14.77 | -25.44 | -12.00 | -6.05 | -2.20 | -3.51 | -4.40 | 7.19 | 6.15 |

Import gap, % [l_imp_gap]

| | 2019Q1 | 2019Q2 | 2019Q3 | 2019Q4 | 2020Q1 | 2020Q2 | 2020Q3 | 2020Q4 | 2021Q1 | 2021Q2 | 2021Q3 | 2021Q4 | 2022Q1 | 2022Q2 | 2022Q3 | 2022Q4 | 2023Q1 | 2023Q2 |
|----------------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|
| Cons. gap | -2.37 | -1.32 | -1.31 | -2.79 | -2.07 | -7.05 | -3.24 | -3.87 | -2.06 | -5.33 | -4.99 | -3.53 | -4.66 | 0.59 | -0.36 | -0.19 | -3.66 | -4.23 |
| Invest. gap | 0.50 | 3.69 | 4.81 | 4.76 | 2.97 | -4.88 | -9.91 | -1.83 | -6.26 | 2.81 | 3.56 | -0.51 | -0.78 | 0.29 | -1.41 | 0.62 | -1.90 | -4.59 |
| Gov.demand gap | 0.40 | 3.96 | -1.47 | -0.34 | -0.34 | -0.25 | 2.96 | 1.79 | 1.40 | 1.52 | -0.04 | 2.29 | 1.79 | -0.75 | 1.66 | -5.42 | -1.89 | 3.05 |
| Export gap | 0.48 | 0.90 | 2.22 | 2.31 | 0.61 | -4.12 | 1.33 | -3.59 | -3.47 | -1.81 | -3.11 | -1.47 | -0.74 | -0.27 | -0.43 | -0.54 | 0.88 | 0.75 |
| REER gap | -0.65 | -0.44 | -0.33 | -0.04 | 0.37 | 1.11 | 0.78 | -0.52 | -1.13 | -1.77 | -2.07 | -1.84 | -1.28 | 0.25 | 1.32 | 2.29 | 2.16 | 0.99 |
| Shock | -2.39 | -4.34 | 4.39 | 5.16 | 8.37 | -11.43 | 10.02 | -5.83 | -0.02 | -5.17 | -3.30 | -0.40 | 2.12 | 5.55 | 1.54 | 1.01 | -3.22 | -0.93 |
| Total | -4.03 | 2.44 | 8.32 | 9.05 | 9.91 | -26.62 | 1.95 | -13.85 | -11.55 | -9.74 | -9.93 | -5.46 | -3.55 | 5.66 | 2.32 | -2.23 | -7.63 | -4.95 |

Output gap, % [l_y_gap]

| | 2019Q1 | 2019Q2 | 2019Q3 | 2019Q4 | 2020Q1 | 2020Q2 | 2020Q3 | 2020Q4 | 2021Q1 | 2021Q2 | 2021Q3 | 2021Q4 | 2022Q1 | 2022Q2 | 2022Q3 | 2022Q4 | 2023Q1 | 2023Q2 |
|----------------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|
| Cons. gap | -4.15 | -2.32 | -2.29 | -4.89 | -3.62 | -12.34 | -5.67 | -6.78 | -3.61 | -9.33 | -8.72 | -6.18 | -8.15 | 1.04 | -0.63 | -0.33 | -6.41 | -7.41 |
| Invest. gap | 0.41 | 3.07 | 4.01 | 3.97 | 2.48 | -4.07 | -8.26 | -1.53 | -5.22 | 2.34 | 2.97 | -0.43 | -0.65 | 0.24 | -1.17 | 0.52 | -1.59 | -3.82 |
| Gov.demand gap | 0.33 | 3.30 | -1.22 | -0.28 | -0.28 | -0.20 | 2.47 | 1.49 | 1.16 | 1.27 | -0.03 | 1.90 | 1.49 | -0.63 | 1.39 | -4.52 | -1.58 | 2.55 |
| Export gap | 0.83 | 1.55 | 3.82 | 3.97 | 1.06 | -7.08 | 2.29 | -6.17 | -5.96 | -3.10 | -5.34 | -2.52 | -1.27 | -0.46 | -0.74 | -0.92 | 1.51 | 1.29 |
| Import gap | 1.41 | -0.85 | -2.91 | -3.17 | -3.47 | 9.32 | -0.68 | 4.85 | 4.04 | 3.41 | 3.48 | 1.91 | 1.24 | -1.98 | -0.81 | 0.78 | 2.67 | 1.73 |
| Shock | 1.37 | -0.56 | 2.20 | 1.41 | 2.01 | -1.53 | 1.90 | -0.16 | 2.82 | 0.01 | 1.59 | 0.19 | 2.22 | -1.68 | -0.34 | 0.31 | 1.90 | 0.53 |
| Total | 0.21 | 4.18 | 3.61 | 1.00 | -1.83 | -15.91 | -7.95 | -8.30 | -6.76 | -5.40 | -6.06 | -5.12 | -5.11 | -3.48 | -2.30 | -4.17 | -3.50 | -5.13 |

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 |
|------------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|
| Cons. | 4.23 | 4.10 | 4.08 | 4.32 | 4.67 | 5.00 | 5.01 | 5.08 | 4.87 | 4.57 | 4.21 | 3.96 | 3.94 | 4.17 | 4.54 | 4.87 | 5.08 | 5.14 |
| Invest. | 0.79 | 0.76 | 0.75 | 0.78 | 0.84 | 0.90 | 0.90 | 0.92 | 0.88 | 0.82 | 0.74 | 0.68 | 0.66 | 0.70 | 0.76 | 0.81 | 0.84 | 0.85 |
| Gov.demand | 1.30 | 1.23 | 1.23 | 1.43 | 1.71 | 1.97 | 1.99 | 2.05 | 1.89 | 1.67 | 1.38 | 1.18 | 1.14 | 1.29 | 1.55 | 1.77 | 1.91 | 1.92 |
| Export | 2.62 | 2.49 | 2.42 | 2.53 | 2.70 | 2.86 | 2.83 | 2.83 | 2.67 | 2.45 | 2.18 | 1.99 | 1.94 | 2.05 | 2.26 | 2.43 | 2.53 | 2.50 |
| Import | -3.27 | -3.25 | -3.15 | -2.85 | -2.48 | -2.15 | -2.08 | -1.97 | -2.07 | -2.25 | -2.50 | -2.68 | -2.71 | -2.59 | -2.36 | -2.17 | -2.07 | -2.07 |
| Total | 5.67 | 5.33 | 5.33 | 6.20 | 7.44 | 8.59 | 8.65 | 8.92 | 8.23 | 7.27 | 6.02 | 5.13 | 4.97 | 5.61 | 6.75 | 7.71 | 8.29 | 8.35 |

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 |
|-------------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|
| Lag | 1.19 | 0.91 | 1.09 | 1.42 | 3.19 | 2.90 | 4.42 | 2.44 | -2.01 | 0.65 | 0.71 | 0.75 | 3.40 | 5.38 | 8.61 | 5.60 | 7.58 | 4.46 |
| Expectation | 0.63 | 2.13 | 1.97 | 3.18 | 2.32 | 0.32 | 1.88 | -1.75 | 0.35 | 1.07 | 0.24 | 2.71 | 3.98 | 6.78 | 4.11 | 4.50 | 2.54 | 1.98 |
| Direct | -0.06 | -0.02 | 0.08 | 0.16 | 0.05 | -0.01 | 0.49 | 0.64 | 0.48 | 0.50 | 0.28 | 0.22 | 0.23 | -0.06 | -0.09 | 0.20 | 0.58 | 1.00 |
| Output gap | 0.03 | 0.67 | 0.58 | 0.16 | -0.29 | -2.54 | -1.27 | -1.33 | -1.08 | -0.86 | -0.97 | -0.82 | -0.82 | -0.56 | -0.37 | -0.67 | -0.56 | -0.82 |
| REER gap | 0.09 | 0.06 | 0.04 | 0.01 | -0.05 | -0.15 | -0.10 | 0.07 | 0.15 | 0.24 | 0.28 | 0.24 | 0.17 | -0.03 | -0.18 | -0.31 | -0.29 | -0.13 |
| Shock | 0.14 | -1.31 | -0.62 | 2.17 | 1.22 | 9.30 | 0.02 | -4.55 | 3.55 | -0.01 | 1.13 | 4.44 | 5.00 | 7.62 | 0.36 | 7.52 | 0.06 | -2.20 |
| Total | 2.02 | 2.43 | 3.15 | 7.09 | 6.44 | 9.82 | 5.43 | -4.47 | 1.44 | 1.58 | 1.67 | 7.56 | 11.96 | 19.13 | 12.45 | 16.84 | 9.90 | 4.29 |

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 |
|------------------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|
| Foreign CPI | -4.18 | -2.72 | -1.50 | -0.46 | -1.84 | -0.76 | 4.64 | 7.04 | 7.66 | 8.78 | 3.81 | 1.23 | 2.66 | -2.24 | -5.20 | -3.71 | 0.51 | 5.43 |
| 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 |
| Trend adjustment | -1.76 | -1.77 | -1.75 | -1.71 | -1.65 | -1.61 | -1.66 | -1.69 | -1.72 | -1.76 | -1.78 | -1.79 | -1.75 | -1.69 | -1.61 | -1.55 | -1.51 | -1.45 |
| Total | -1.22 | -0.36 | 1.68 | 3.24 | 0.99 | -0.11 | 9.86 | 12.82 | 9.67 | 10.03 | 5.69 | 4.49 | 4.60 | -1.29 | -1.82 | 3.90 | 11.56 | 19.91 |

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 |
|-------------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|
| Lag | -9.28 | 3.49 | 4.85 | 5.37 | 13.31 | 8.15 | -4.95 | 7.12 | 1.14 | -6.50 | -2.11 | -0.89 | -2.98 | 11.28 | 13.85 | 14.23 | 15.59 | 12.07 |
| Expectation | 5.19 | 5.57 | 6.30 | 10.94 | 7.93 | 1.07 | 8.26 | 3.47 | -1.58 | 1.31 | 1.93 | 1.83 | 10.84 | 10.02 | 9.96 | 9.96 | 8.92 | 5.23 |
| Direct | 0.63 | 0.55 | -0.47 | 1.07 | 0.52 | -2.09 | 1.20 | 3.73 | 3.92 | 3.42 | -0.70 | 0.36 | 5.04 | 2.41 | -5.11 | 0.41 | 1.92 | 1.40 |
| RER gap | 0.60 | 0.39 | -0.11 | -0.80 | -1.25 | -1.42 | -1.63 | -0.77 | 0.67 | 1.68 | 1.56 | 1.87 | 2.32 | 1.93 | -0.36 | -1.37 | -1.75 | -1.81 |
| AgrOutp gap | -3.19 | -4.11 | -2.59 | -0.62 | 3.37 | 3.88 | 1.35 | 1.38 | -0.43 | -0.56 | -0.63 | 0.95 | 5.09 | 3.49 | 4.71 | 5.34 | 11.59 | 12.03 |
| Shock | 16.01 | 7.97 | 7.38 | 22.05 | -0.59 | -23.73 | 16.11 | -11.69 | -22.30 | -5.37 | -2.59 | -12.62 | 11.90 | 10.43 | 17.63 | 15.96 | -1.80 | -12.68 |
| Total | 9.96 | 13.86 | 15.36 | 38.02 | 23.29 | -14.13 | 20.35 | 3.24 | -18.58 | -6.03 | -2.54 | -8.51 | 32.22 | 39.56 | 40.67 | 44.54 | 34.47 | 16.24 |

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 |
|------------------------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|
| Foreign food inflation | 3.15 | 3.45 | -7.12 | 8.19 | 4.02 | -19.51 | 9.57 | 34.88 | 40.91 | 36.77 | -5.21 | 3.77 | 51.31 | 25.23 | -53.24 | -2.99 | 8.03 | -1.40 |
| 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 |
| Trend adjustment | -1.54 | -2.07 | -2.53 | -2.91 | -3.28 | -3.69 | -4.44 | -5.03 | -5.41 | -5.57 | -5.49 | -5.21 | -4.60 | -3.78 | -2.87 | -2.08 | -1.34 | -0.53 |
| Total | 6.34 | 5.50 | -4.71 | 10.69 | 5.22 | -20.93 | 12.01 | 37.32 | 39.24 | 34.21 | -7.04 | 3.60 | 50.40 | 24.08 | -51.12 | 4.09 | 19.24 | 14.01 |

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 |
|-------------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|
| Lag | −0.14 | −3.33 | −0.72 | 2.55 | 2.31 | 4.18 | 1.48 | −2.54 | 2.54 | −0.65 | −0.73 | 2.68 | 2.15 | 6.04 | 6.28 | 2.99 | 3.86 | −0.57 |
| Expectation | −0.36 | 2.91 | 5.10 | 5.04 | 5.18 | 1.45 | 0.77 | 4.29 | 2.80 | 3.64 | 5.40 | 5.14 | 8.30 | 7.97 | 4.08 | 4.50 | 1.66 | 2.46 |
| Direct | −0.44 | 0.56 | −0.65 | 0.10 | −1.65 | −3.62 | 2.39 | 0.36 | 2.33 | 0.88 | 0.43 | 0.67 | 1.53 | 1.06 | −1.06 | −0.78 | −0.38 | −0.44 |
| RER gap | 0.42 | 0.73 | 0.31 | 0.27 | −0.72 | −2.59 | −1.30 | −1.21 | −0.02 | 0.45 | 0.55 | 0.80 | 1.33 | 1.60 | 0.95 | 0.41 | 0.24 | 0.07 |
| Shock | −12.80 | −3.75 | 6.14 | 1.30 | 11.58 | 6.51 | −13.52 | 9.25 | −10.24 | −7.24 | 5.07 | −0.68 | 10.85 | 8.46 | 1.70 | 8.30 | −7.67 | −6.53 |
| Total | −13.32 | −2.87 | 10.18 | 9.25 | 16.70 | 5.92 | −10.18 | 10.15 | −2.60 | −2.91 | 10.72 | 8.61 | 24.16 | 25.13 | 11.95 | 15.43 | −2.30 | −5.01 |

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 |
|--------------------------|--------|--------|--------|--------|--------|---------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|
| 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 | -30.57 | -37.87 |
| 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 |
| Trend adjustment | -2.85 | -3.24 | -3.64 | -4.07 | -4.57 | -5.19 | -6.02 | -6.70 | -7.19 | -7.38 | -7.25 | -6.80 | -6.00 | -4.92 | -3.67 | -2.41 | -1.20 | -0.04 |
| Total | -22.01 | 28.15 | -32.37 | 5.08 | -82.31 | -181.05 | 119.52 | 18.24 | 116.44 | 44.21 | 21.49 | 33.39 | 76.54 | 52.76 | -53.22 | -38.80 | -19.22 | -21.98 |

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 |
|-------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|
| Lag | 0.25 | 0.85 | 1.10 | 0.69 | 0.17 | -0.90 | -1.04 | -0.36 | -0.37 | 0.12 | 0.15 | 0.17 | -0.25 | -1.36 | -0.93 | -1.26 | -1.42 | -3.09 |
| Shock | 1.88 | 1.89 | 0.63 | -0.28 | -2.41 | -1.69 | 0.14 | -0.56 | 0.66 | 0.25 | 0.27 | -0.80 | -3.14 | -0.97 | -2.21 | -2.30 | -6.31 | -4.93 |
| Total | 2.12 | 2.74 | 1.73 | 0.42 | -2.24 | -2.59 | -0.90 | -0.92 | 0.29 | 0.37 | 0.42 | -0.63 | -3.39 | -2.33 | -3.14 | -3.56 | -7.73 | -8.02 |

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

| | 2019Q1 | 2019Q2 | 2019Q3 | 2019Q4 | 2020Q1 | 2020Q2 | 2020Q3 | 2020Q4 | 2021Q1 | 2021Q2 | 2021Q3 | 2021Q4 | 2022Q1 | 2022Q2 | 2022Q3 | 2022Q4 | 2023Q1 | 2023Q2 |
|--------------------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|
| 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 |
| Neutral rate | 1.46 | 1.44 | 1.46 | 1.45 | 1.41 | 1.41 | 1.44 | 1.43 | 1.46 | 1.47 | 1.47 | 1.47 | 1.46 | 1.45 | 1.45 | 1.46 | 1.48 | 1.49 |
| Inflation reaction | -0.20 | 0.11 | 0.03 | 0.15 | -0.06 | -0.61 | -0.04 | -0.44 | -0.26 | -0.07 | -0.27 | 0.01 | 0.18 | 0.35 | 0.02 | -0.13 | -0.23 | -0.08 |
| Output gap | 0.02 | 0.42 | 0.36 | 0.10 | -0.18 | -1.59 | -0.80 | -0.83 | -0.68 | -0.54 | -0.61 | -0.51 | -0.51 | -0.35 | -0.23 | -0.42 | -0.35 | -0.51 |
| 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 |
| Shock | -0.18 | -1.04 | -0.72 | -0.63 | -0.04 | 1.69 | 0.37 | 0.84 | 0.44 | 0.17 | 0.42 | 0.02 | -0.00 | -0.22 | 0.34 | 1.01 | 0.91 | 0.88 |
| 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 |

Exchange rate, QQ annualized % [dl_s]

| | 2019Q1 | 2019Q2 | 2019Q3 | 2019Q4 | 2020Q1 | 2020Q2 | 2020Q3 | 2020Q4 | 2021Q1 | 2021Q2 | 2021Q3 | 2021Q4 | 2022Q1 | 2022Q2 | 2022Q3 | 2022Q4 | 2023Q1 | 2023Q2 |
|-----------------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|
| Expectation | 1.70 | 1.69 | 1.73 | 1.76 | 1.75 | 1.74 | 1.90 | 1.84 | 1.70 | 1.65 | 1.73 | 1.84 | 1.83 | 1.93 | 2.09 | 2.34 | 2.41 | 2.36 |
| 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 | -0.47 | -0.48 |
| Premium | 0.38 | 0.38 | 0.38 | 0.38 | 0.38 | 0.38 | 0.39 | 0.39 | 0.40 | 0.40 | 0.41 | 0.41 | 0.42 | 0.42 | 0.42 | 0.42 | 0.42 | 0.41 |
| Target | 2.42 | 2.16 | 2.61 | 2.94 | 4.28 | 7.12 | 5.36 | 3.58 | 1.81 | 0.06 | -0.04 | -0.12 | 0.65 | 3.49 | 6.59 | 9.14 | 9.17 | 6.29 |
| Shock | 0.81 | 0.47 | 0.89 | 1.09 | -1.07 | -5.96 | 0.24 | 2.67 | 0.83 | 1.90 | 2.57 | 3.91 | 1.77 | -2.36 | -3.47 | -2.24 | 1.02 | 7.35 |
| 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 |

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 |
|---------------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|
| 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 |
| RER trend | 1.76 | 1.77 | 1.75 | 1.71 | 1.65 | 1.61 | 1.66 | 1.69 | 1.72 | 1.76 | 1.78 | 1.79 | 1.75 | 1.69 | 1.61 | 1.55 | 1.51 | 1.45 |
| CPI target | 4.85 | 4.87 | 4.87 | 4.87 | 4.87 | 4.88 | 4.95 | 5.02 | 5.08 | 5.13 | 5.18 | 5.21 | 5.21 | 5.20 | 5.18 | 5.18 | 5.18 | 5.17 |
| Core RP trend | -0.40 | -0.39 | -0.39 | -0.39 | -0.38 | -0.36 | -0.29 | -0.22 | -0.16 | -0.12 | -0.09 | -0.07 | -0.07 | -0.09 | -0.11 | -0.11 | -0.10 | -0.11 |
| 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 |
| CPI deviation | 0.60 | -0.34 | -0.10 | -0.46 | 0.19 | 1.83 | 0.13 | 1.32 | 0.78 | 0.22 | 0.82 | -0.04 | -0.53 | -1.06 | -0.07 | 0.39 | 0.69 | 0.24 |
| RER gap | -1.84 | -1.24 | -0.93 | -0.11 | 1.05 | 3.16 | 2.21 | -1.46 | -3.21 | -5.00 | -5.86 | -5.20 | -3.64 | 0.70 | 3.73 | 6.48 | 6.13 | 2.81 |
| Shock | 0.03 | 0.02 | 0.03 | 0.04 | -0.04 | -0.22 | 0.01 | 0.10 | 0.03 | 0.07 | 0.09 | 0.14 | 0.07 | -0.09 | -0.13 | -0.08 | 0.04 | 0.27 |
| Total | 3.02 | 2.70 | 3.27 | 3.67 | 5.35 | 8.91 | 6.70 | 4.47 | 2.26 | 0.08 | -0.05 | -0.15 | 0.81 | 4.37 | 8.24 | 11.43 | 11.46 | 7.86 |

RIR (policy) trend, % [r_tnd]

| | 2019Q1 | 2019Q2 | 2019Q3 | 2019Q4 | 2020Q1 | 2020Q2 | 2020Q3 | 2020Q4 | 2021Q1 | 2021Q2 | 2021Q3 | 2021Q4 | 2022Q1 | 2022Q2 | 2022Q3 | 2022Q4 | 2023Q1 | 2023Q2 |
|----------------------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|
| Foreign RIR | -0.76 | -0.85 | -0.73 | -0.77 | -0.90 | -0.88 | -1.00 | -1.20 | -1.26 | -1.37 | -1.47 | -1.55 | -1.60 | -1.55 | -1.45 | -1.33 | -1.20 | -1.06 |
| Premium | 1.91 | 1.91 | 1.90 | 1.89 | 1.89 | 1.90 | 1.93 | 1.96 | 1.99 | 2.01 | 2.04 | 2.07 | 2.09 | 2.11 | 2.10 | 2.09 | 2.08 | 2.05 |
| Exp. RER trend depr. | 1.67 | 1.68 | 1.67 | 1.62 | 1.57 | 1.53 | 1.58 | 1.60 | 1.64 | 1.67 | 1.70 | 1.70 | 1.67 | 1.60 | 1.53 | 1.47 | 1.43 | 1.38 |
| Total | 2.82 | 2.74 | 2.84 | 2.75 | 2.56 | 2.54 | 2.51 | 2.36 | 2.37 | 2.31 | 2.26 | 2.22 | 2.16 | 2.16 | 2.18 | 2.24 | 2.31 | 2.38 |

Govt. rev., % of GDP [grev_y]

| | 2019Q1 | 2019Q2 | 2019Q3 | 2019Q4 | 2020Q1 | 2020Q2 | 2020Q3 | 2020Q4 | 2021Q1 | 2021Q2 | 2021Q3 | 2021Q4 | 2022Q1 | 2022Q2 | 2022Q3 | 2022Q4 | 2023Q1 | 2023Q2 |
|---------------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|
| Structural | 17.94 | 17.99 | 18.04 | 18.08 | 18.12 | 18.17 | 18.22 | 18.26 | 18.29 | 18.32 | 18.35 | 18.37 | 18.39 | 18.40 | 18.41 | 18.43 | 18.45 | 18.47 |
| Cyclical | -0.08 | 0.06 | 0.09 | -0.00 | -0.03 | -0.67 | -0.23 | -0.35 | -0.26 | -0.31 | -0.31 | -0.23 | -0.25 | -0.02 | -0.04 | -0.10 | -0.21 | -0.25 |
| Discretionary | 1.22 | 0.59 | 1.07 | 1.16 | -1.21 | 2.18 | 1.79 | 1.66 | -0.66 | 3.35 | 0.13 | 1.16 | 2.22 | -0.23 | -0.63 | -1.64 | 0.01 | -0.59 |
| Total | 19.07 | 18.64 | 19.19 | 19.24 | 16.88 | 19.69 | 19.77 | 19.56 | 17.37 | 21.37 | 18.16 | 19.30 | 20.36 | 18.15 | 17.75 | 16.68 | 18.24 | 17.64 |

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 |
|-----------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|
| Cons. gap | −0.06 | −0.04 | −0.04 | −0.08 | −0.06 | −0.19 | −0.09 | −0.10 | −0.06 | −0.14 | −0.13 | −0.10 | −0.13 | 0.02 | −0.01 | −0.01 | −0.10 | −0.11 |
| Imp. gap | −0.02 | 0.01 | 0.05 | 0.05 | 0.06 | −0.16 | 0.01 | −0.08 | −0.07 | −0.06 | −0.06 | −0.03 | −0.02 | 0.03 | 0.01 | −0.01 | −0.05 | −0.03 |
| Ouput gap | 0.00 | 0.08 | 0.07 | 0.02 | −0.04 | −0.32 | −0.16 | −0.17 | −0.14 | −0.11 | −0.12 | −0.10 | −0.10 | −0.07 | −0.05 | −0.08 | −0.07 | −0.10 |
| 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 |
| Total | −0.08 | 0.06 | 0.09 | −0.00 | −0.03 | −0.67 | −0.23 | −0.35 | −0.26 | −0.31 | −0.31 | −0.23 | −0.25 | −0.02 | −0.04 | −0.10 | −0.21 | −0.25 |

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 |
|--------------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|
| Lag | 17.70 | 17.76 | 17.81 | 17.86 | 17.90 | 17.94 | 17.99 | 18.04 | 18.07 | 18.10 | 18.14 | 18.16 | 18.19 | 18.21 | 18.22 | 18.23 | 18.24 | 18.26 |
| 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 |
| Shock | 0.02 | 0.02 | 0.02 | 0.02 | 0.01 | 0.02 | 0.02 | 0.01 | 0.00 | 0.01 | -0.00 | -0.00 | -0.00 | -0.02 | -0.01 | -0.01 | -0.00 | -0.00 |
| Total | 17.94 | 17.99 | 18.04 | 18.08 | 18.12 | 18.17 | 18.22 | 18.26 | 18.29 | 18.32 | 18.35 | 18.37 | 18.39 | 18.40 | 18.41 | 18.43 | 18.45 | 18.47 |

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 |
|---------------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|
| 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 |
| Cyclical | -0.00 | -0.10 | -0.08 | -0.02 | 0.04 | 0.37 | 0.18 | 0.19 | 0.16 | 0.12 | 0.14 | 0.12 | 0.12 | 0.08 | 0.05 | 0.10 | 0.08 | 0.12 |
| Discretionary | 0.32 | 2.74 | -2.24 | -0.56 | 0.11 | 3.54 | 4.67 | 3.65 | 2.92 | 2.71 | 1.40 | 3.37 | 2.90 | 0.11 | 2.11 | -4.12 | -0.95 | 4.09 |
| Total | 24.82 | 27.14 | 22.18 | 23.92 | 24.65 | 28.40 | 29.36 | 28.34 | 27.57 | 27.34 | 26.04 | 27.98 | 27.52 | 24.69 | 26.67 | 20.47 | 23.63 | 28.71 |

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 |
|-------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|
| Lag | 0.52 | 0.23 | 1.92 | -1.57 | -0.39 | 0.08 | 2.48 | 3.27 | 2.56 | 2.04 | 1.90 | 0.98 | 2.36 | 2.03 | 0.08 | 1.48 | -2.89 | -0.67 |
| Shock | -0.20 | 2.51 | -4.15 | 1.01 | 0.50 | 3.46 | 2.20 | 0.38 | 0.36 | 0.67 | -0.50 | 2.38 | 0.54 | -1.92 | 2.03 | -5.60 | 1.93 | 4.76 |
| Total | 0.32 | 2.74 | -2.24 | -0.56 | 0.11 | 3.54 | 4.67 | 3.65 | 2.92 | 2.71 | 1.40 | 3.37 | 2.90 | 0.11 | 2.11 | -4.12 | -0.95 | 4.09 |

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 |
|------------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|
| 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 |
| Output gap | -0.00 | -0.10 | -0.08 | -0.02 | 0.04 | 0.37 | 0.18 | 0.19 | 0.16 | 0.12 | 0.14 | 0.12 | 0.12 | 0.08 | 0.05 | 0.10 | 0.08 | 0.12 |
| 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 |
| Total | -0.00 | -0.10 | -0.08 | -0.02 | 0.04 | 0.37 | 0.18 | 0.19 | 0.16 | 0.12 | 0.14 | 0.12 | 0.12 | 0.08 | 0.05 | 0.10 | 0.08 | 0.12 |

Struct. govt. demand (G&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 |
|---------------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|
| Structural | 5.70 | 5.77 | 5.87 | 5.93 | 5.96 | 5.98 | 5.98 | 5.95 | 5.94 | 5.96 | 5.97 | 5.98 | 5.96 | 5.95 | 5.93 | 5.89 | 5.87 | 5.84 |
| Cyclical | -0.00 | -0.05 | -0.04 | -0.01 | 0.02 | 0.19 | 0.10 | 0.10 | 0.08 | 0.06 | 0.07 | 0.06 | 0.06 | 0.04 | 0.03 | 0.05 | 0.04 | 0.06 |
| Discretionary | 0.84 | -2.61 | 2.88 | 2.21 | -0.37 | 2.76 | 2.26 | -2.56 | -1.88 | -0.36 | -0.28 | 2.70 | 0.11 | 0.59 | 2.32 | -3.03 | 0.21 | -3.64 |
| Total | 6.54 | 3.11 | 8.70 | 8.12 | 5.61 | 8.93 | 8.34 | 3.48 | 4.14 | 5.67 | 5.77 | 8.75 | 6.14 | 6.58 | 8.27 | 2.91 | 6.12 | 2.26 |

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 |
|------------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|
| 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 |
| Output gap | -0.00 | -0.05 | -0.04 | -0.01 | 0.02 | 0.19 | 0.10 | 0.10 | 0.08 | 0.06 | 0.07 | 0.06 | 0.06 | 0.04 | 0.03 | 0.05 | 0.04 | 0.06 |
| 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 |
| Total | -0.00 | -0.05 | -0.04 | -0.01 | 0.02 | 0.19 | 0.10 | 0.10 | 0.08 | 0.06 | 0.07 | 0.06 | 0.06 | 0.04 | 0.03 | 0.05 | 0.04 | 0.06 |

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 |
|--------------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|
| Lag | 5.34 | 5.42 | 5.48 | 5.57 | 5.63 | 5.66 | 5.68 | 5.68 | 5.65 | 5.65 | 5.66 | 5.67 | 5.69 | 5.67 | 5.65 | 5.63 | 5.60 | 5.58 |
| 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 |
| Shock | 0.06 | 0.05 | 0.08 | 0.05 | 0.03 | 0.02 | -0.01 | -0.03 | -0.01 | 0.01 | 0.01 | 0.01 | -0.02 | -0.01 | -0.02 | -0.04 | -0.02 | -0.04 |
| Total | 5.70 | 5.77 | 5.87 | 5.93 | 5.96 | 5.98 | 5.98 | 5.95 | 5.94 | 5.96 | 5.97 | 5.98 | 5.96 | 5.95 | 5.93 | 5.89 | 5.87 | 5.84 |

Budget deficit, % of GDP [def_y]

| | 2019Q1 | 2019Q2 | 2019Q3 | 2019Q4 | 2020Q1 | 2020Q2 | 2020Q3 | 2020Q4 | 2021Q1 | 2021Q2 | 2021Q3 | 2021Q4 | 2022Q1 | 2022Q2 | 2022Q3 | 2022Q4 | 2023Q1 | 2023Q2 |
|--------------------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|
| Govt. Demand | 24.82 | 27.14 | 22.18 | 23.92 | 24.65 | 28.40 | 29.36 | 28.34 | 27.57 | 27.34 | 26.04 | 27.98 | 27.52 | 24.69 | 26.67 | 20.47 | 23.63 | 28.71 |
| Other expenditures | 6.54 | 3.11 | 8.70 | 8.12 | 5.61 | 8.93 | 8.34 | 3.48 | 4.14 | 5.67 | 5.77 | 8.75 | 6.14 | 6.58 | 8.27 | 2.91 | 6.12 | 2.26 |
| Revenues | -19.07 | -18.64 | -19.19 | -19.24 | -16.88 | -19.69 | -19.77 | -19.56 | -17.37 | -21.37 | -18.16 | -19.30 | -20.36 | -18.15 | -17.75 | -16.68 | -18.24 | -17.64 |
| Total | 12.29 | 11.60 | 11.69 | 12.80 | 13.39 | 17.65 | 17.92 | 12.27 | 14.34 | 11.64 | 13.65 | 17.43 | 13.29 | 13.13 | 17.20 | 6.70 | 11.51 | 13.34 |

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 |
|--------------------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|
| Demand | −0.00 | −0.10 | −0.08 | −0.02 | 0.04 | 0.37 | 0.18 | 0.19 | 0.16 | 0.12 | 0.14 | 0.12 | 0.12 | 0.08 | 0.05 | 0.10 | 0.08 | 0.12 |
| Other expenditures | −0.00 | −0.05 | −0.04 | −0.01 | 0.02 | 0.19 | 0.10 | 0.10 | 0.08 | 0.06 | 0.07 | 0.06 | 0.06 | 0.04 | 0.03 | 0.05 | 0.04 | 0.06 |
| Revenues | 0.08 | −0.06 | −0.09 | 0.00 | 0.03 | 0.67 | 0.23 | 0.35 | 0.26 | 0.31 | 0.31 | 0.23 | 0.25 | 0.02 | 0.04 | 0.10 | 0.21 | 0.25 |
| Total | 0.08 | −0.21 | −0.21 | −0.03 | 0.10 | 1.22 | 0.51 | 0.64 | 0.50 | 0.50 | 0.53 | 0.41 | 0.43 | 0.14 | 0.12 | 0.25 | 0.34 | 0.43 |

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 |
|--------------------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|
| Demand | 0.32 | 2.74 | -2.24 | -0.56 | 0.11 | 3.54 | 4.67 | 3.65 | 2.92 | 2.71 | 1.40 | 3.37 | 2.90 | 0.11 | 2.11 | -4.12 | -0.95 | 4.09 |
| Other expenditures | 0.84 | -2.61 | 2.88 | 2.21 | -0.37 | 2.76 | 2.26 | -2.56 | -1.88 | -0.36 | -0.28 | 2.70 | 0.11 | 0.59 | 2.32 | -3.03 | 0.21 | -3.64 |
| Revenues | -1.22 | -0.59 | -1.07 | -1.16 | 1.21 | -2.18 | -1.79 | -1.66 | 0.66 | -3.35 | -0.13 | -1.16 | -2.22 | 0.23 | 0.63 | 1.64 | -0.01 | 0.59 |
| Total | -0.05 | -0.47 | -0.43 | 0.49 | 0.95 | 4.12 | 5.15 | -0.57 | 1.69 | -1.00 | 1.00 | 4.91 | 0.79 | 0.94 | 5.06 | -5.51 | -0.75 | 1.04 |

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 |
|--------------------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|
| 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 |
| Other expenditures | 5.70 | 5.77 | 5.87 | 5.93 | 5.96 | 5.98 | 5.98 | 5.95 | 5.94 | 5.96 | 5.97 | 5.98 | 5.96 | 5.95 | 5.93 | 5.89 | 5.87 | 5.84 |
| Revenues | -17.94 | -17.99 | -18.04 | -18.08 | -18.12 | -18.17 | -18.22 | -18.26 | -18.29 | -18.32 | -18.35 | -18.37 | -18.39 | -18.40 | -18.41 | -18.43 | -18.45 | -18.47 |
| Total | 12.26 | 12.28 | 12.33 | 12.34 | 12.34 | 12.31 | 12.26 | 12.19 | 12.16 | 12.13 | 12.13 | 12.11 | 12.07 | 12.05 | 12.02 | 11.96 | 11.92 | 11.87 |

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 |
|---------------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|
| Structural | 12.26 | 12.28 | 12.33 | 12.34 | 12.34 | 12.31 | 12.26 | 12.19 | 12.16 | 12.13 | 12.13 | 12.11 | 12.07 | 12.05 | 12.02 | 11.96 | 11.92 | 11.87 |
| Discretionary | -0.05 | -0.47 | -0.43 | 0.49 | 0.95 | 4.12 | 5.15 | -0.57 | 1.69 | -1.00 | 1.00 | 4.91 | 0.79 | 0.94 | 5.06 | -5.51 | -0.75 | 1.04 |
| Cyclical | 0.08 | -0.21 | -0.21 | -0.03 | 0.10 | 1.22 | 0.51 | 0.64 | 0.50 | 0.50 | 0.53 | 0.41 | 0.43 | 0.14 | 0.12 | 0.25 | 0.34 | 0.43 |
| Total | 12.29 | 11.60 | 11.69 | 12.80 | 13.39 | 17.65 | 17.92 | 12.27 | 14.34 | 11.64 | 13.65 | 17.43 | 13.29 | 13.13 | 17.20 | 6.70 | 11.51 | 13.34 |

Fiscal impulse, % of GDP [fisc_imp]

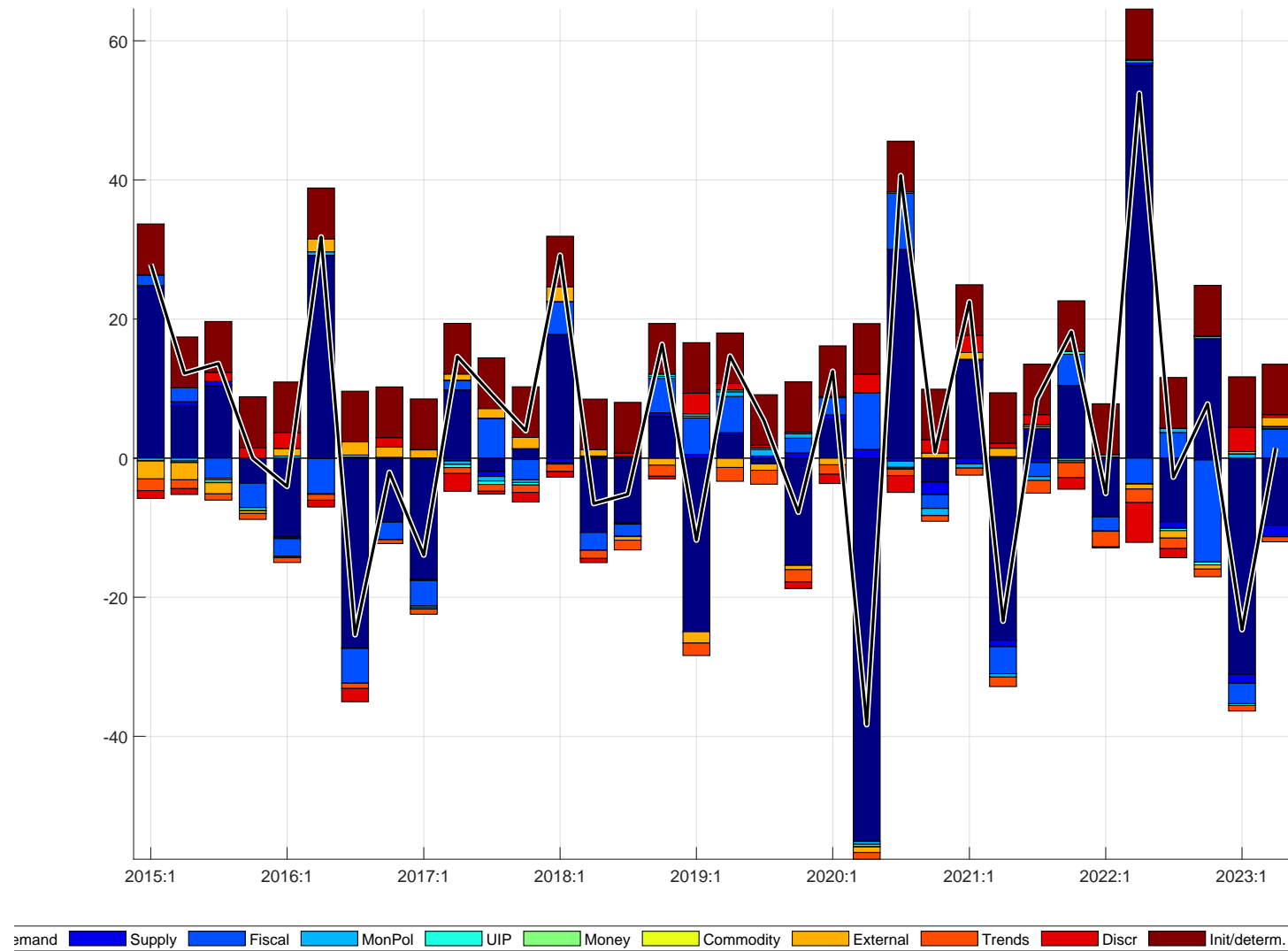
| | 2019Q1 | 2019Q2 | 2019Q3 | 2019Q4 | 2020Q1 | 2020Q2 | 2020Q3 | 2020Q4 | 2021Q1 | 2021Q2 | 2021Q3 | 2021Q4 | 2022Q1 | 2022Q2 | 2022Q3 | 2022Q4 | 2023Q1 | 2023Q2 |
|---------------------------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|
| Discr. deficit | -0.05 | -0.47 | -0.43 | 0.49 | 0.95 | 4.12 | 5.15 | -0.57 | 1.69 | -1.00 | 1.00 | 4.91 | 0.79 | 0.94 | 5.06 | -5.51 | -0.75 | 1.04 |
| Change in struct. deficit | 0.02 | 0.02 | 0.05 | 0.01 | -0.01 | -0.03 | -0.05 | -0.07 | -0.04 | -0.02 | -0.01 | -0.01 | -0.04 | -0.02 | -0.03 | -0.05 | -0.04 | -0.05 |
| Total | -0.03 | -0.45 | -0.38 | 0.51 | 0.94 | 4.09 | 5.10 | -0.64 | 1.65 | -1.02 | 0.99 | 4.90 | 0.75 | 0.92 | 5.02 | -5.57 | -0.79 | 0.99 |

Real money, ann. QQ % [dl_rmd]

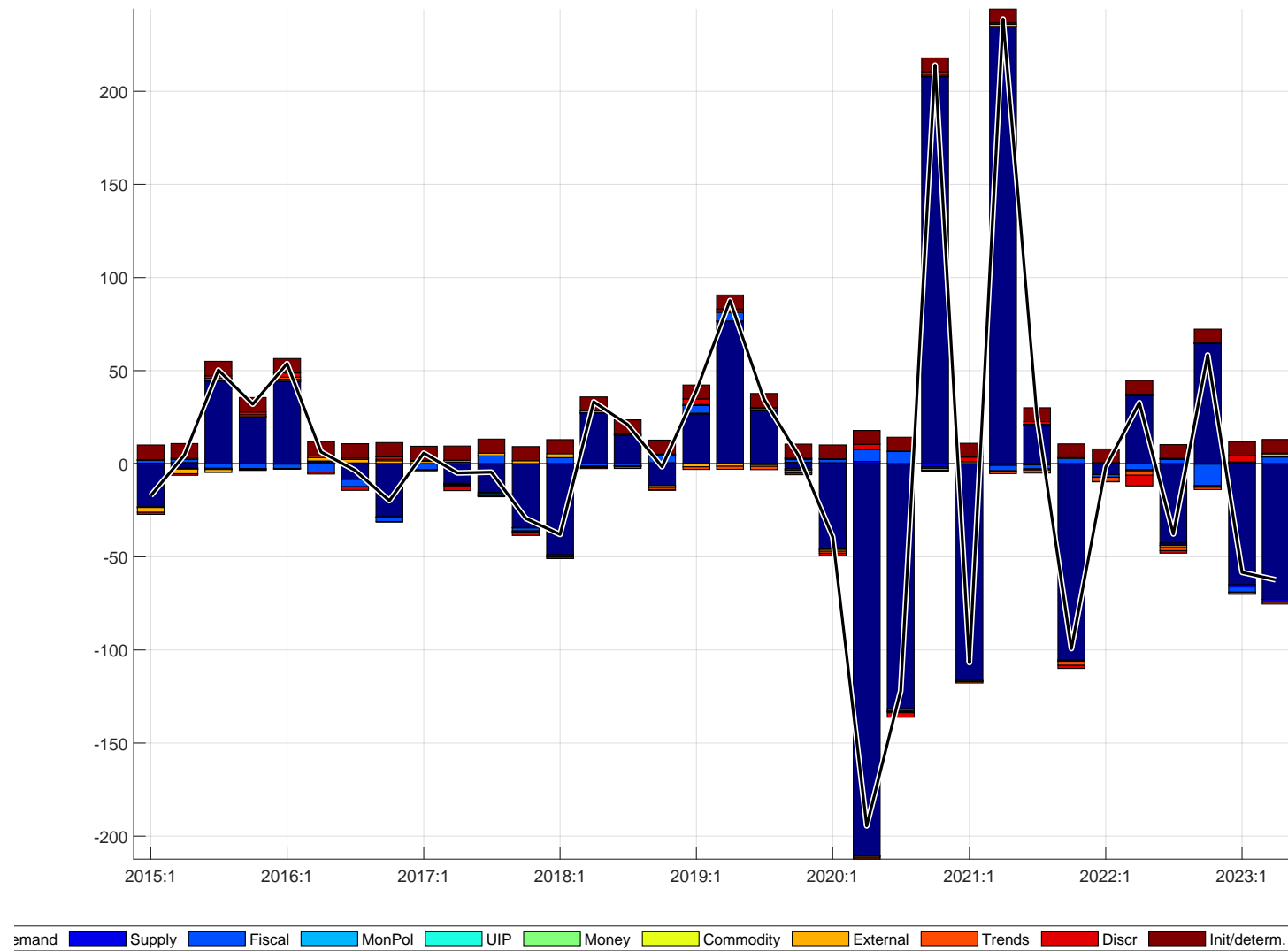
| | 2019Q1 | 2019Q2 | 2019Q3 | 2019Q4 | 2020Q1 | 2020Q2 | 2020Q3 | 2020Q4 | 2021Q1 | 2021Q2 | 2021Q3 | 2021Q4 | 2022Q1 | 2022Q2 | 2022Q3 | 2022Q4 | 2023Q1 | 2023Q2 |
|------------------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|
| Chg. of velocity | 0.66 | 0.66 | 0.67 | 0.68 | 0.68 | 0.69 | 0.67 | 0.66 | 0.65 | 0.64 | 0.62 | 0.61 | 0.59 | 0.58 | 0.58 | 0.59 | 0.60 | 0.62 |
| Lag | 14.73 | 5.77 | 5.53 | 3.80 | 5.39 | 6.40 | 6.80 | 10.06 | 11.99 | 11.91 | 10.81 | 10.91 | 9.54 | 5.19 | -2.02 | -3.88 | -5.54 | -4.00 |
| GDP growth | 2.93 | 6.37 | 0.91 | -1.27 | -1.17 | -14.31 | 12.14 | 2.26 | 4.32 | 3.81 | 1.01 | 2.67 | 1.49 | 3.65 | 3.43 | 0.07 | 3.29 | 0.54 |
| Interest rate | -0.28 | -0.30 | -0.30 | -0.28 | -0.25 | -0.28 | -0.31 | -0.31 | -0.34 | -0.34 | -0.34 | -0.35 | -0.32 | -0.29 | -0.21 | -0.10 | -0.04 | 0.00 |
| Shock | -9.79 | -4.60 | -1.39 | 4.77 | 4.48 | 17.22 | -4.93 | 4.45 | 0.40 | -0.57 | 3.49 | -0.21 | -3.89 | -12.02 | -7.33 | -4.59 | -4.03 | 16.94 |
| Total | 8.24 | 7.90 | 5.42 | 7.70 | 9.14 | 9.72 | 14.37 | 17.12 | 17.02 | 15.44 | 15.59 | 13.63 | 7.41 | -2.88 | -5.54 | -7.91 | -5.72 | 14.09 |

5 Shock decomposition

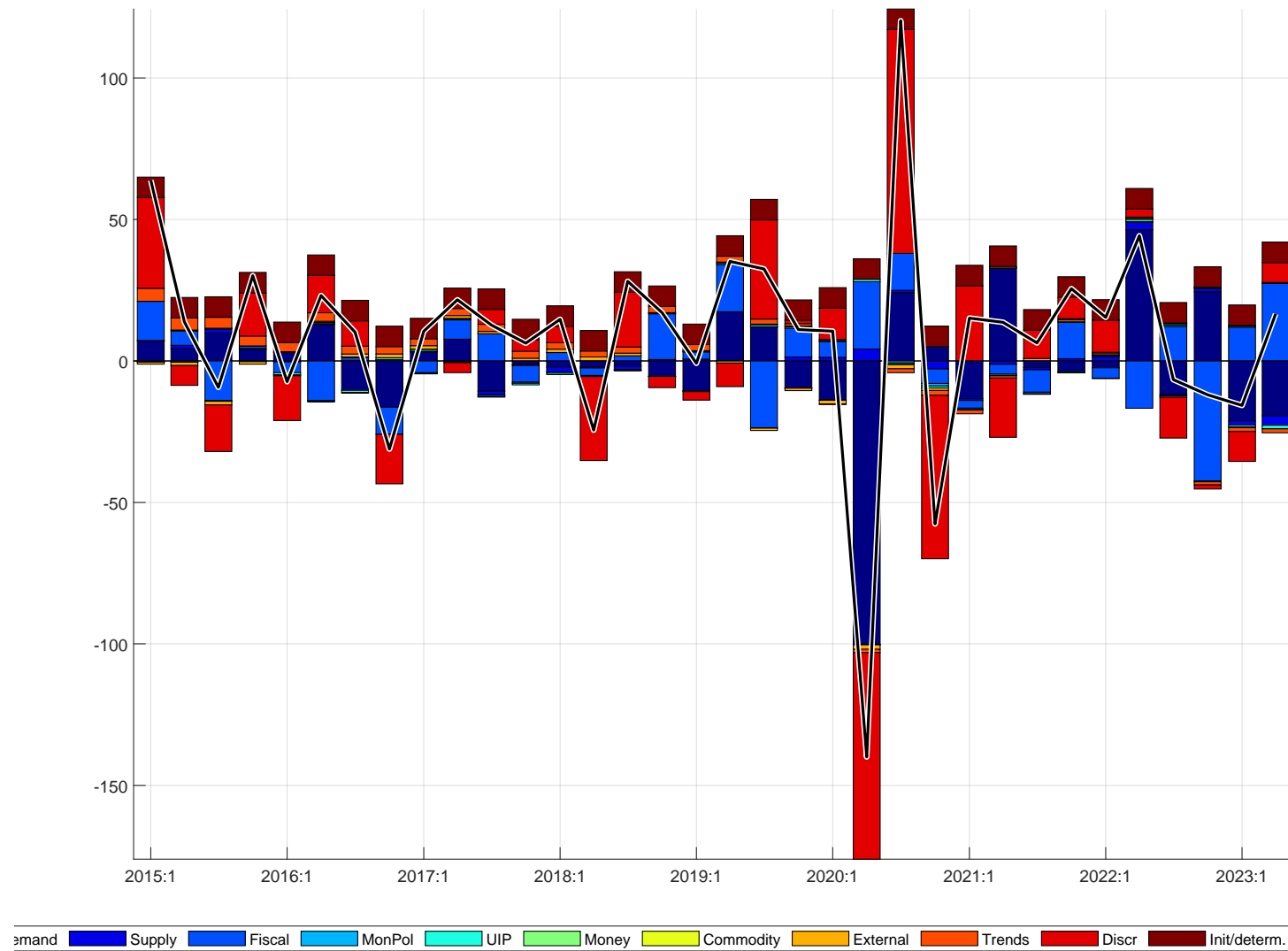
Consumption, ann. QQ % [dl_cons]



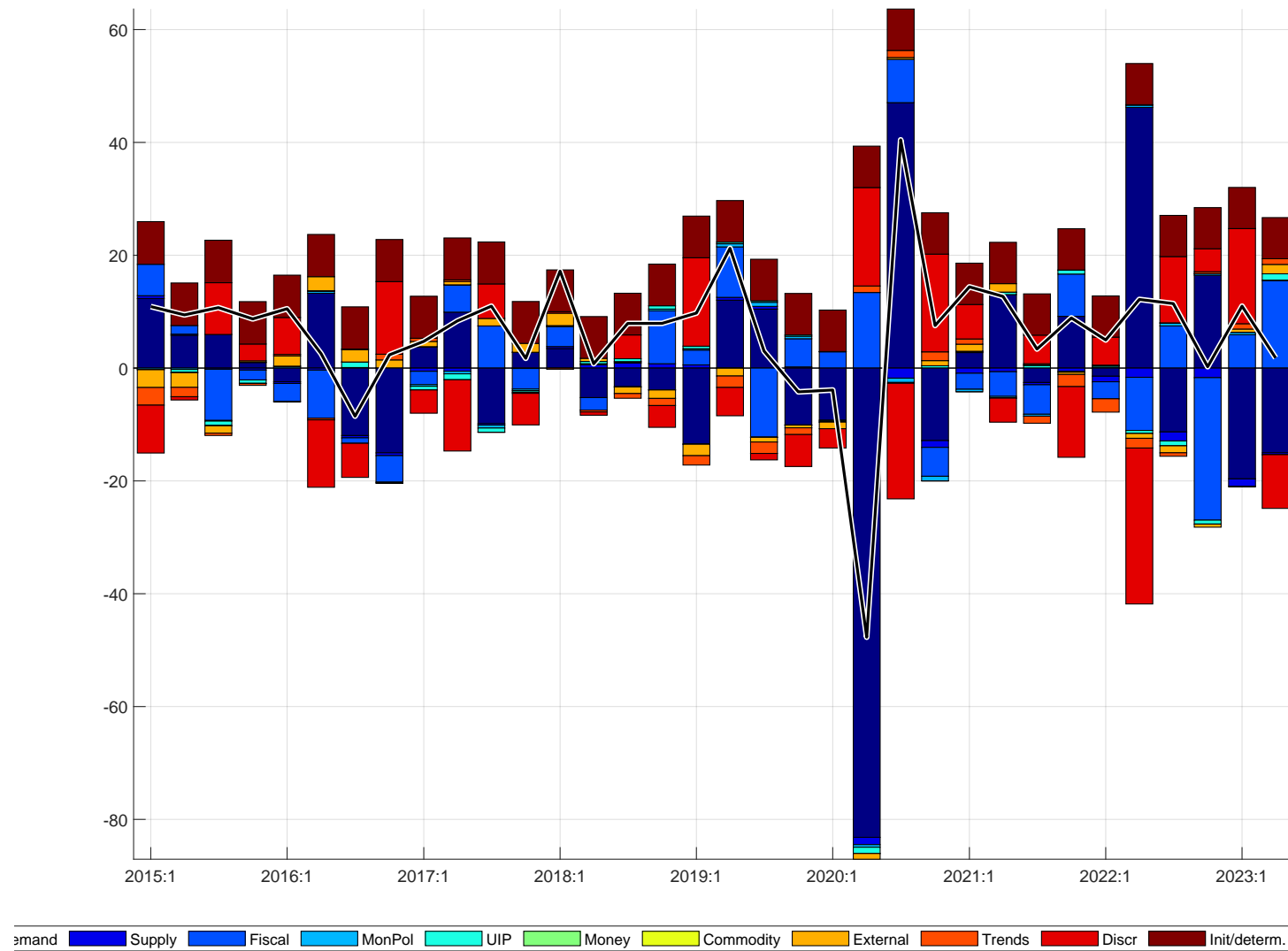
Investment, ann. QQ % [dl_inv]



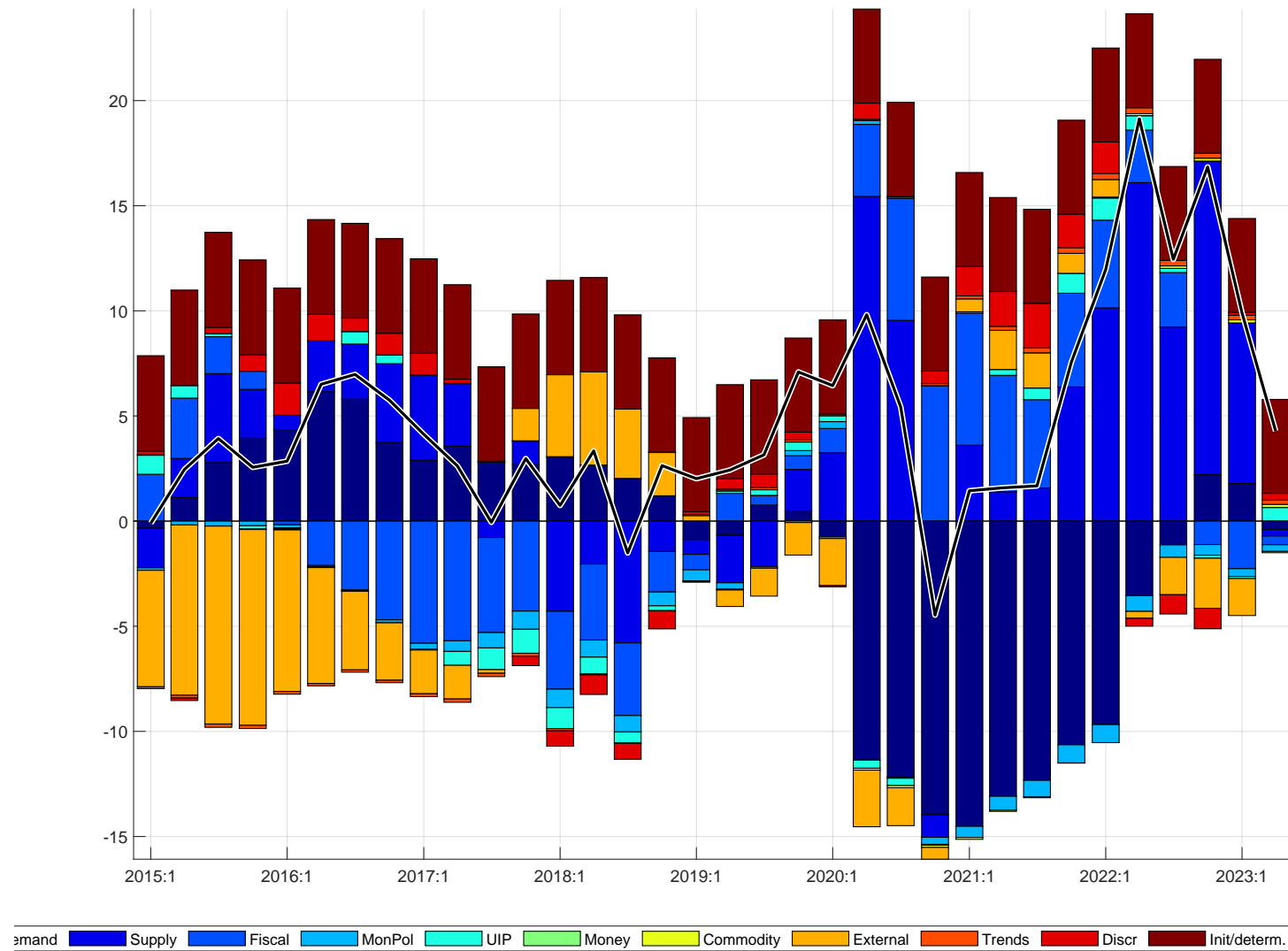
Import, ann. QQ % [dl_imp]



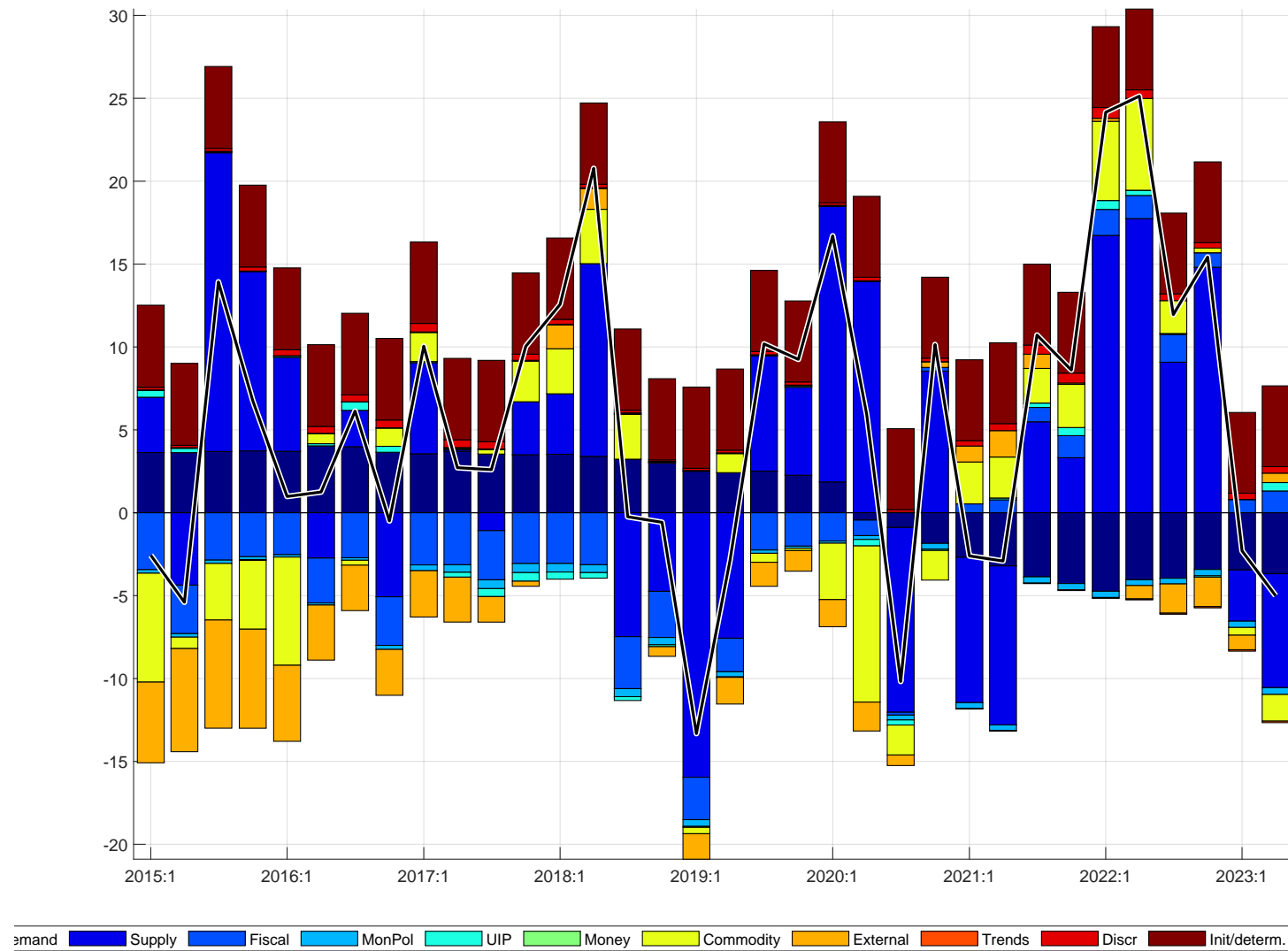
GDP, ann. QQ % [dl_y]



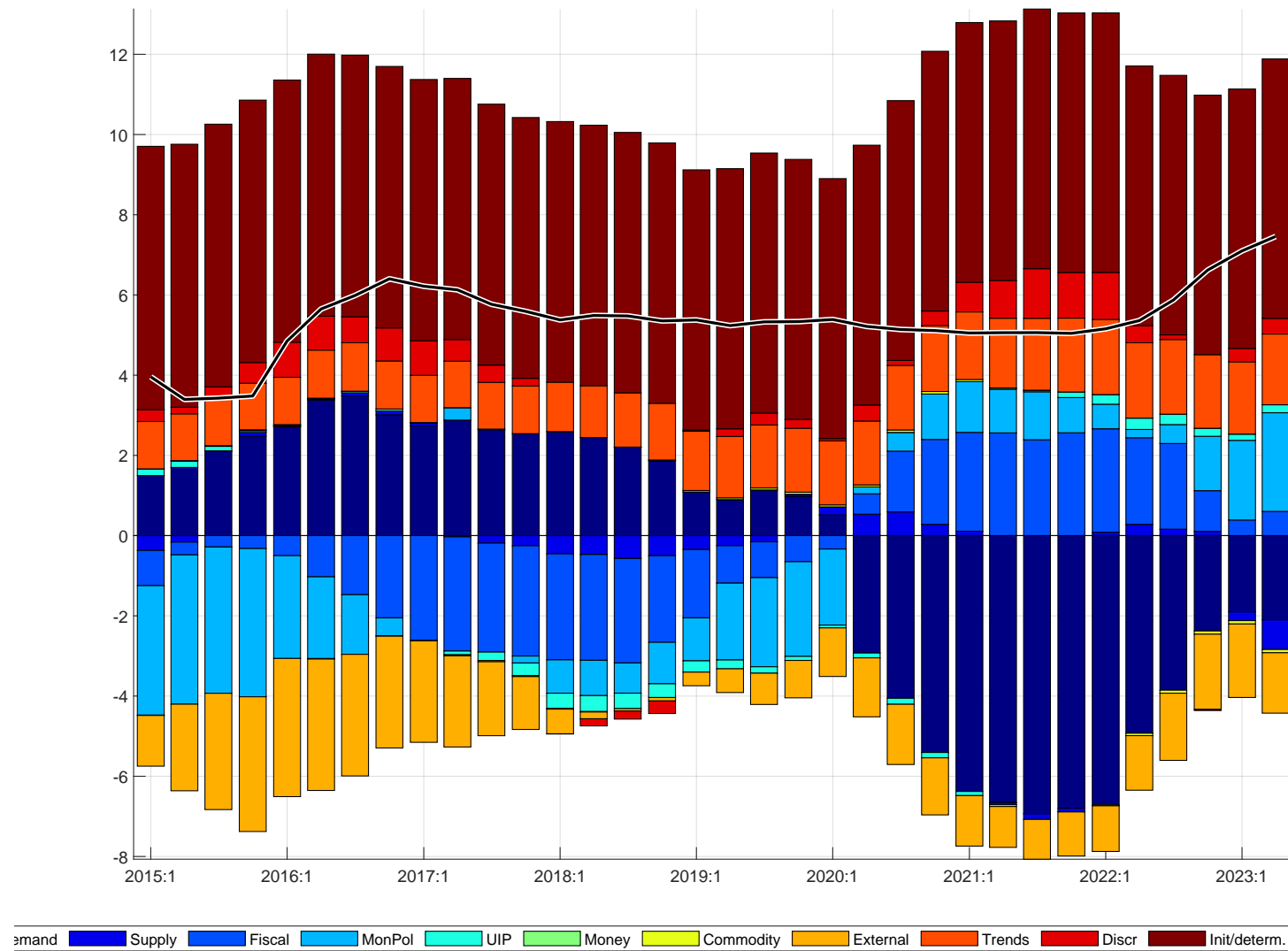
Core CPI, ann. QQ % [dl_cpi_core]



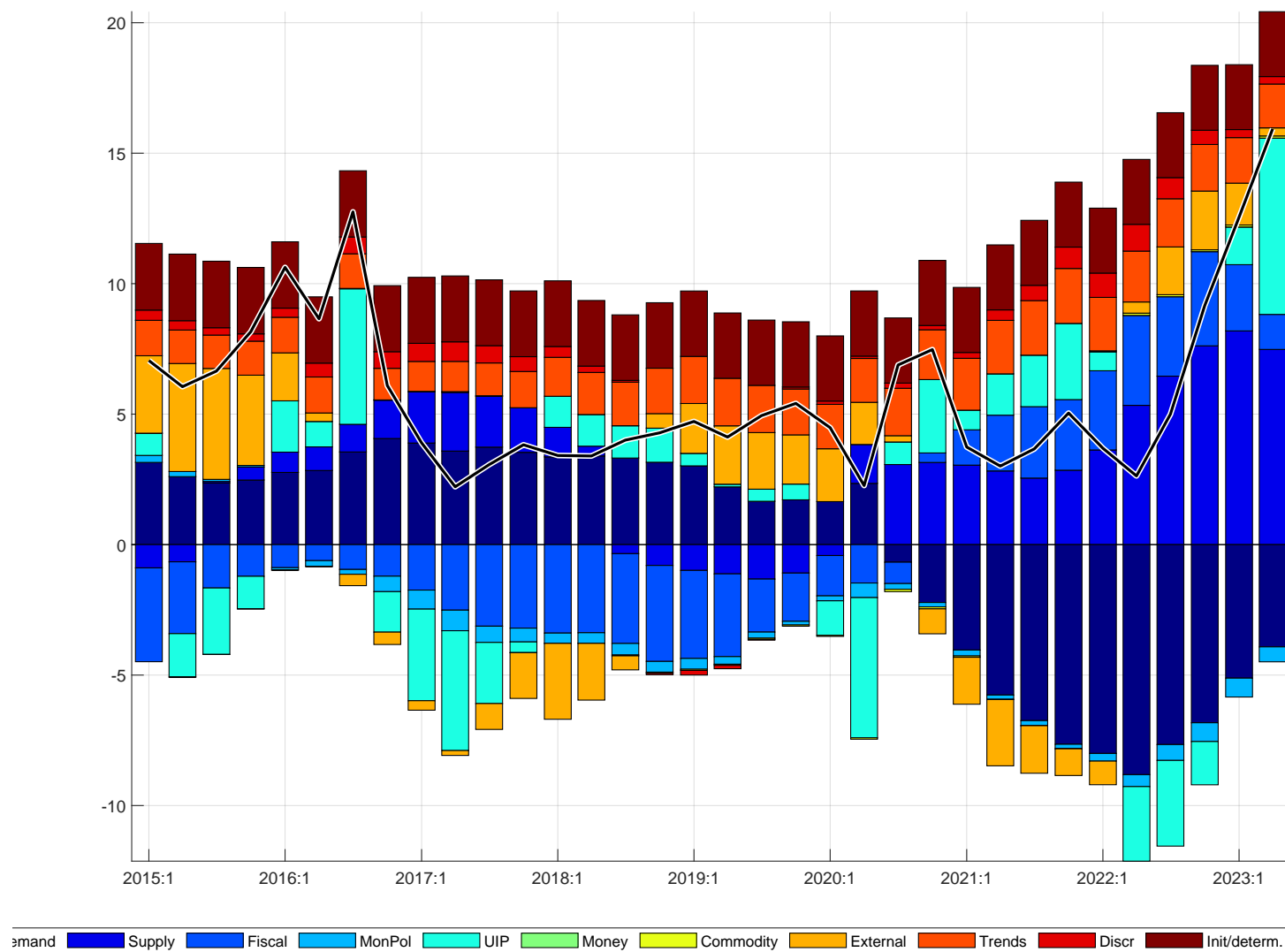
Energy CPI, ann. QQ % [dl_cpi_ener]



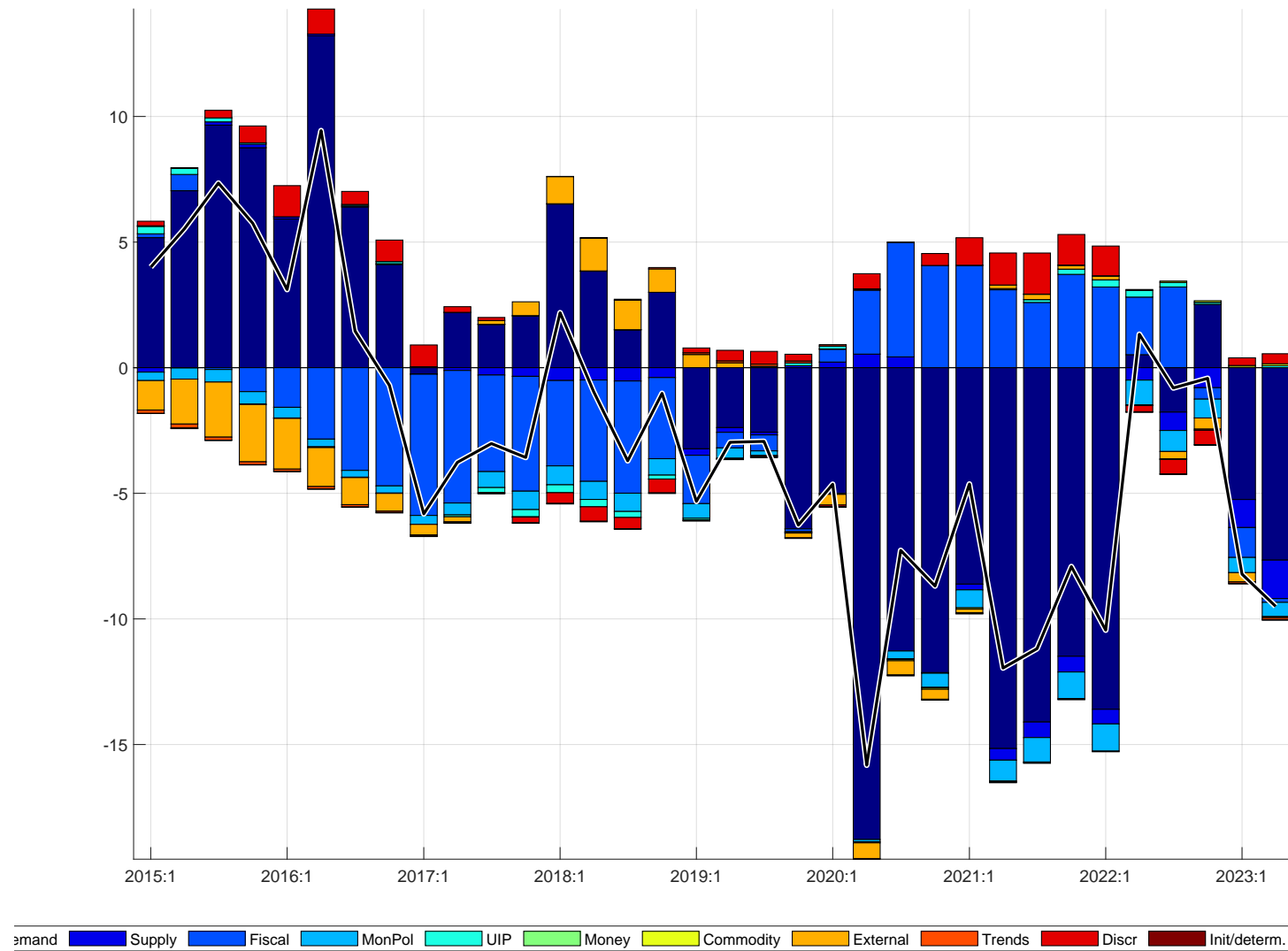
Policy rate (IB rate used), % [i]

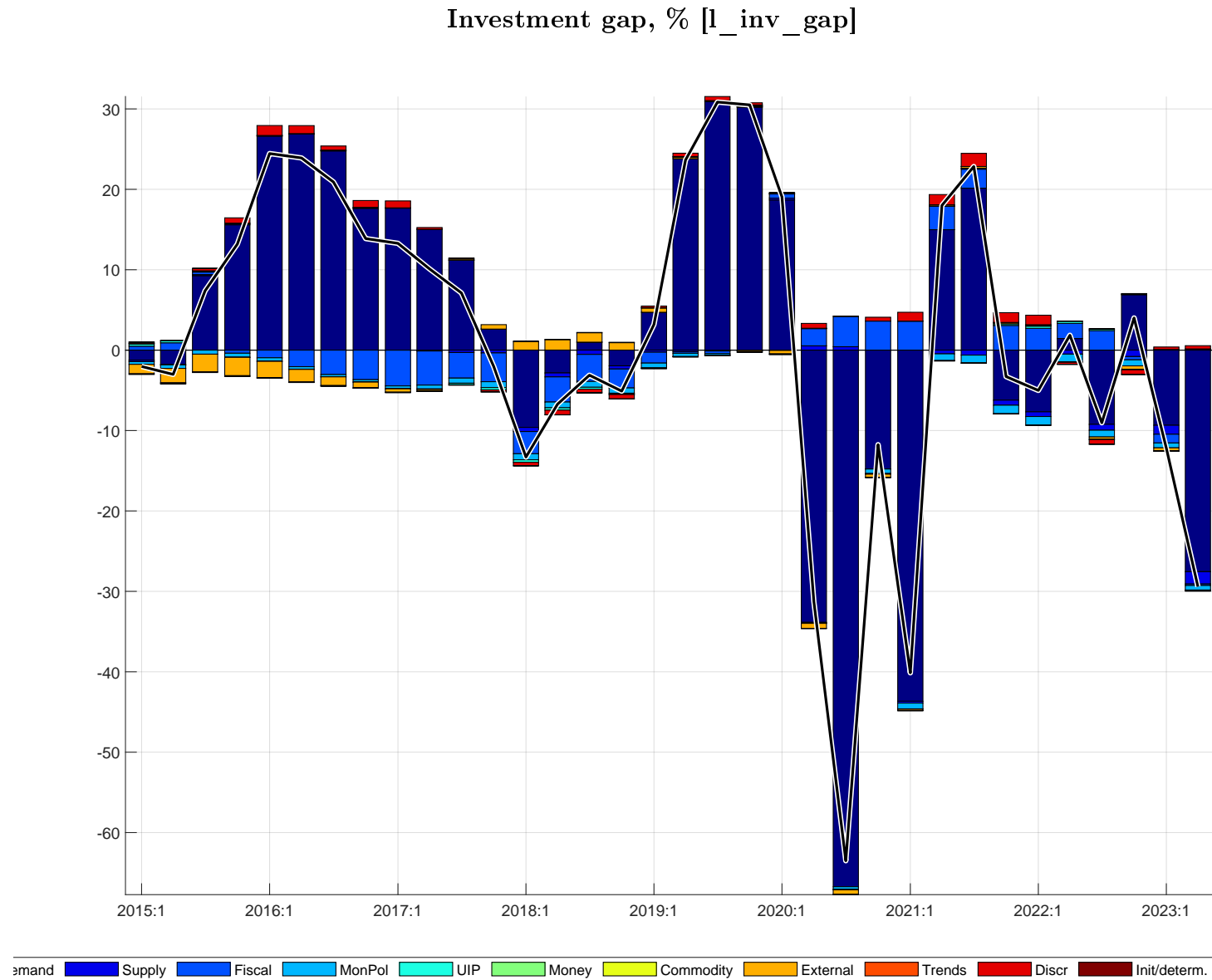


Exchng. rate, ann. QQ % [dl_s]

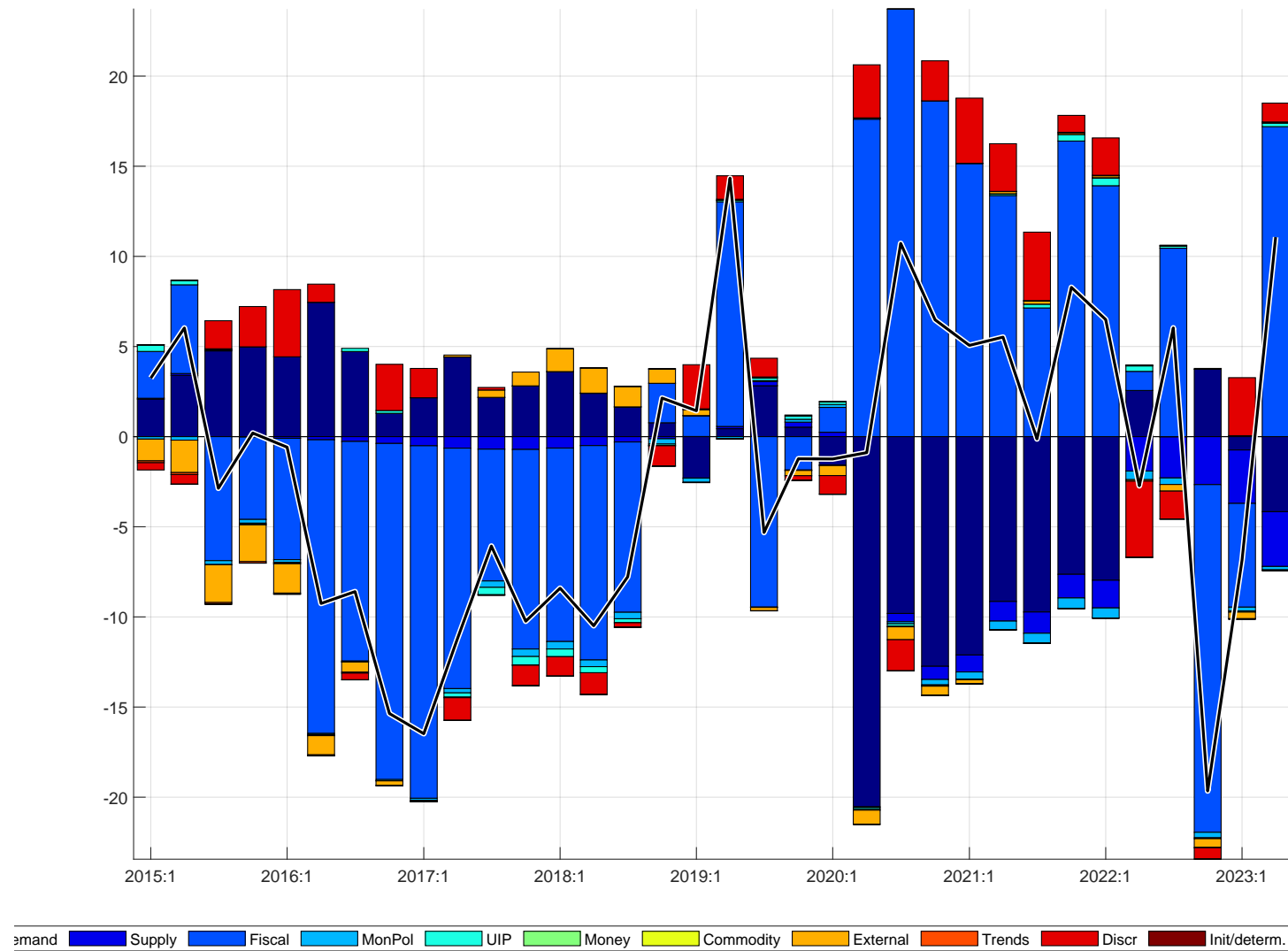


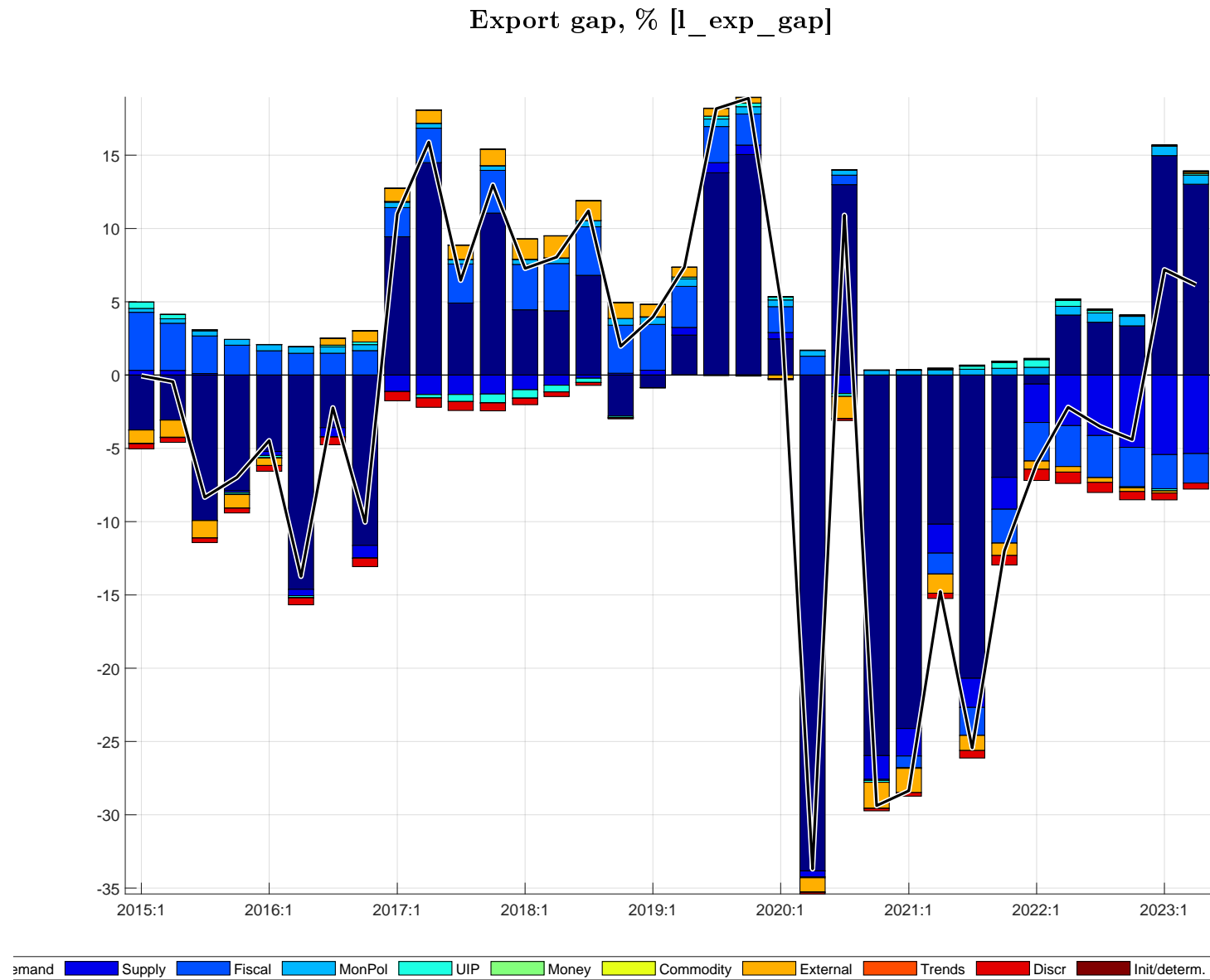
Consumption gap, % [l_cons_gap]

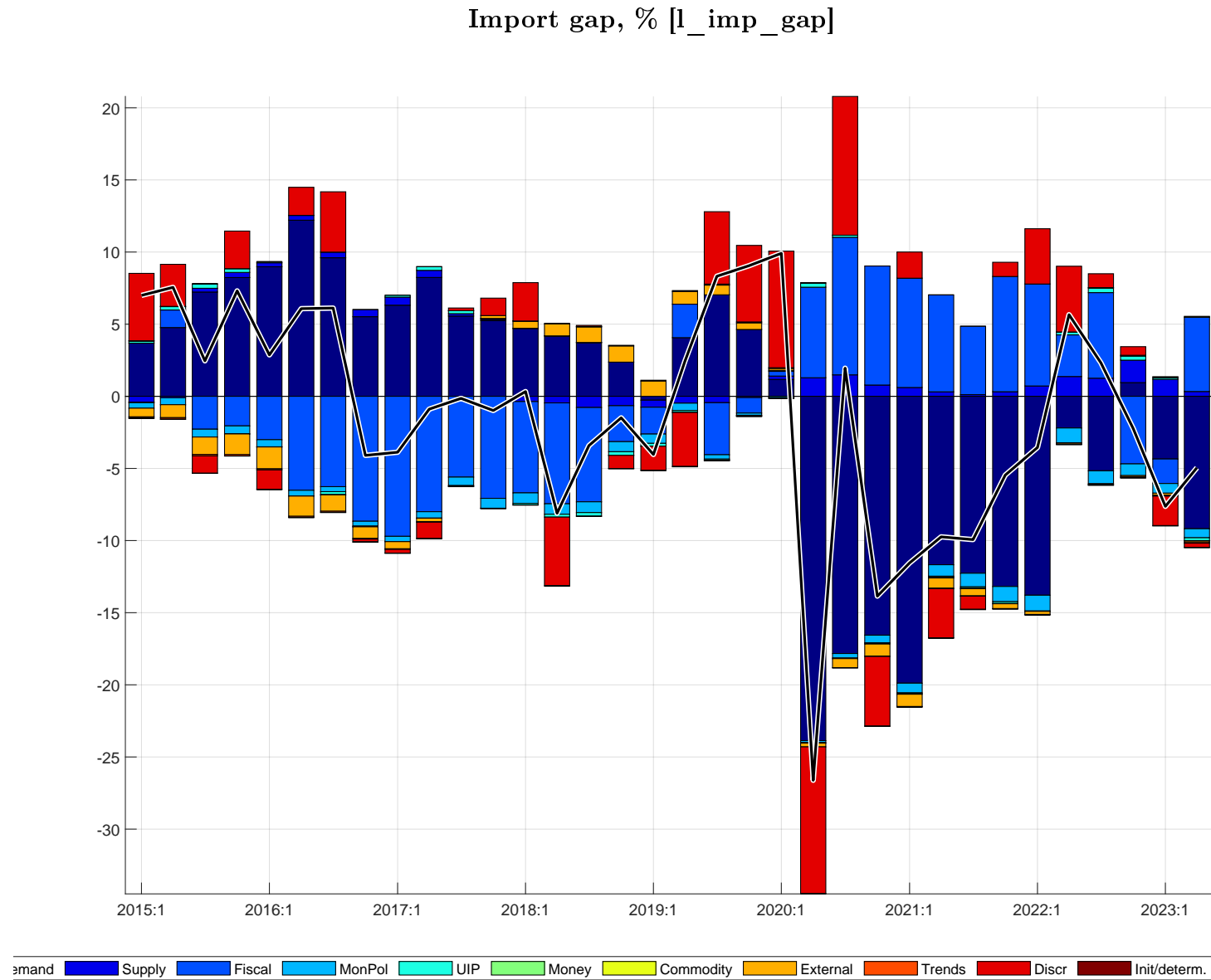


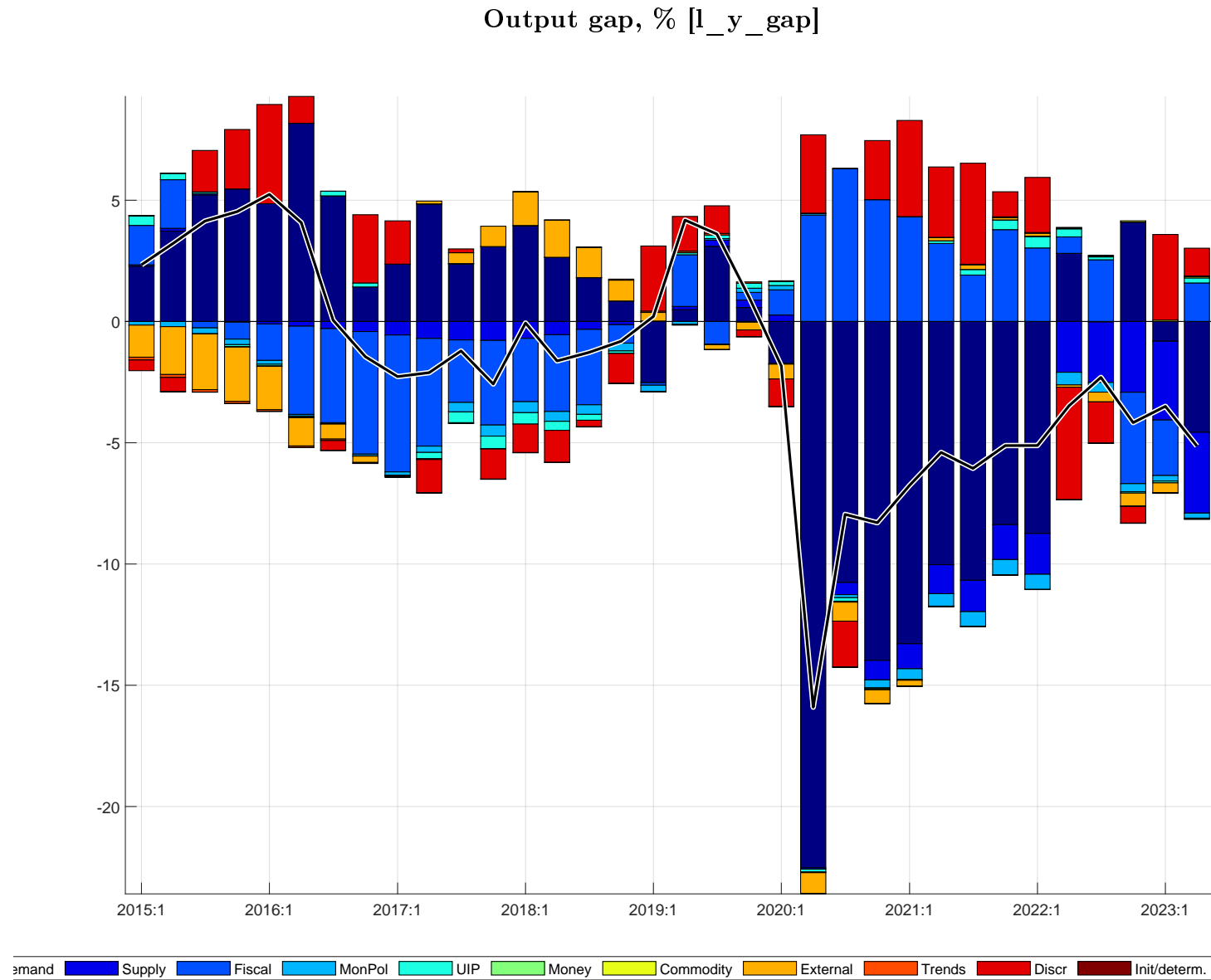


Gov. demand gap, % [l_gdem_gap]

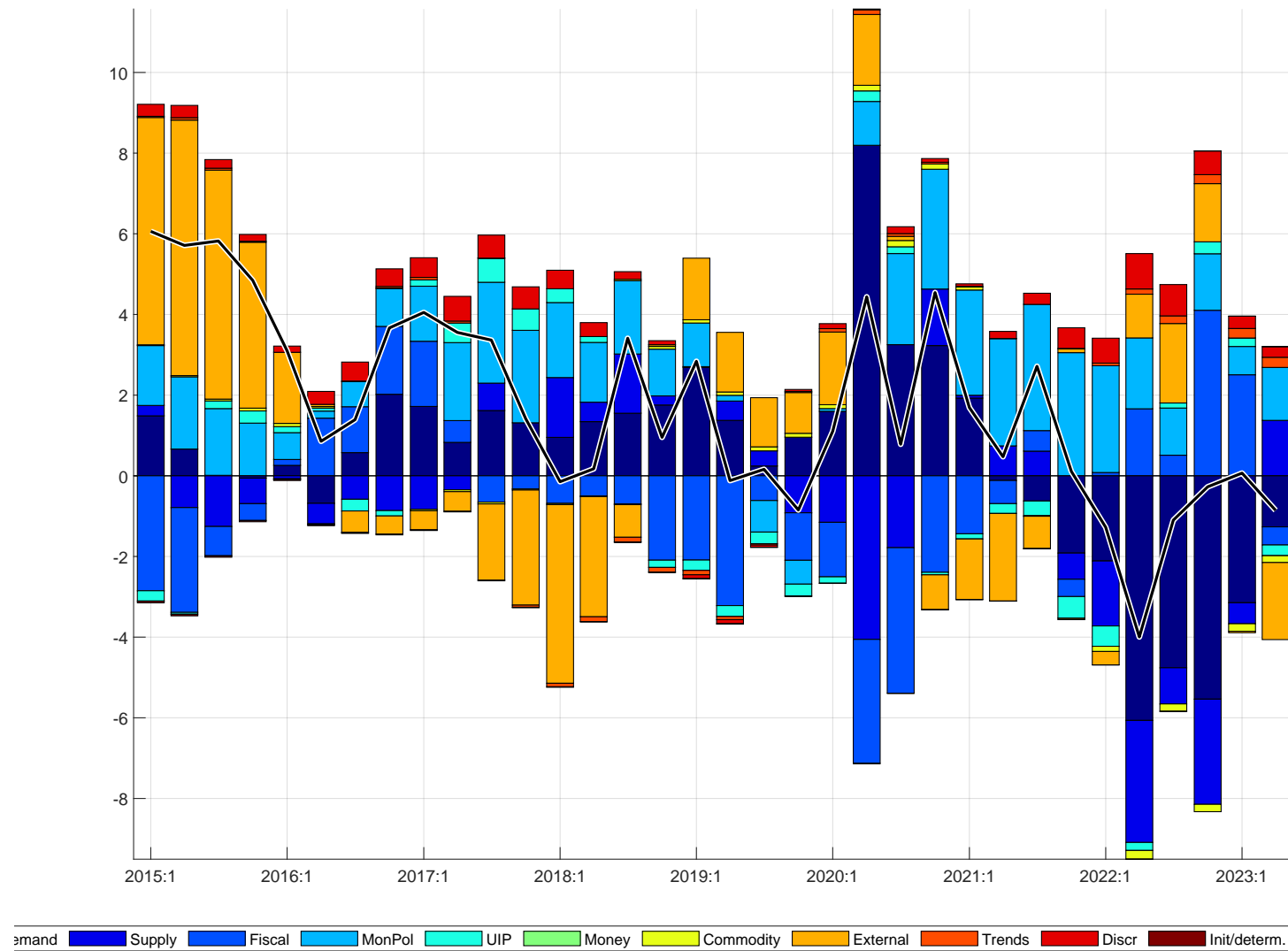




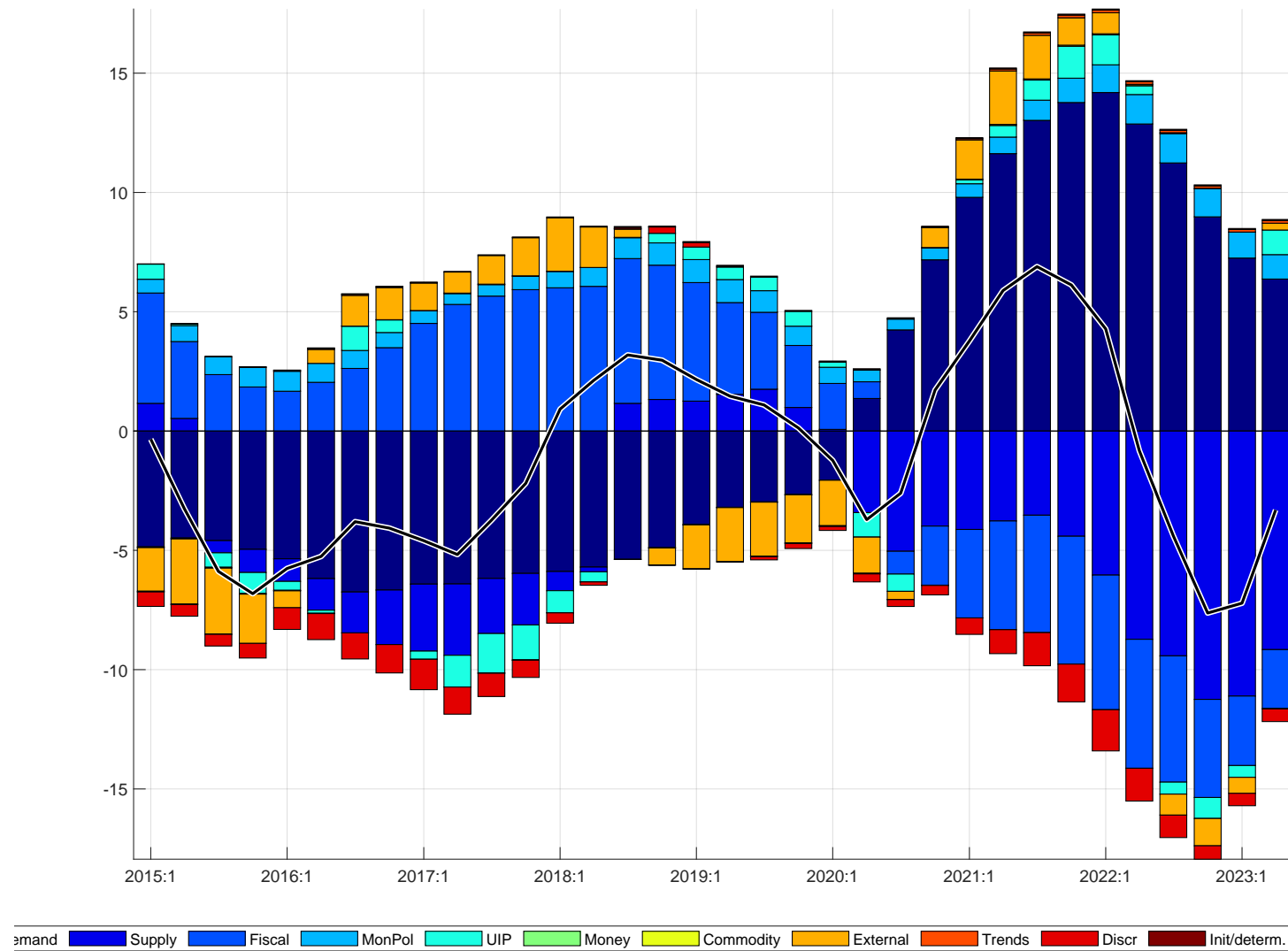




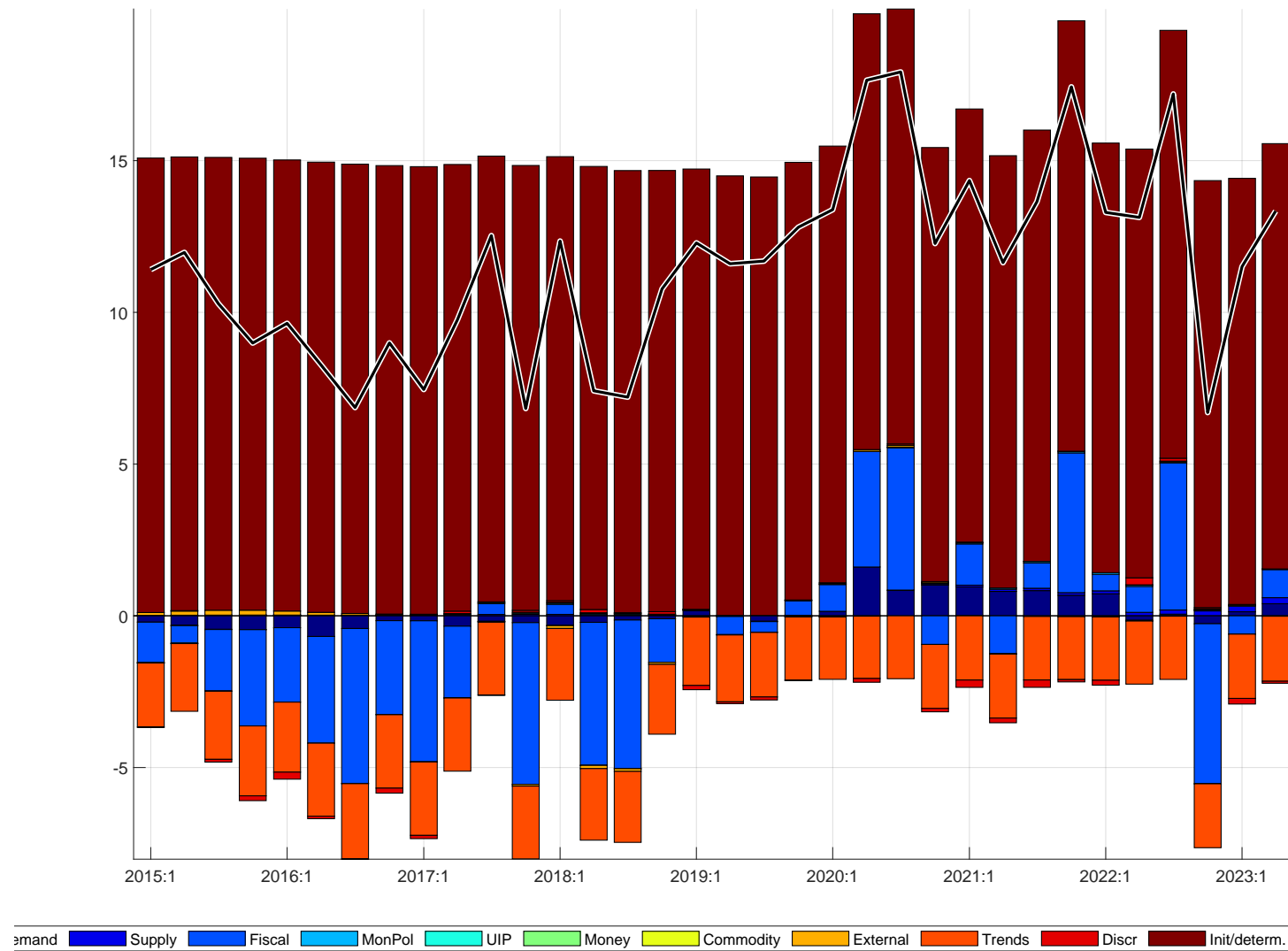
Exptd. RIR (lending) gap, 4-Q ahead av., % [r4_gap]



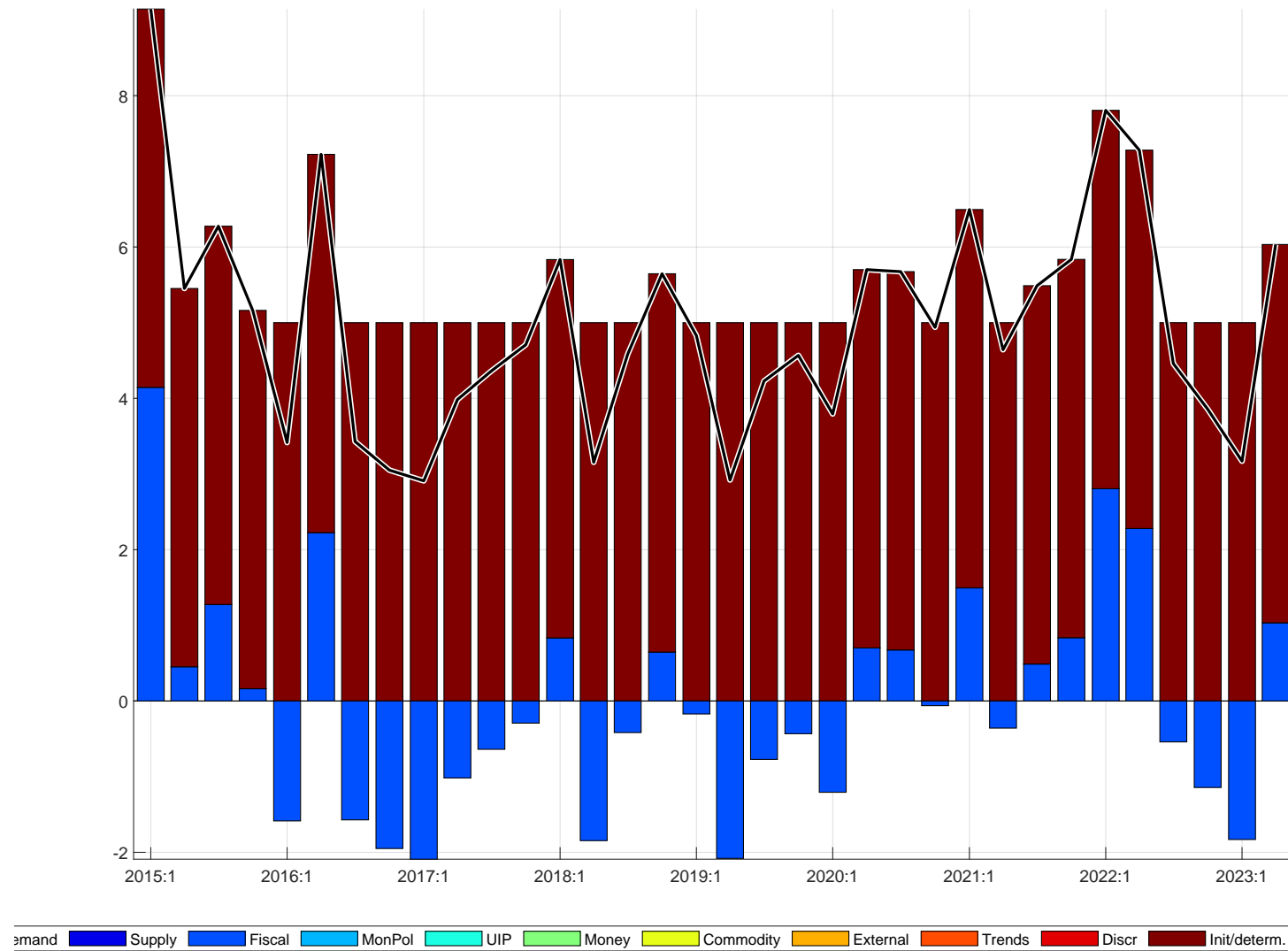
Real exchng. rate gap, % [l_z_gap]



Budget deficit, % of GDP [def_y]

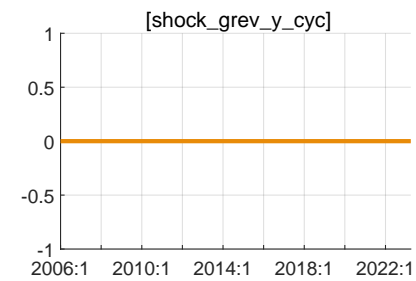
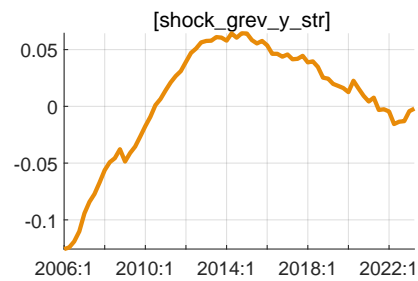
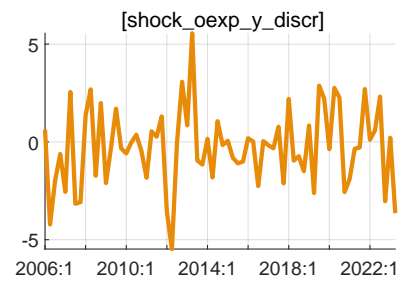
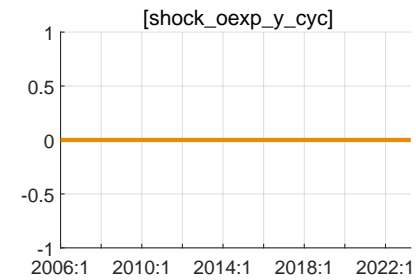
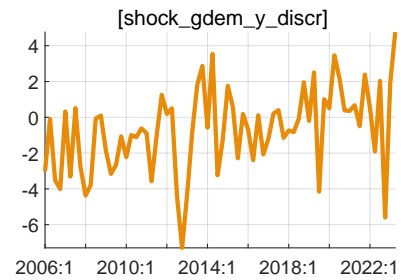
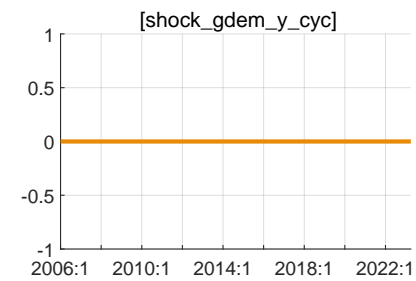
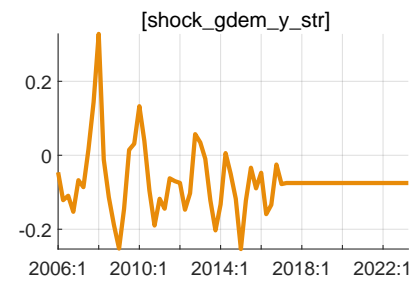
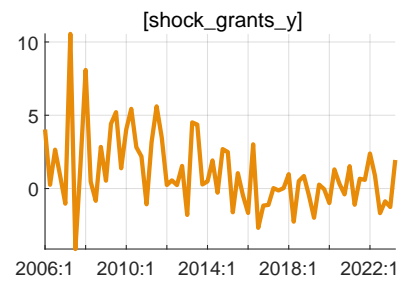


Fiscal grants, % of GDP [grants_y]

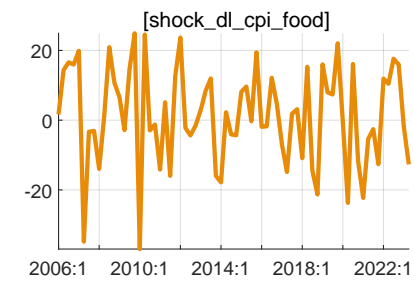
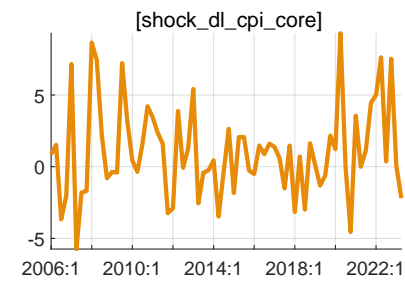
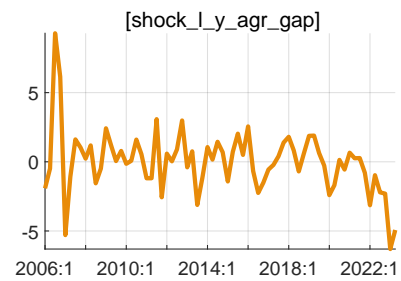
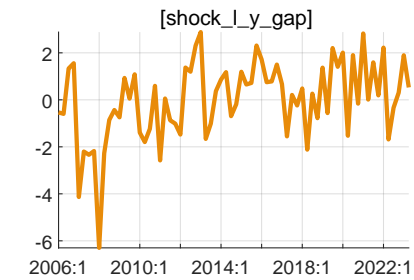
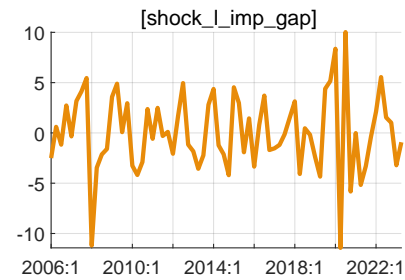
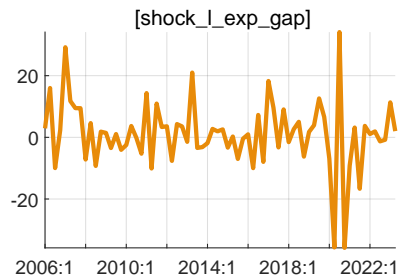
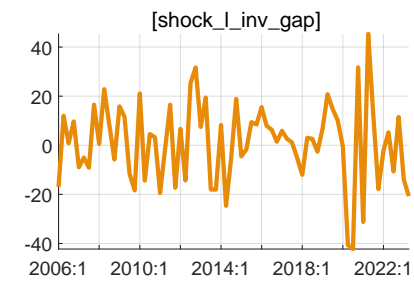
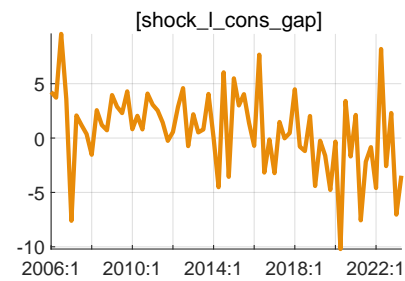
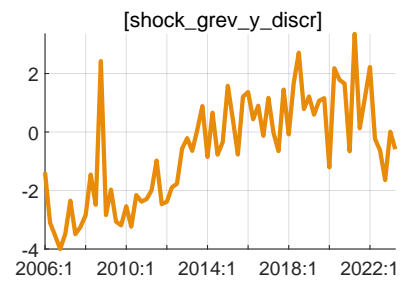


6 Shocks

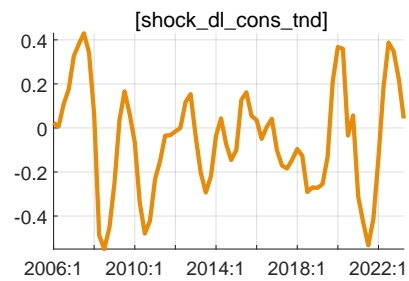
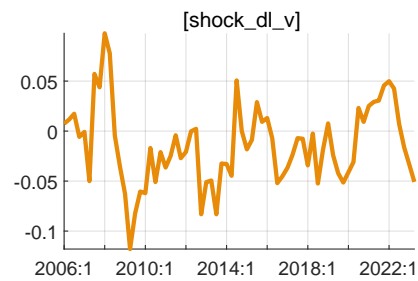
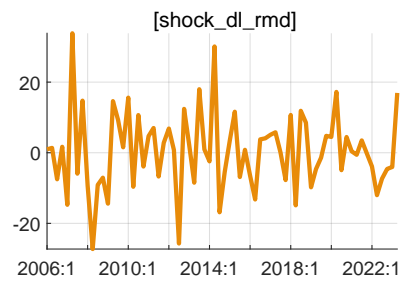
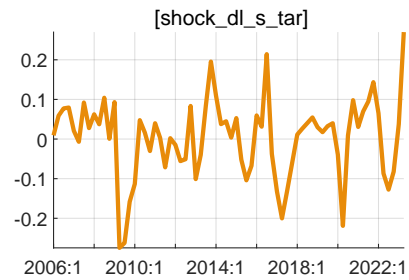
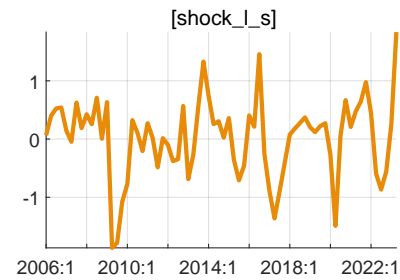
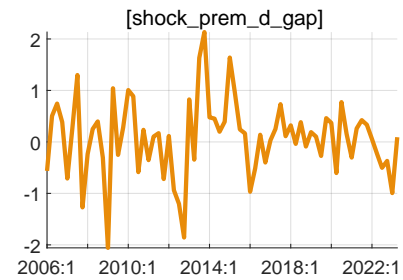
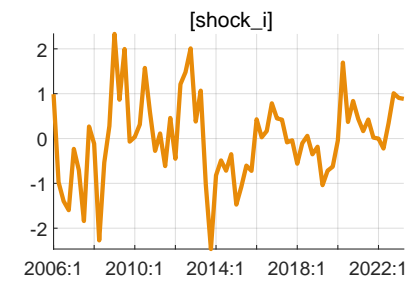
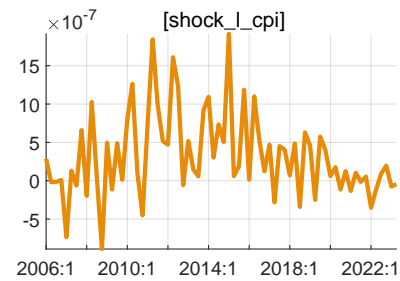
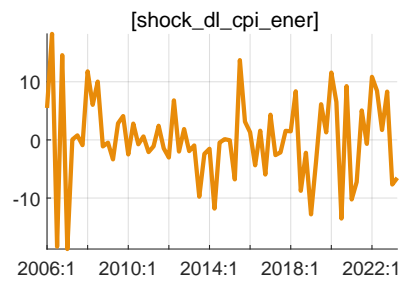
Shocks (page 1)



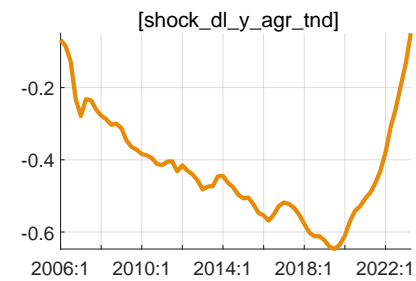
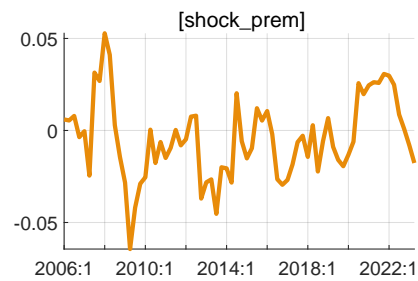
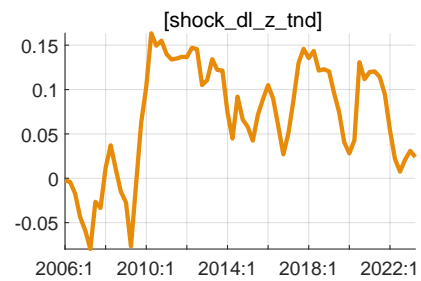
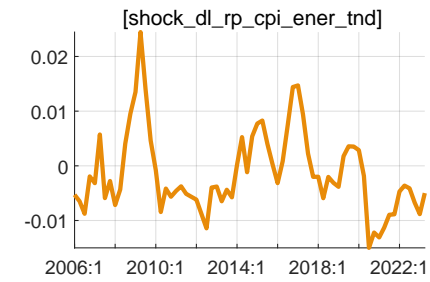
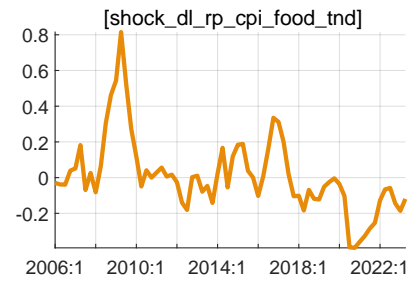
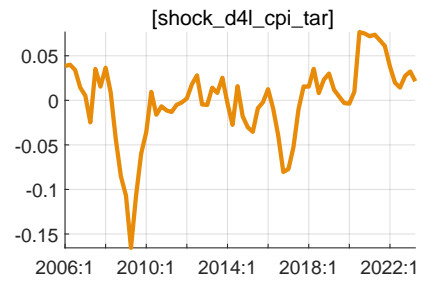
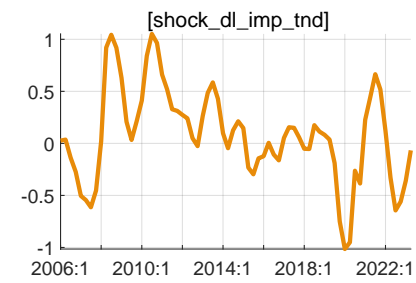
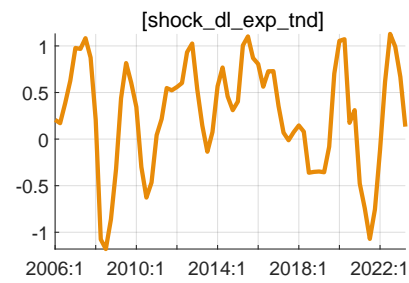
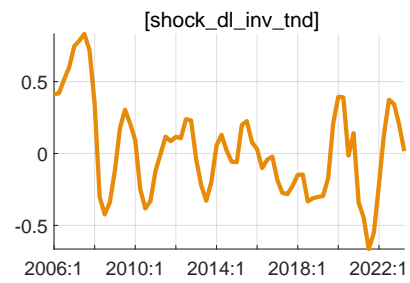
Shocks (page 2)



Shocks (page 3)



Shocks (page 4)



Shocks (page 5)

