# Forecast report

Round: 2023 July main round, time: 06-Dec-2023 15:58:54.

## 1 Forecast tables

### Main indicators

	2021Q1	2021Q2	2021Q3	2021Q4	2022Q1	2022Q2	2022Q3	2022Q4	2023Q1	2023Q2	2023Q3	2023Q4	2024Q1	2024Q2	2024Q3	2024Q4
CPI, y-on-y change	2.12	0.68	-0.63	1.16	5.89	12.05	16.37	21.13	20.23	15.16	13.30	8.81	6.14	5.24	3.02	2.19
GDP, y-on-y change	3.51	20.61	10.11	10.26	7.86	7.48	10.03	7.28	9.20	5.10	4.30	7.73	7.98	12.32	13.49	13.40
Interbank rate, pct	5.18	5.19	5.19	5.17	5.29	5.51	6.05	6.84	7.36	7.73	7.72	7.08	6.62	6.34	6.23	6.24
Exchange rate, y-on-y change	5.22	5.42	4.57	3.94	3.93	3.83	4.18	5.25	7.61	11.25	13.99	13.09	11.07	7.92	4.96	4.17
Deficit, pct. of GDP	14.53	12.05	12.77	17.79	13.34	13.91	15.71	7.15	9.42	13.10	6.74	8.55	9.80	10.66	11.24	11.64

### GDP growth, y-on-y percentage changes

	2021Q1	2021Q2	2021Q3	2021Q4	2022Q1	2022Q2	2022Q3	2022Q4	2023Q1	2023Q2	2023Q3	$2023\mathrm{Q4}$	2024Q1	2024Q2	2024Q3	2024Q4
GDP, y-on-y change in %	3.51	20.61	10.11	10.26	7.86	7.48	10.03	7.28	9.20	5.10	4.30	7.73	7.98	12.32	13.49	13.40
Consumption, y-on-y change	6.38	10.54	1.73	7.35	-0.84	20.37	16.93	14.20	14.18	5.39	5.63	4.15	9.96	4.49	7.91	9.09
Investment, y-on-y change	-53.68	98.90	276.83	16.60	65.37	-13.00	-30.84	23.00	25.45	12.00	29.03	0.12	5.87	6.47	8.45	9.65
Gov. dem., y-on-y change	18.00	15.78	-6.82	8.56	8.04	-0.68	14.55	-20.47	-15.41	-30.66	-24.86	2.51	8.48	44.80	35.33	28.13
Export, y-on-y change	-18.69	38.10	-21.55	32.39	38.38	25.76	36.77	19.64	5.66	4.77	6.13	10.43	14.16	13.98	13.46	13.04
Import, y-on-y change	-15.36	27.43	-5.98	16.49	15.42	27.28	21.22	10.67	-0.35	-12.18	-7.15	-1.04	9.39	11.76	11.95	11.10

## GDP growth, q-on-q change in %

	2021Q1	2021Q2	2021Q3	2021Q4	2022Q1	2022Q2	2022Q3	2022Q4	2023Q1	2023Q2	2023Q3	2023Q4	2024Q1	2024Q2	2024Q3	2024Q4
GDP, q-on-q change in %	15.92	13.77	3.28	8.70	5.81	12.81	12.16	-0.47	12.56	-2.90	8.79	13.26	13.61	13.68	13.41	12.91
Consumption, q-on-q change	16.55	-16.00	8.03	23.23	-13.53	83.75	-4.37	11.54	-13.43	33.60	-3.49	5.43	7.55	8.95	9.77	10.12
Investment, q-on-q change	-81.54	2538.47	35.10	-71.19	-22.31	76.05	-41.82	192.04	-13.52	7.09	2.48	5.86	8.13	9.55	10.32	10.60
Gov. dem., q-on-q change	-1.80	16.45	-28.42	73.28	-7.88	-12.05	18.35	-56.73	10.11	-59.01	63.21	49.92	38.06	30.13	24.54	20.46
Export, q-on-q change	29.83	82.22	-24.85	71.06	59.80	19.22	9.20	-2.68	-0.54	14.02	14.98	14.05	13.60	13.30	12.90	12.36
Import, q-on-q change	13.47	21.50	3.25	28.10	13.27	70.69	-11.99	-11.94	-24.84	2.11	9.95	13.67	12.19	11.27	10.69	10.26

## CPI, y-on-y change in %

	2021Q1	2021Q2	2021Q3	2021Q4	2022Q1	2022Q2	2022Q3	2022Q4	2023Q1	2023Q2	2023Q3	2023Q4	2024Q1	2024Q2	2024Q3	2024Q4
Headline CPI, y-on-y change	2.12	0.68	-0.63	1.16	5.89	12.05	16.37	21.13	20.23	15.16	13.30	8.81	6.14	5.24	3.02	2.19
Core CPI, y-on-y change	3.03	1.08	0.07	3.08	5.84	10.66	13.61	16.27	15.70	11.48	11.33	8.45	6.91	6.66	4.25	3.27

	2021Q1	2021Q2	2021Q3	2021Q4	2022Q1	2022Q2	2022Q3	2022Q4	2023Q1	2023Q2	2023Q3	2023Q4	2024Q1	2024Q2	2024Q3	2024Q4
Food CPI, y-on-y change	-1.92	-0.33	-5.83	-8.64	4.09	16.25	29.70	48.08	48.89	40.47	29.00	14.90	4.44	-1.15	-3.80	-4.47
Energy CPI, y-on-y change	1.24	-1.57	3.87	3.41	10.90	18.70	18.89	21.24	13.42	5.08	2.31	-0.45	1.42	4.45	5.52	5.95

## CPI, q-on-q change in %

	2021Q1	2021Q2	2021Q3	2021Q4	2022Q1	2022Q2	2022Q3	2022Q4	2023Q1	2023Q2	2023Q3	2023Q4	2024Q1	2024Q2	2024Q3	2024Q4
Headline CPI, q-on-q change	-1.91	-0.23	1.66	5.50	17.33	25.29	18.16	24.06	13.79	5.44	10.71	5.54	3.01	1.92	1.67	2.15
Core CPI, q-on-q change	2.21	0.65	2.87	6.79	13.48	20.32	14.18	17.27	11.26	3.96	12.60	7.09	4.21	2.99	2.77	3.12
Food CPI, q-on-q change	-17.06	-5.23	-3.53	-7.72	37.90	49.73	48.40	56.73	41.10	18.64	5.54	-1.36	-3.68	-4.78	-5.34	-4.06
Energy CPI, q-on-q change	-2.47	-3.21	11.71	8.88	27.57	27.70	13.41	16.60	-2.08	-5.84	1.90	4.51	5.50	5.93	6.14	6.23

### Fiscal indicators

	2021Q1	2021Q2	2021Q3	2021Q4	2022Q1	2022Q2	2022Q3	2022Q4	2023Q1	2023Q2	2023Q3	$2023\mathrm{Q4}$	2024Q1	2024Q2	2024Q3	2024Q4
Deficit, percent of GDP	14.53	12.05	12.77	17.79	13.34	13.91	15.71	7.15	9.42	13.10	6.74	8.55	9.80	10.66	11.24	11.64
Str. deficit, percent of GDP	12.44	12.55	12.49	12.32	12.09	11.96	12.01	12.15	12.33	12.36	12.39	12.42	12.44	12.46	12.49	12.50
Cyc. deficit, percent of GDP	0.49	0.48	0.52	0.40	0.44	0.12	0.13	0.28	0.36	0.46	0.49	0.44	0.37	0.30	0.23	0.17
Discr. deficit, percent of GDP	1.60	-0.97	-0.23	5.07	0.80	1.83	3.57	-5.27	-3.27	0.28	-6.15	-4.30	-3.01	-2.11	-1.48	-1.03
Fiscal impulse, percent of GDP	1.62	-0.86	-0.29	4.90	0.57	1.70	3.62	-5.14	-3.09	0.31	-6.12	-4.28	-2.99	-2.09	-1.46	-1.02

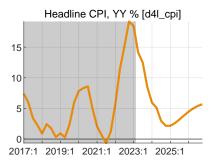
### Auxiliary model results

	2021Q1	2021Q2	2021Q3	2021Q4	2022Q1	2022Q2	2022Q3	2022Q4	2023Q1	2023Q2	2023Q3	2023Q4	2024Q1	2024Q2	2024Q3	2024
Defeit % of CDD									•							
Deficit, % of GDP	14.53	12.05	12.77	17.79	13.34	13.91	15.71	7.15	9.42	13.10	0.74	8.55	9.80	10.66	11.24	11.
Grants, $\%$ of GDP	6.27	4.83	5.44	5.85	7.16	7.89	4.41	3.87	2.72	3.86	4.43	4.71	4.86	4.93	4.96	4
Net for eign financing deficit, $\%$ of GDP									11.25	7.64	2.37	4.33	5.09	5.66	6.06	6.
Net domestic financing deficit, $\%$ of GDP						• • •		• • •	-3.15	1.61	-0.06	-0.50	-0.15	0.06	0.22	0.
Debt in foreign currency, $\%$ of GDP				50.64	• • • •	47.02		42.80	44.82	48.60	48.87	48.57	48.65	48.89	49.17	49.
Debt in local currency, $\%$ of GDP				20.12		18.57		16.47	15.38	15.80	15.11	14.34	13.76	13.30	12.90	12.
Resource balance ratio $\%$ of GDP	-14.78	-14.68	-16.04	-16.82	-14.53	-18.46	-17.16	-14.65	-13.79	-13.91	-13.93	-13.96	-13.92	-13.82	-13.68	-13.
Net private capital flows, mln USD	-86.16	72.83	238.15	59.10	-193.79	130.13	42.98	505.00	132.00							
Money demand, annualized growth, in %	14.59	15.06	18.96	17.99	22.70	19.19	13.85	12.07	6.40	11.51	17.63	14.84	13.85	13.77	14.14	14

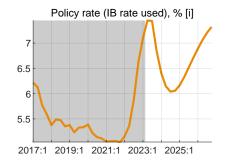
	2021Q1	2021Q2	2021Q3	2021Q4	2022Q1	2022Q2	2022Q3	2022Q4	$2023\mathrm{Q}1$	2023Q2	2023Q3	$2023\mathrm{Q4}$	2024Q1	2024Q2	2024Q3	2024
log change GDP deflator (from CPI, PM)	1.41	-3.03	8.00	6.73	20.14	20.12	19.71	19.69	7.43	2.56	8.90	5.10	2.50	1.37	1.23	1.

## 2 Forecast charts

#### Main indicators



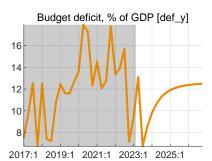






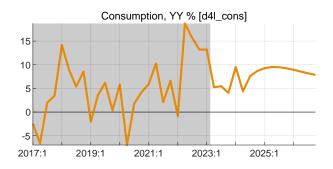




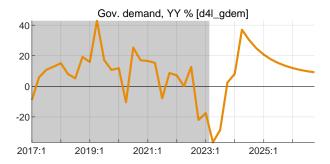


### GDP growth, y-on-y

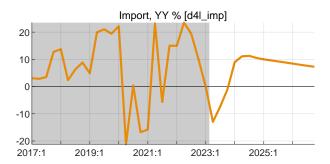




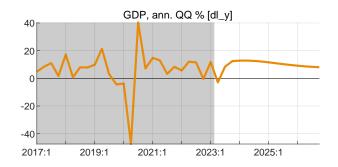


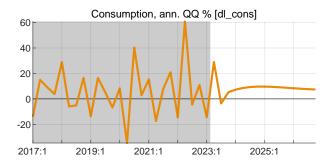




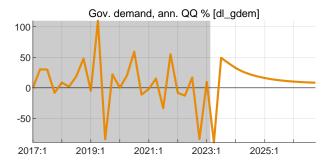


### GDP growth, q-on-q





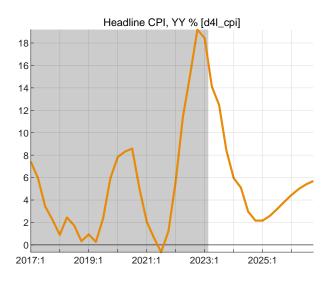


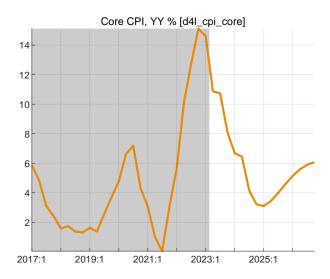


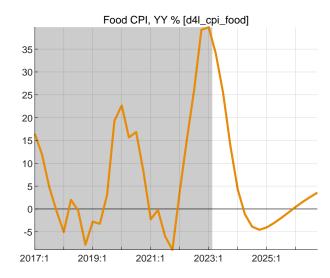


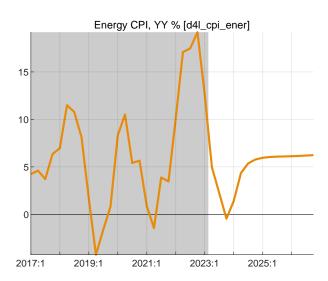


### Inflation, y-on-y

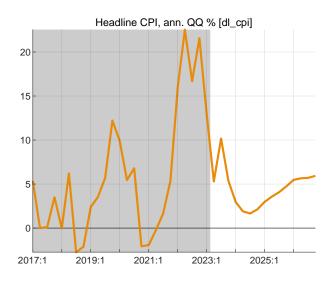


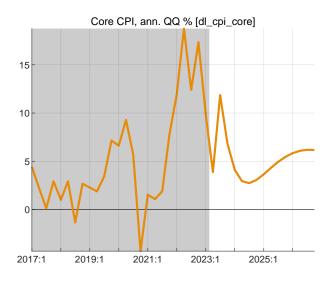


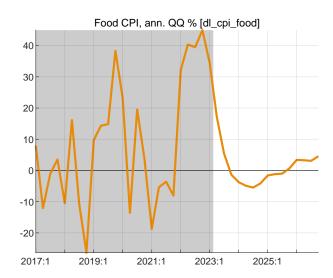


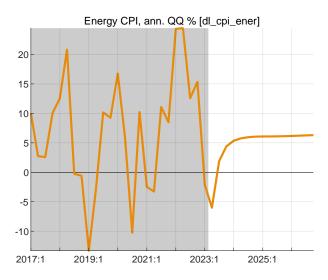


### Inflation, q-on-q

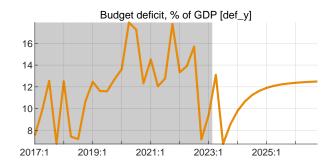




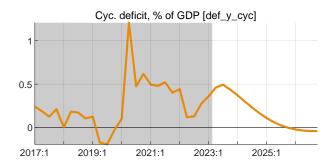




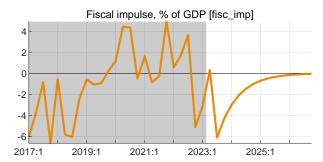
## Budget deficit



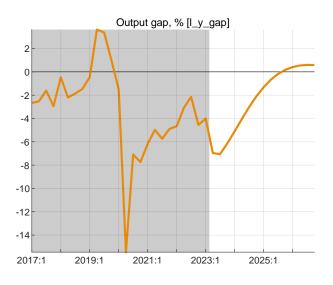


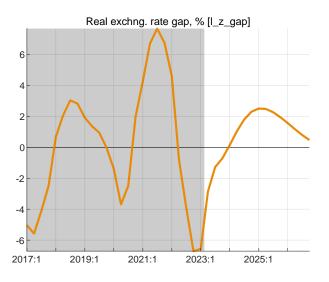


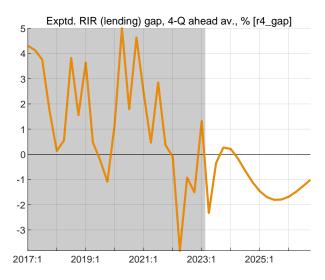




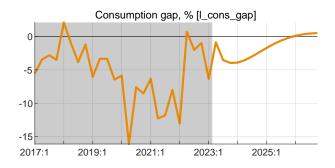
### Main cyclical indicators



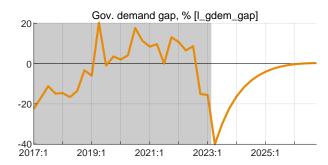




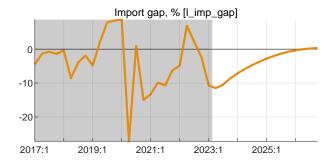
### GDP cyclical indicators



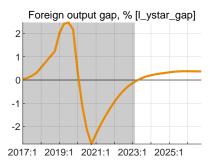


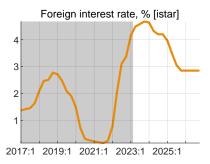


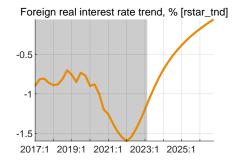


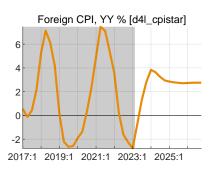


#### External variables



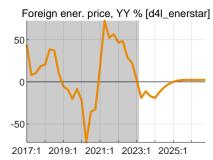


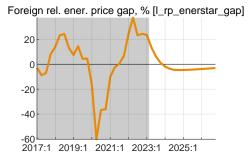






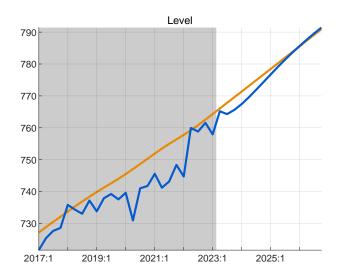


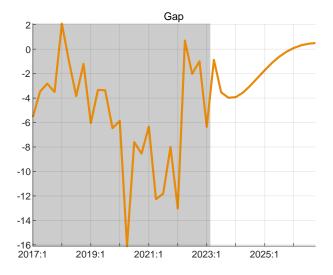


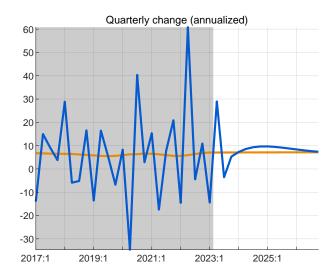


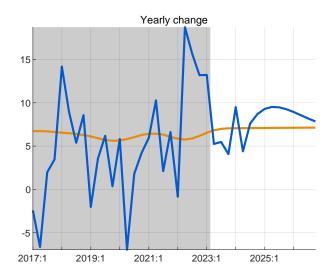
# 3 Trends and gaps

## Consumption, $100*\log [l\_cons]$

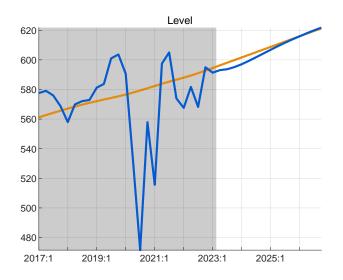


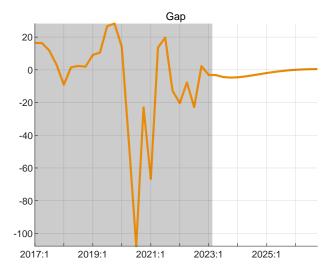


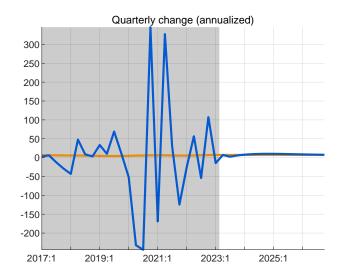


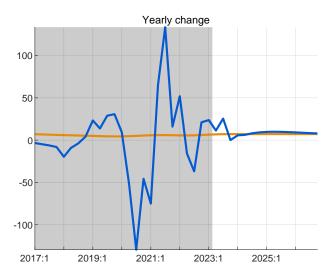


## Investment, $100*\log [l\_inv]$

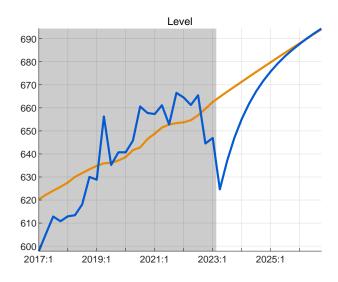


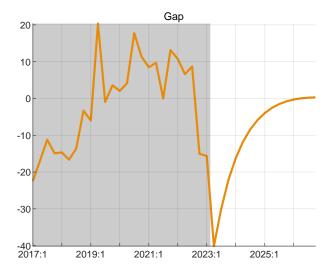


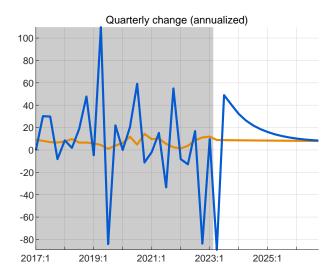


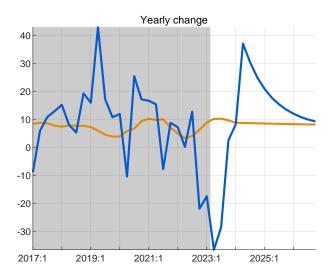


## Gov. demand, $100*\log [l\_gdem]$

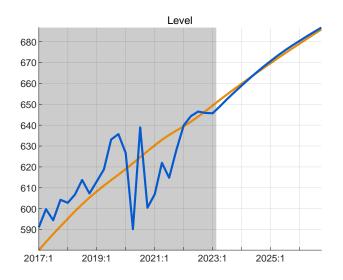


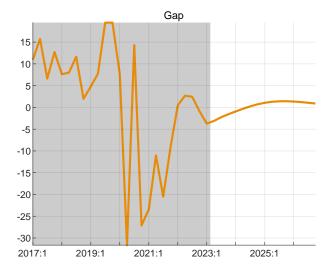


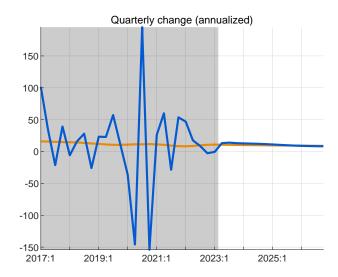


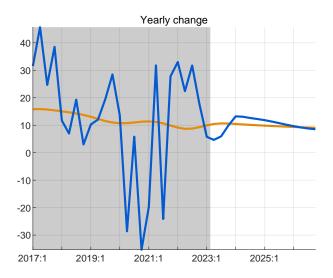


Export,  $100*\log [l_exp]$ 

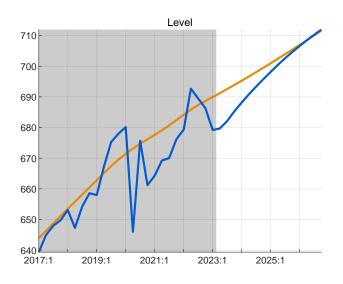


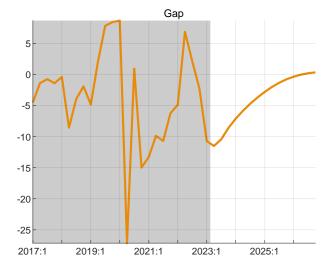


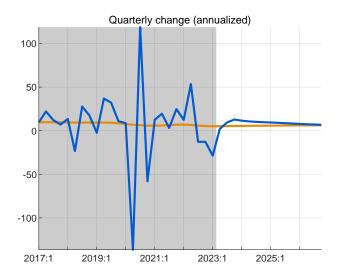


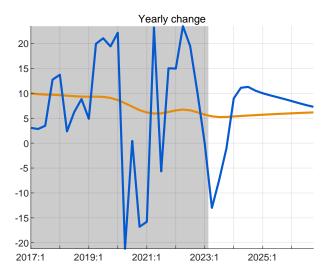


Import,  $100*\log [l\_imp]$ 

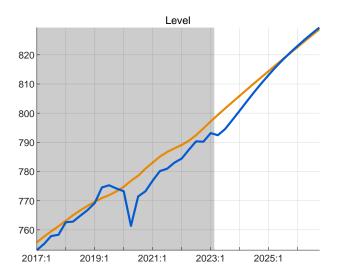


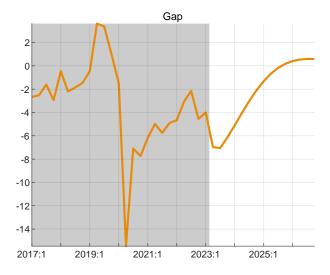


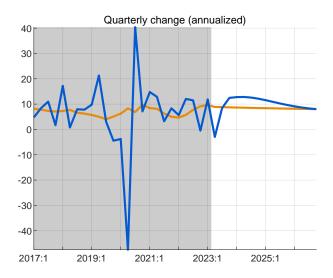


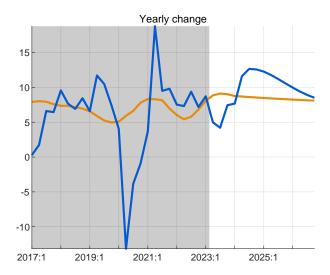


GDP, 100\*log [l\_y]

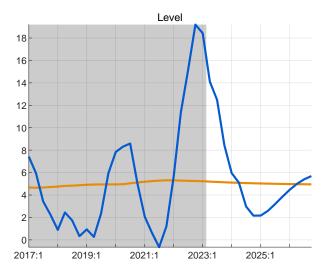




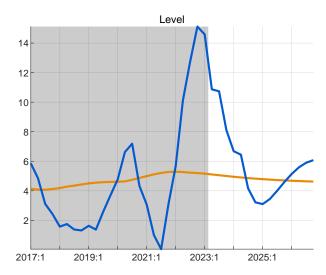




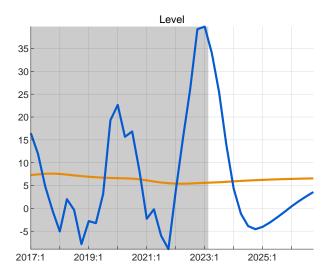
# Headline CPI, YY % [d4l\_cpi]



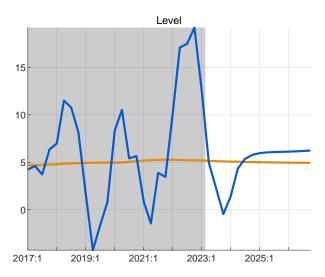
Core CPI, YY % [d4l\_cpi\_core]



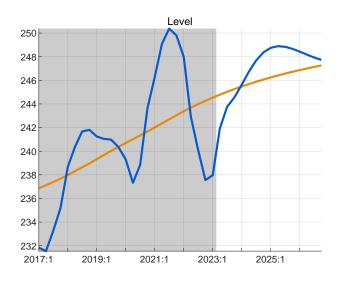
Food CPI, YY % [d4l\_cpi\_food]

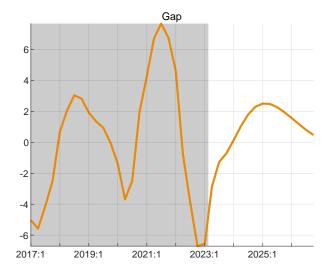


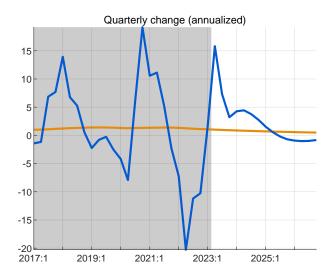
Energy CPI, YY % [d4l\_cpi\_ener]

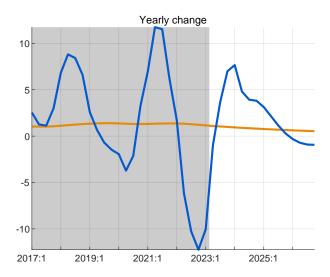


# Real exchng. rate, 100\*log [l\_z]

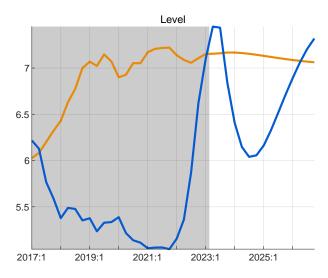




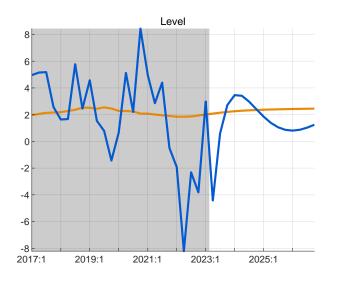


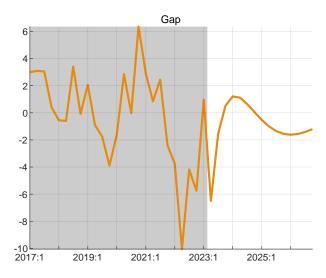


Policy rate (IB rate used), % [i]

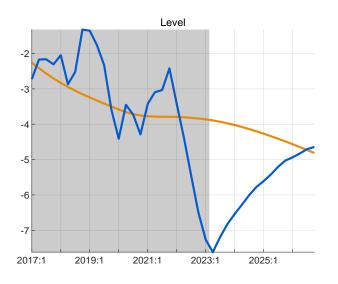


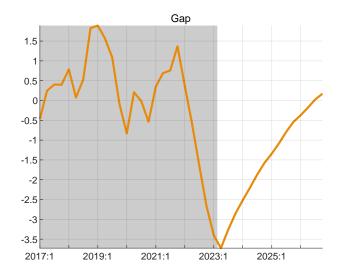
## Real interest (policy) rate, % [r]

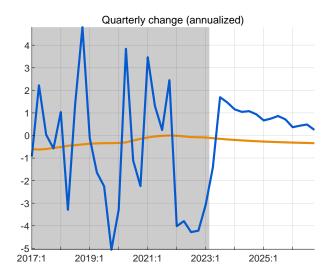


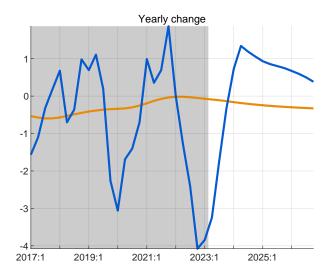


## Core rel. price, $100*\log [l\_rp\_cpi\_core]$

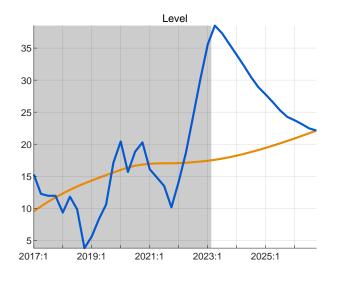


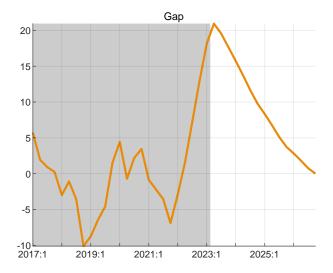


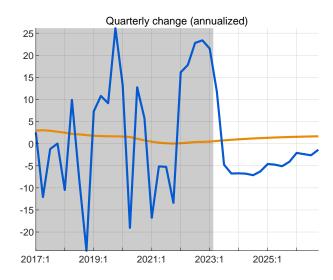


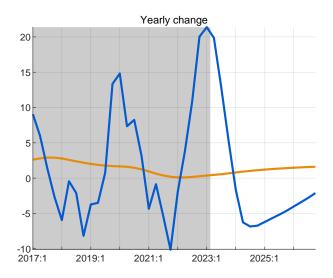


Food rel. price, 100\*log [l\_rp\_cpi\_food]

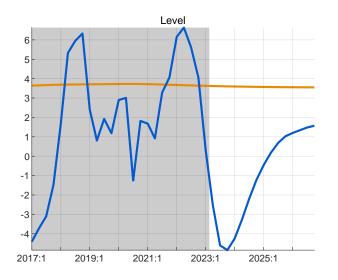


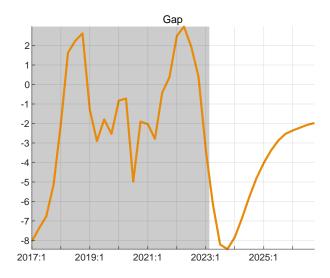


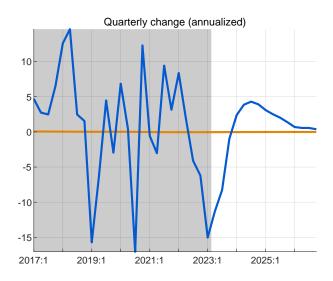


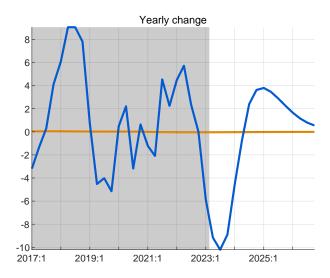


Energy rel. price, 100\*log [l\_rp\_cpi\_ener]

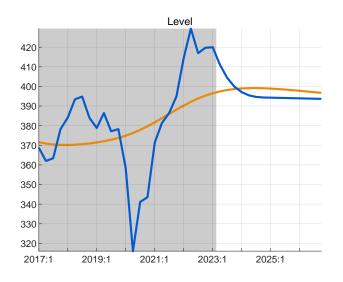


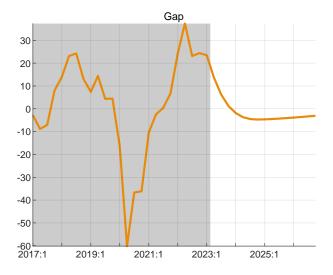


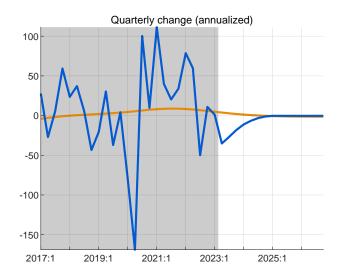


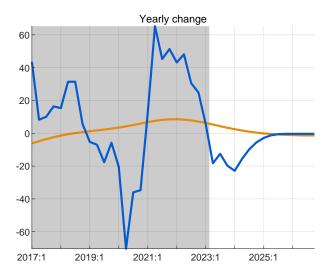


## Foreign rel. ener. price, 100\*log [l\_rp\_enerstar]

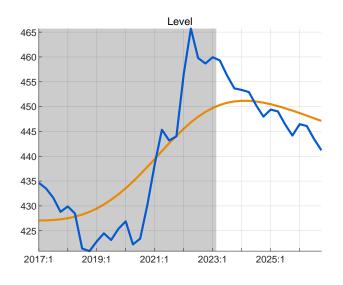


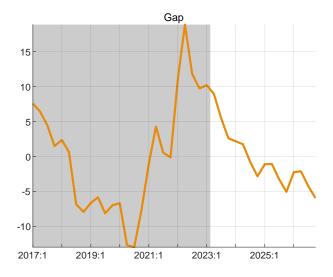


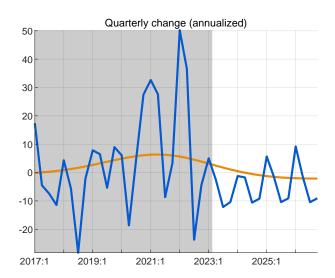


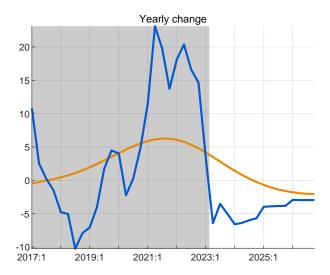


Foreign rel. food price,  $100*\log[l\_rp\_foodstar]$ 

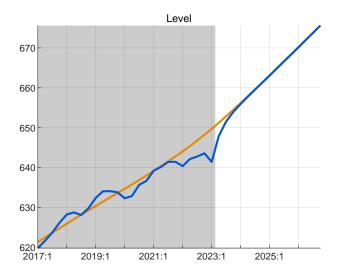


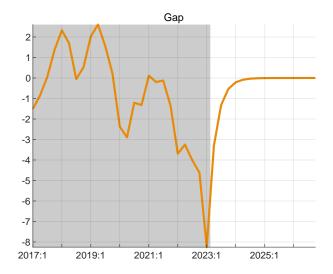


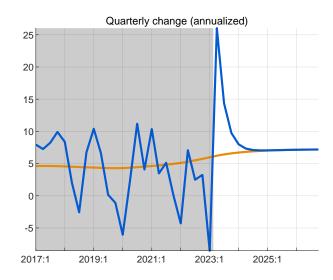


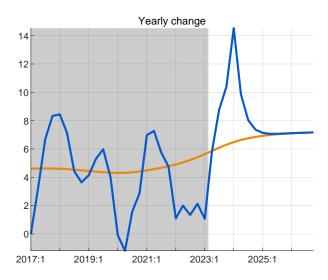


Agric. GDP,  $100*\log [l_y_agr]$ 

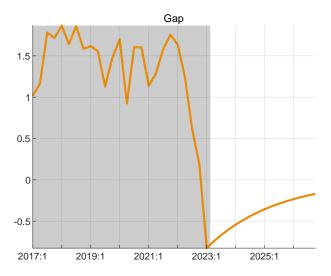




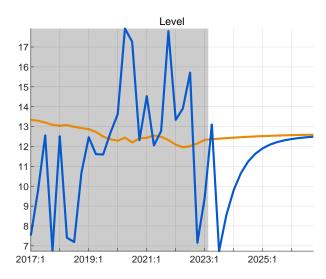




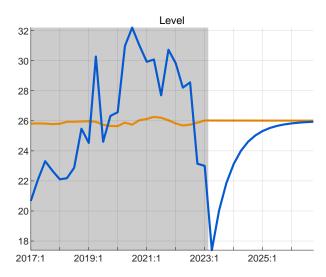
# Lending premium, % [prem\_d]



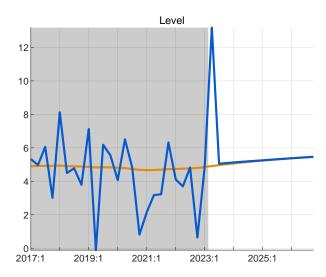
Budget deficit, % of GDP [def\_y]



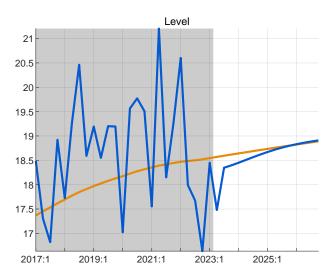
Govt. demand (G&S), % GDP [gdem\_y]



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

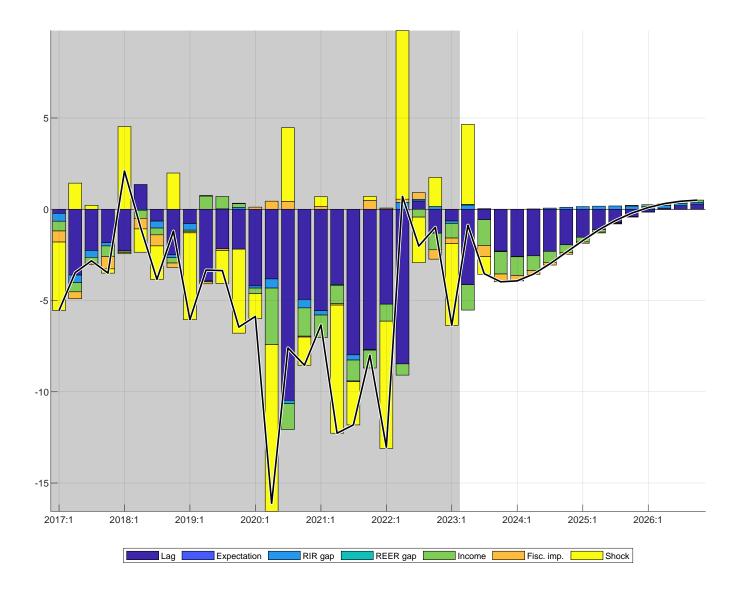


Govt. rev., % of GDP [grev\_y]

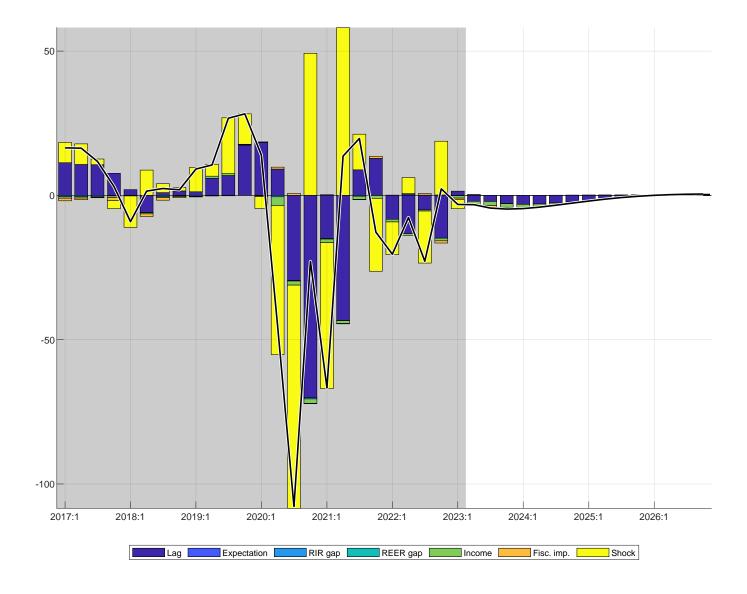


4 Decomposition of equations: charts

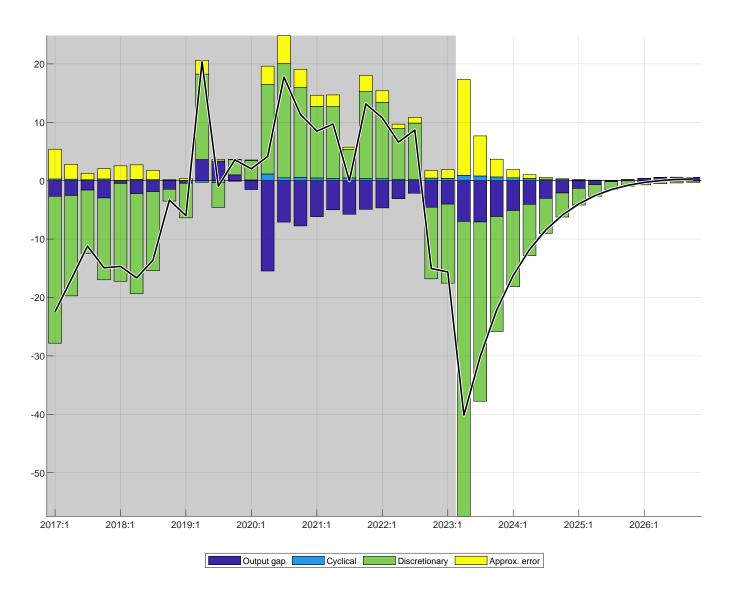
## $Consumption~gap,~\%~[l\_cons\_gap]$



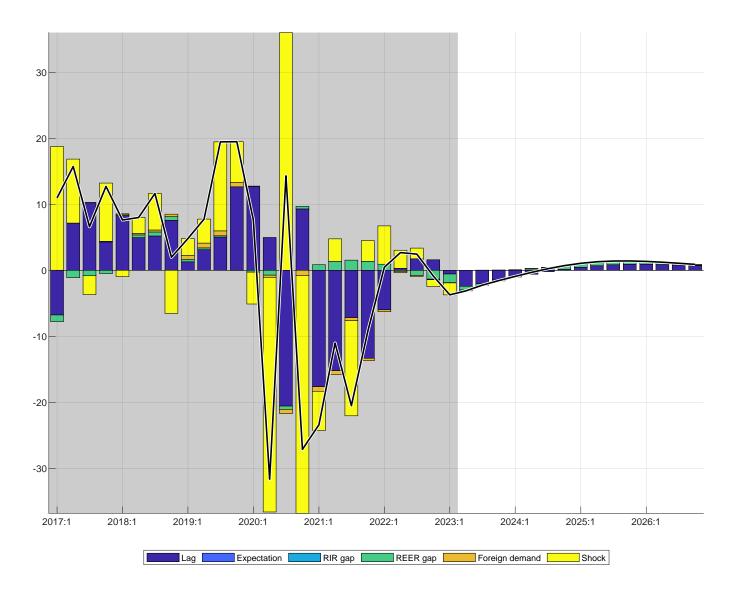
## Investment gap, % [l\_inv\_gap]



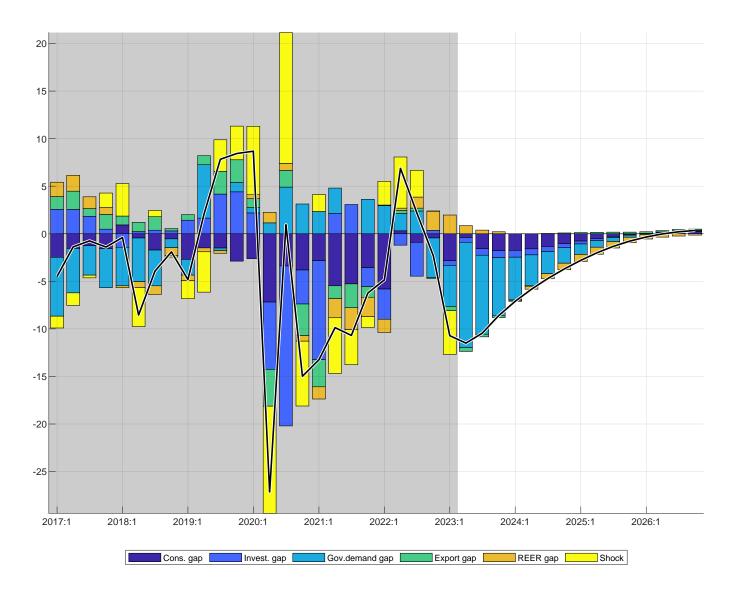
Gov. demand gap, % [l\_gdem\_gap]



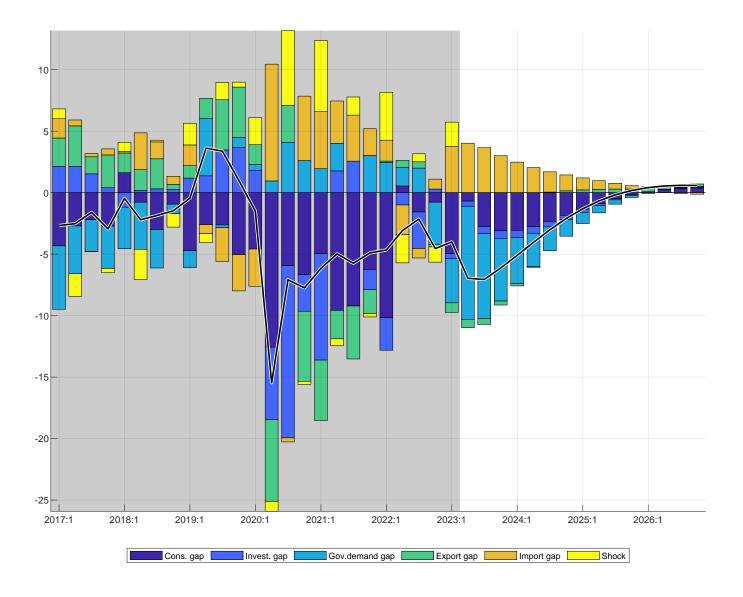
Export gap, % [l\_exp\_gap]



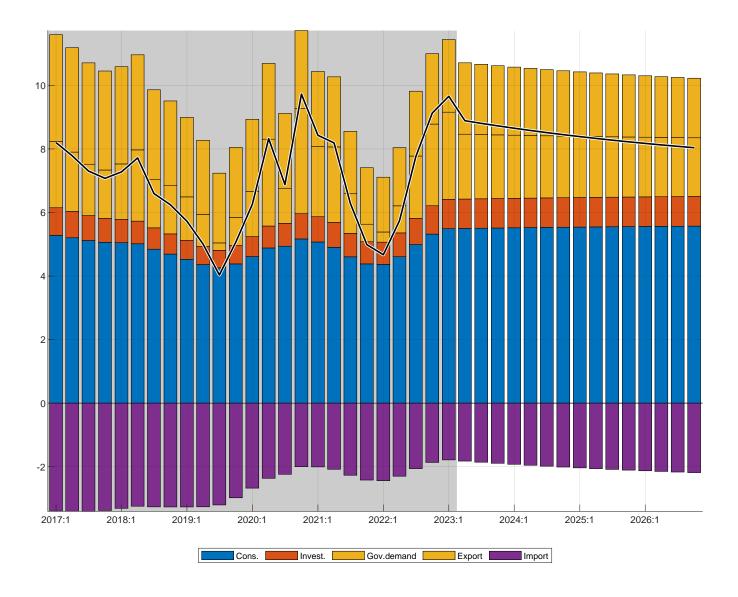
Import gap, % [l\_imp\_gap]



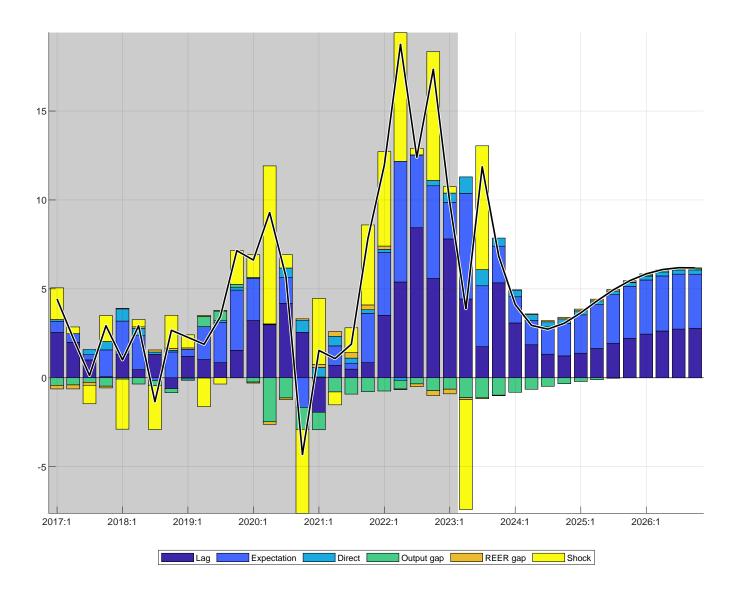
## Output gap, % [l\_y\_gap]



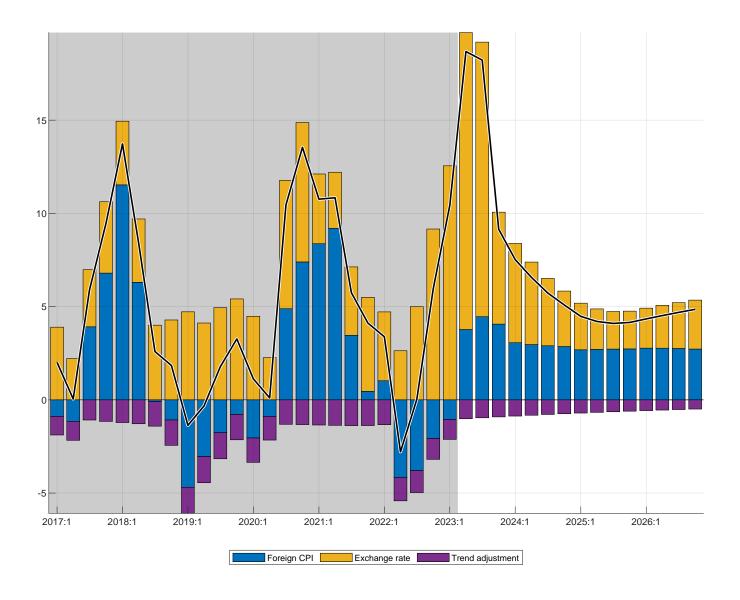
GDP tnd., ann. QQ % [dl\_y\_tnd]



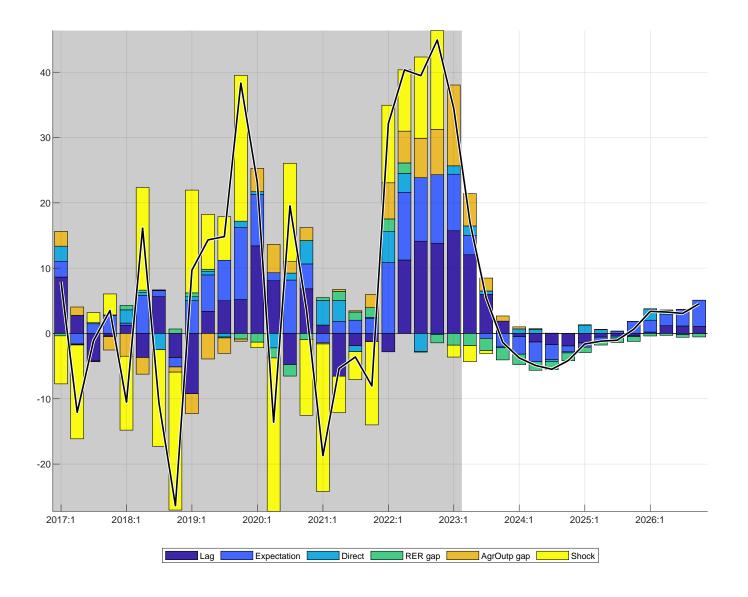
Core CPI, ann. QQ % [dl\_cpi\_core]



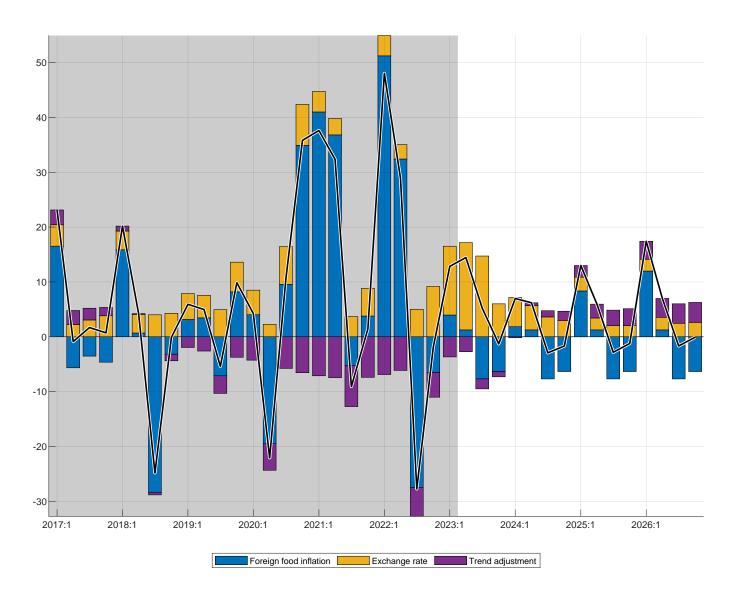
Dir. ext. eff. in core, ann. QQ % [dl\_cpi\_core\_direct]



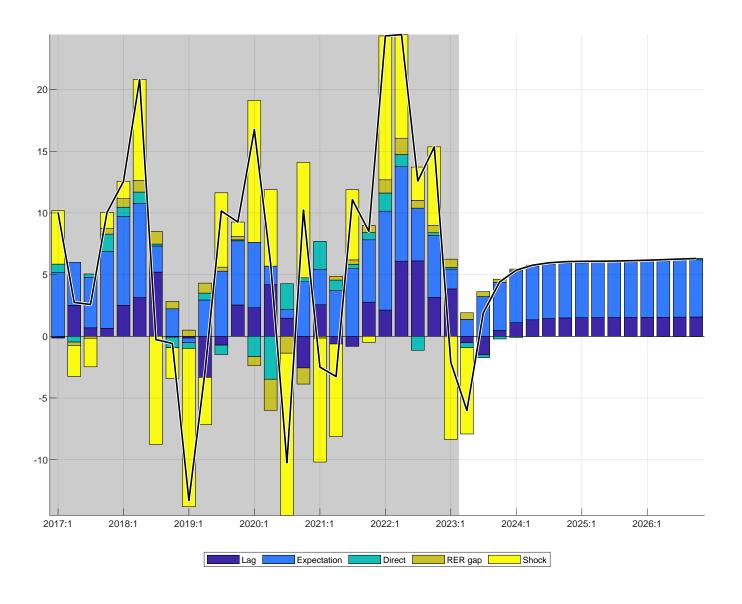
Food CPI, ann. QQ % [dl\_cpi\_food]



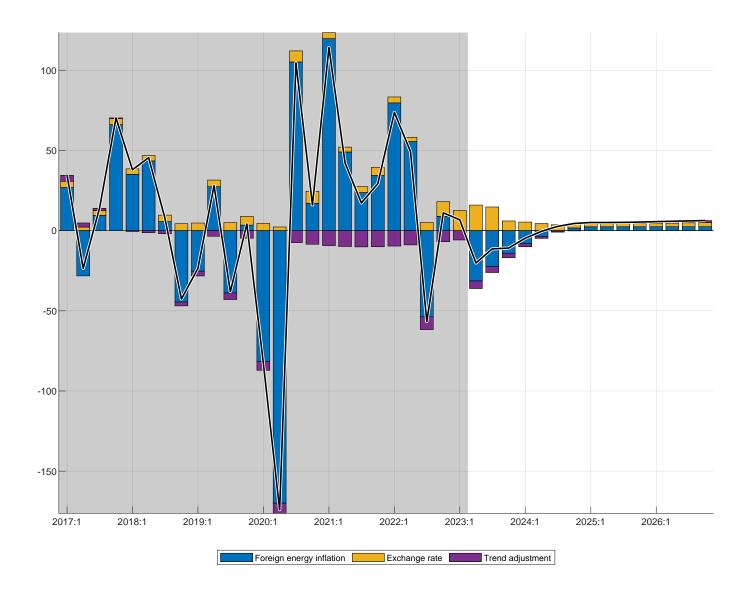
Dir. ext. eff. in food, ann. QQ % [dl\_cpi\_food\_direct]



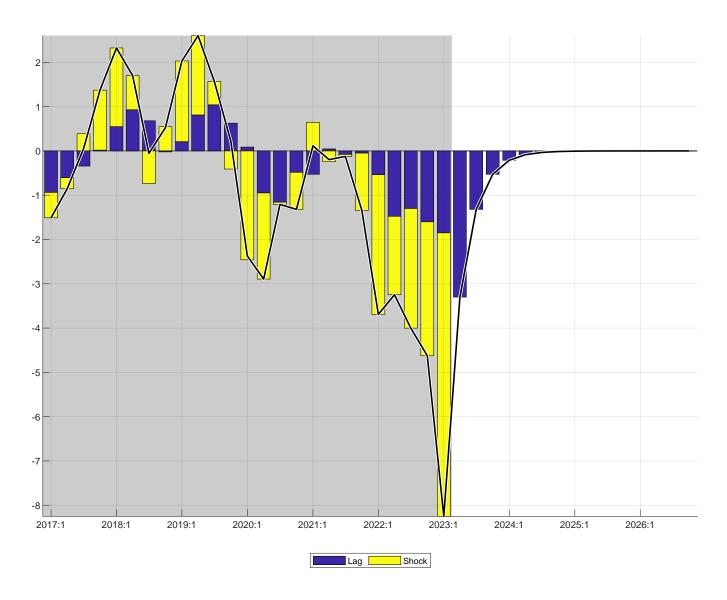
Energy CPI, ann. QQ % [dl\_cpi\_ener]



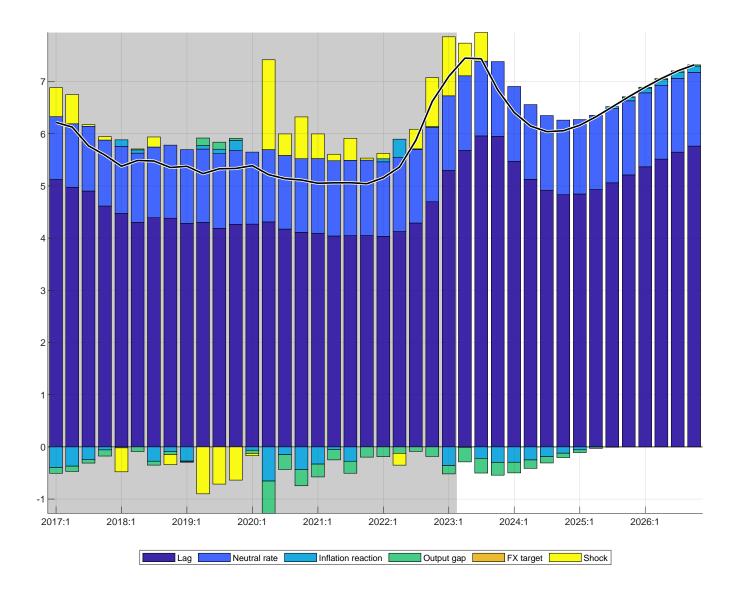
Dir. ext. eff. in energy, ann. QQ % [dl\_cpi\_ener\_direct]



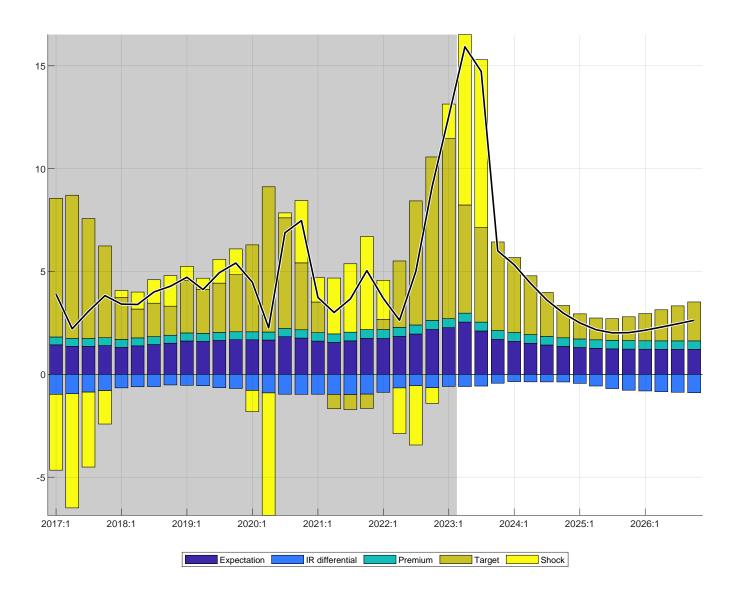
Agric. output gap, % [l\_y\_agr\_gap]



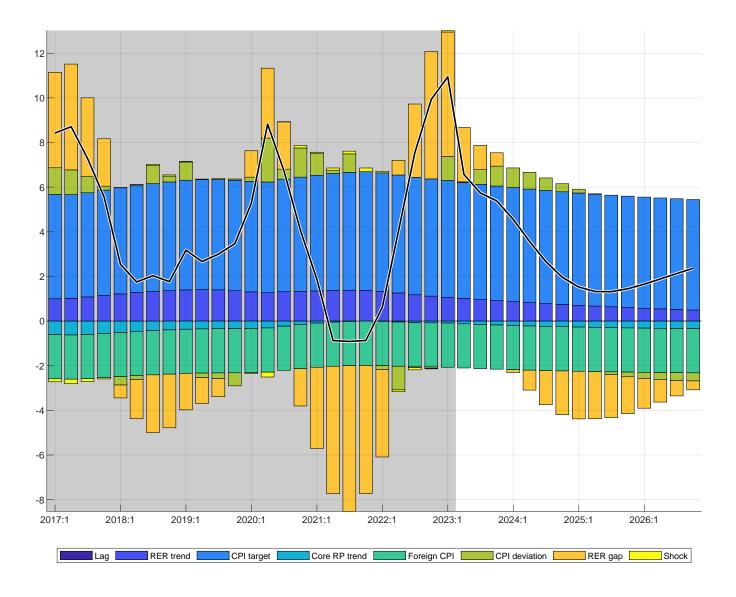
Policy rate (IB rate used), % [i]



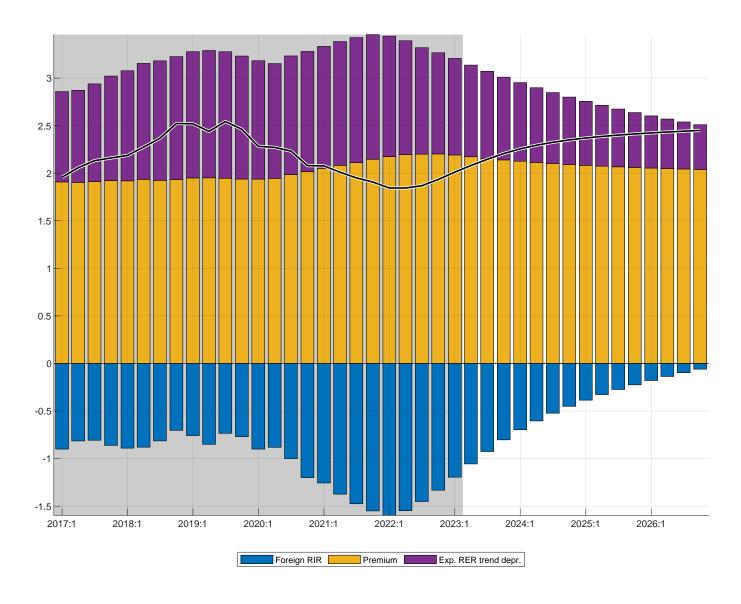
#### Exchange rate, QQ annualized % [dl\_s]



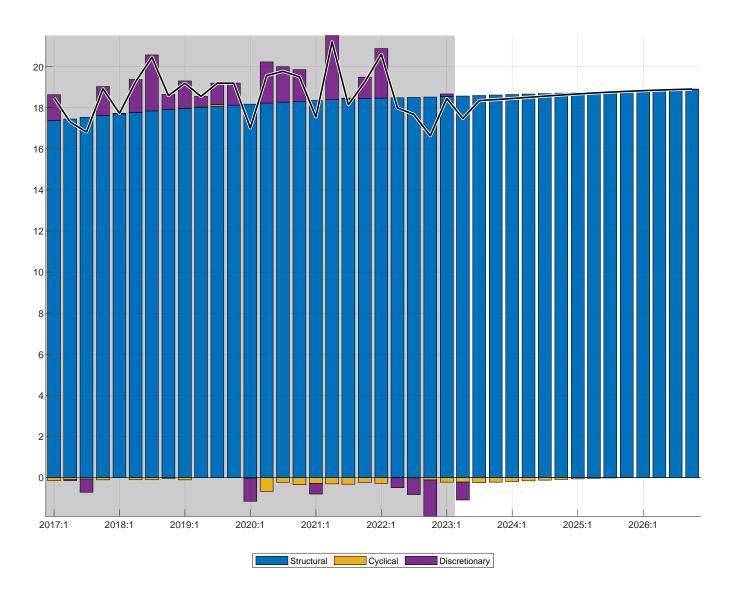
#### Exchange rate target, QQ % [dl\_s\_tar]



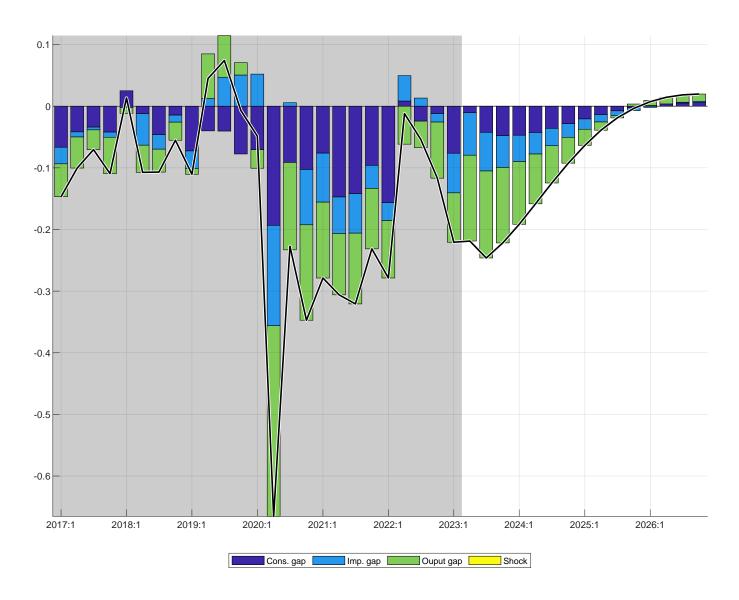
RIR (policy) trend, % [r\_tnd]



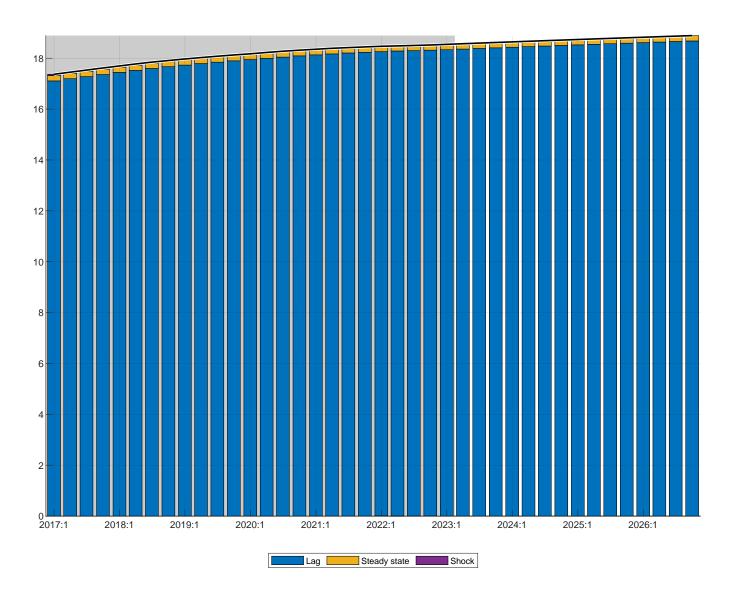
Govt. rev., % of GDP [grev\_y]



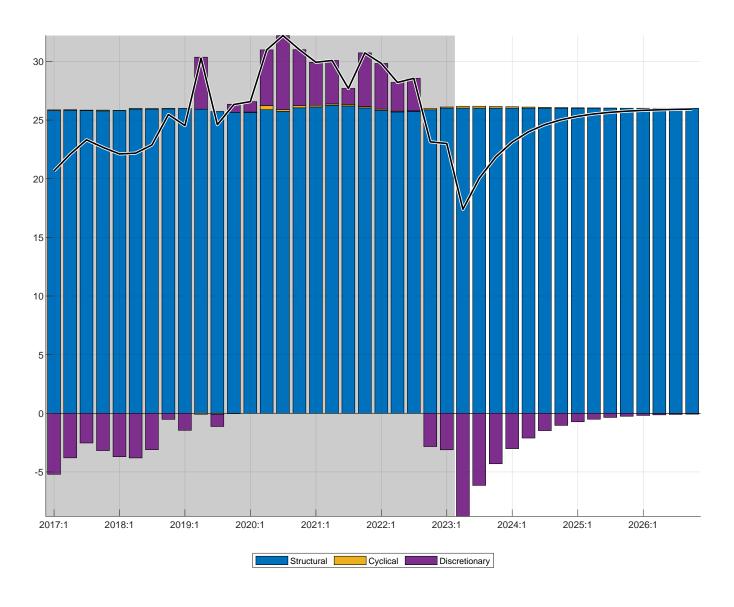
Cyc. govt. rev., % of GDP [grev\_y\_cyc]



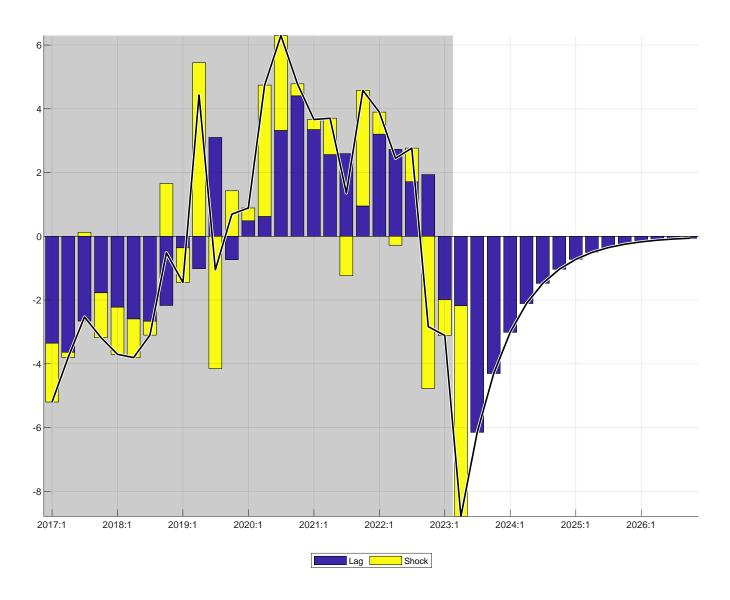
Struct. govt. rev., % of GDP [grev\_y\_str]



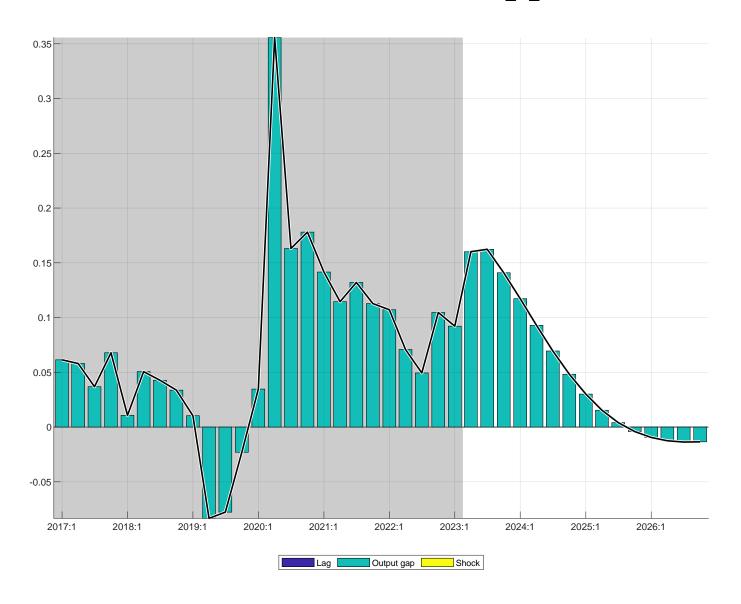
Govt. demand (G&S), % GDP [gdem\_y]



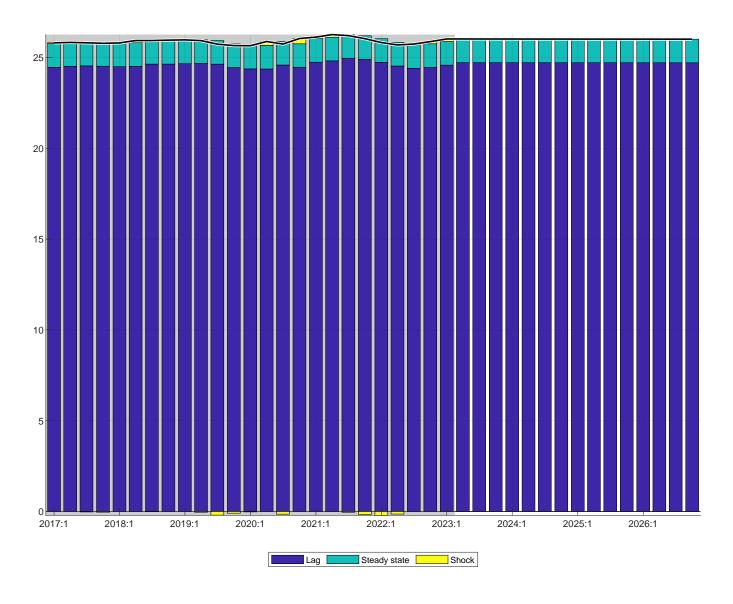
Discr. govt. demand (G&S), % GDP [gdem\_y\_discr]



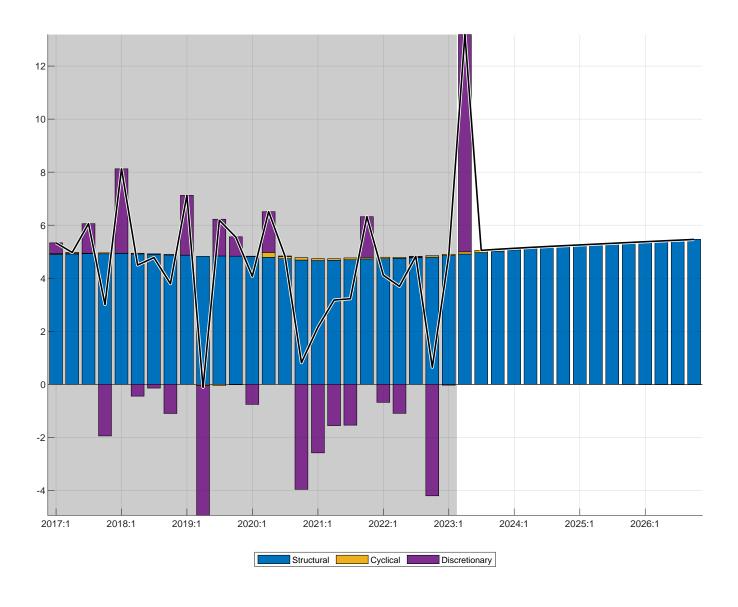
Cyc. govt. demand (G&S), % GDP [gdem\_y\_cyc]



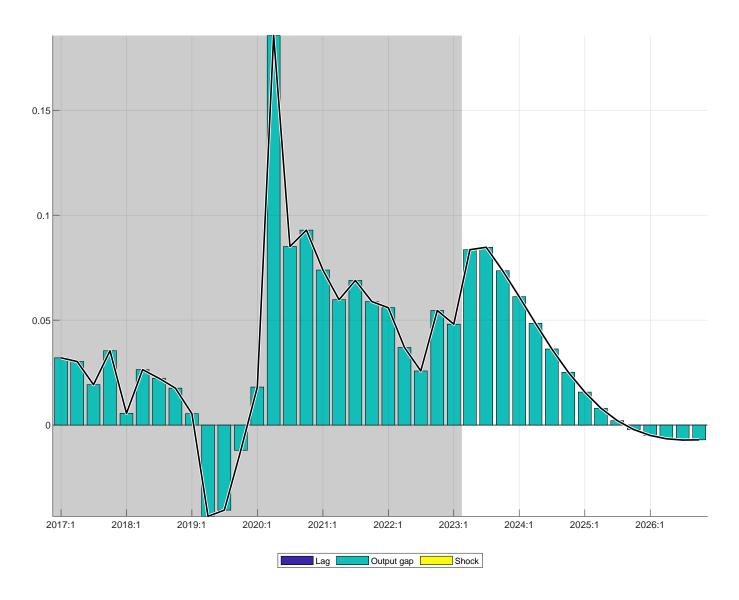
Struct. govt. demand (G&S), % GDP [gdem\_y\_str]



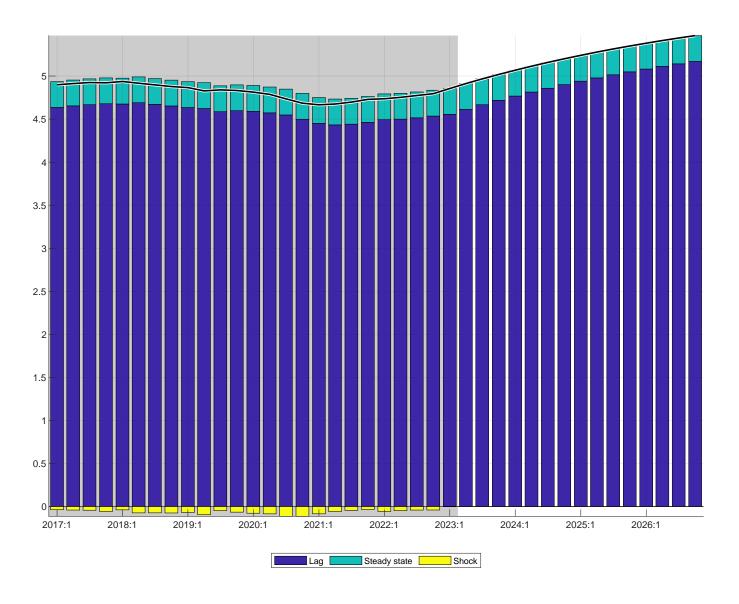
Other govt. exp., % to GDP [oexp\_y]



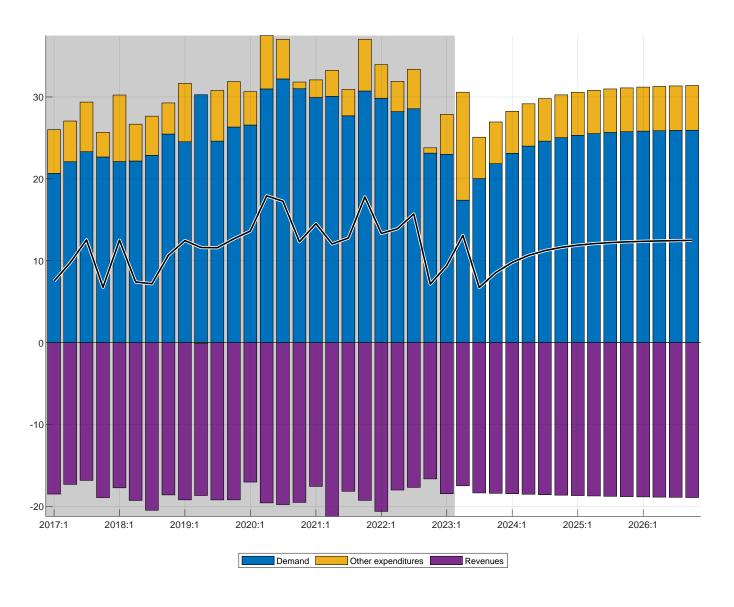
Cyc. other govt. exp., % to GDP [oexp\_y\_cyc]



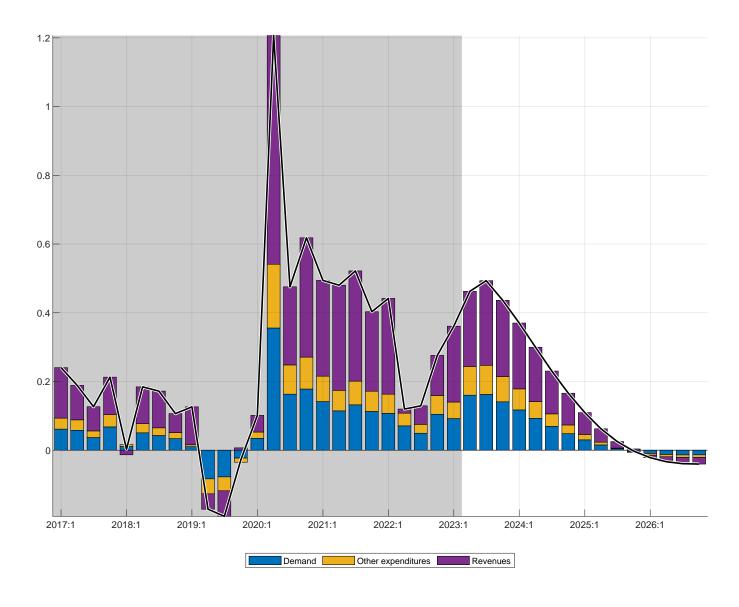
Struct. other govt. exp., % to GDP [oexp\_y\_str]



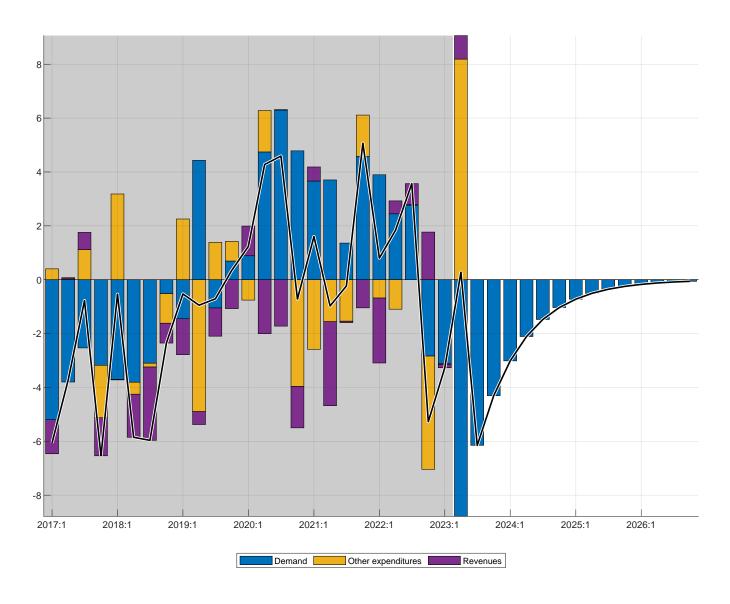
#### Budget deficit, % of GDP [def\_y]



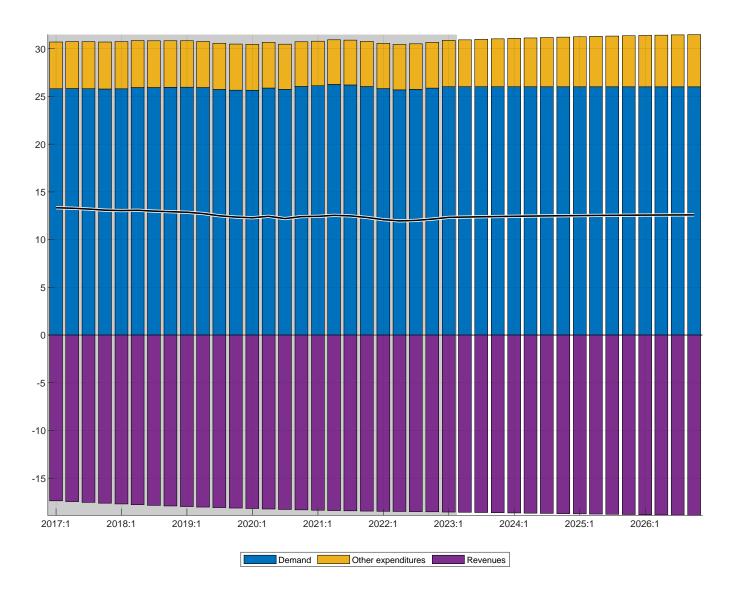
Cyc. deficit, % of GDP [def\_y\_cyc]



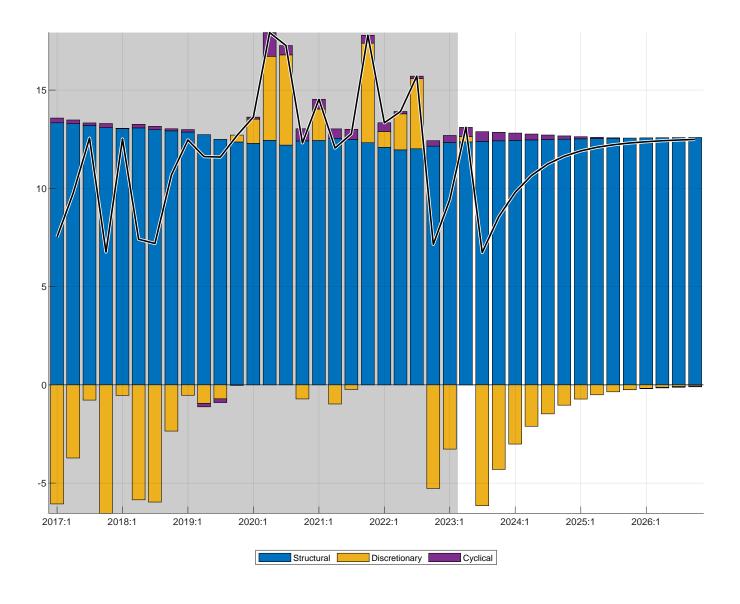
Discr. deficit, % of GDP [def\_y\_discr]



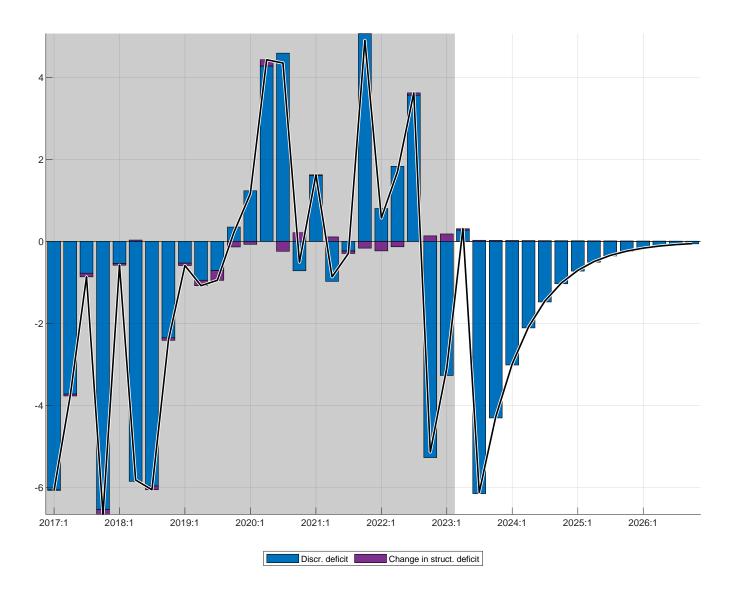
Struct. deficit, % of GDP [def\_y\_str]



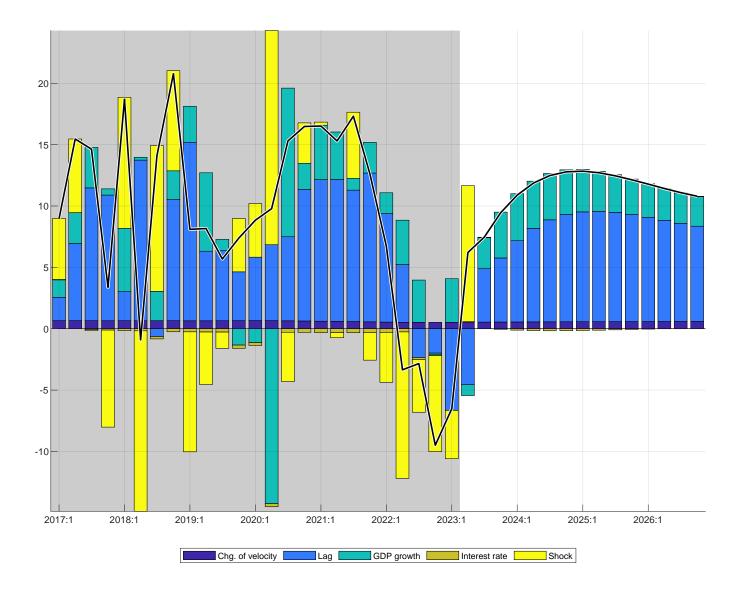
Budget deficit, % of GDP [def\_y\_scd]



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



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



5 Decomposition of equations: tables

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

	2021Q1	2021Q2	2021Q3	2021Q4	2022Q1	2022Q2	2022Q3	2022Q4	2023Q1	2023Q2	2023Q3	2023Q4	2024Q1	2024Q2	2024Q3	2024Q4
Lag	-5.55	-4.12	-7.98	-7.68	-5.20	-8.47	0.46	-1.31	-0.64	-4.13	-0.57	-2.29	-2.58	-2.55	-2.31	-1.95
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
RIR gap	-0.24	-0.05	-0.29	-0.04	0.01	0.38	0.09	0.15	-0.13	0.23	0.03	-0.03	-0.02	0.02	0.06	0.11
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
Income	-1.23	-1.00	-1.15	-0.98	-0.93	-0.62	-0.43	-0.91	-0.80	-1.39	-1.41	-1.23	-1.02	-0.81	-0.60	-0.42
Fisc. imp.	0.16	-0.09	-0.03	0.49	0.06	0.17	0.36	-0.51	-0.31	0.03	-0.61	-0.43	-0.30	-0.21	-0.15	-0.10
Shock	0.52	-7.02	-2.38	0.21	-6.97	9.23	-2.50	1.59	-4.47	4.38	-0.97	0.00	0.00	0.00	0.00	0.00
Total	-6.34	-12.27	-11.82	-8.00	-13.03	0.70	-2.02	-0.99	-6.36	-0.88	-3.53	-3.97	-3.92	-3.55	-2.99	-2.36

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

	2021Q1	2021Q2	2021Q3	2021Q4	2022Q1	2022Q2	2022Q3	2022Q4	2023Q1	2023Q2	2023Q3	2023Q4	2024Q1	2024Q2	2024Q3	2024Q4
Lag	-14.89	-43.34	8.86	12.82	-8.27	-13.25	-5.00	-14.83	1.47	-2.05	-2.09	-2.85	-3.08	-2.97	-2.65	-2.22
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
RIR gap	-0.24	-0.05	-0.29	-0.04	0.01	0.38	0.09	0.15	-0.13	0.23	0.03	-0.03	-0.02	0.02	0.06	0.11
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
Income	-1.23	-1.00	-1.15	-0.98	-0.93	-0.62	-0.43	-0.91	-0.80	-1.39	-1.41	-1.23	-1.02	-0.81	-0.60	-0.42
Fisc. imp.	0.24	-0.13	-0.04	0.74	0.09	0.26	0.54	-0.77	-0.46	0.05	-0.92	-0.64	-0.45	-0.31	-0.22	-0.15
Shock	-50.56	58.14	12.35	-25.27	-11.28	5.54	-18.03	18.62	-3.22	-0.06	0.00	0.00	0.00	0.00	0.00	0.00
Total	-66.68	13.62	19.73	-12.73	-20.38	-7.69	-22.82	2.26	-3.15	-3.22	-4.39	-4.75	-4.57	-4.08	-3.41	-2.68

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

	2021Q1	2021Q2	2021Q3	2021Q4	2022Q1	2022Q2	2022Q3	2022Q4	2023Q1	2023Q2	2023Q3	2023Q4	2024Q1	2024Q2	2024Q3	2024Q4
Output gap	-6.16	-4.98	-5.74	-4.90	-4.66	-3.08	-2.15	-4.55	-4.01	-6.96	-7.06	-6.13	-5.10	-4.04	-3.02	-2.10
Cyclical	0.47	0.38	0.48	0.37	0.36	0.25	0.17	0.45	0.40	0.92	0.81	0.64	0.51	0.39	0.28	0.19
Discretionary	12.24	12.31	4.91	14.90	13.06	8.67	9.69	-12.25	-13.53	-50.50	-30.70	-19.70	-13.03	-8.79	-6.00	-4.13
Approx. error	1.92	1.99	0.35	2.78	1.98	0.76	0.97	1.30	1.51	16.41	6.86	3.04	1.39	0.65	0.31	0.15
Total	8.48	9.71	-0.01	13.14	10.74	6.60	8.68	-15.05	-15.62	-40.14	-30.09	-22.14	-16.24	-11.79	-8.43	-5.89

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

	2021Q1	2021Q2	2021Q3	2021Q4	2022Q1	2022Q2	2022Q3	$2022\mathrm{Q4}$	$2023\mathrm{Q}1$	2023Q2	2023Q3	$2023\mathrm{Q}4$	$2024\mathrm{Q}1$	2024Q2	2024Q3	2024Q4
Lag	-17.63	-15.21	-7.17	-13.33	-5.98	0.30	1.74	1.59	-0.56	-2.42	-2.03	-1.47	-1.02	-0.60	-0.21	0.15
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
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
REER gap	0.86	1.34	1.54	1.35	0.92	-0.15	-0.77	-1.34	-1.31	-0.57	-0.26	-0.14	0.03	0.21	0.36	0.46
Foreign demand	-0.70	-0.58	-0.47	-0.37	-0.28	-0.20	-0.14	-0.08	-0.04	-0.00	0.02	0.05	0.06	0.07	0.08	0.09
Shock	-5.93	3.42	-14.41	3.15	5.81	2.74	1.62	-1.03	-1.81	-0.12	0.00	0.00	0.00	0.00	0.00	0.00
Total	-23.40	-11.03	-20.51	-9.20	0.47	2.68	2.45	-0.86	-3.72	-3.12	-2.26	-1.56	-0.92	-0.32	0.24	0.70

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

	2021Q1	2021Q2	2021Q3	2021Q4	2022Q1	2022Q2	2022Q3	$2022\mathrm{Q}4$	2023Q1	2023Q2	2023Q3	$2023\mathrm{Q}4$	2024Q1	2024Q2	2024Q3	2024Q4
Cons. gap	-2.83	-5.47	-5.27	-3.56	-5.81	0.31	-0.90	-0.44	-2.83	-0.39	-1.57	-1.77	-1.75	-1.58	-1.33	-1.05
Invest. gap	-10.40	2.13	3.08	-1.99	-3.18	-1.20	-3.56	0.35	-0.49	-0.50	-0.68	-0.74	-0.71	-0.64	-0.53	-0.42
Gov.demand gap	2.34	2.68	-0.00	3.63	2.96	1.82	2.40	-4.15	-4.31	-11.08	-8.30	-6.11	-4.48	-3.26	-2.33	-1.63
Export gap	-2.86	-1.35	-2.51	-1.13	0.06	0.33	0.30	-0.11	-0.45	-0.38	-0.28	-0.19	-0.11	-0.04	0.03	0.09
REER gap	-1.28	-2.01	-2.30	-2.03	-1.38	0.23	1.16	2.01	1.97	0.86	0.38	0.21	-0.04	-0.32	-0.54	-0.69
Shock	1.78	-5.84	-3.69	-1.15	2.50	5.38	2.81	0.03	-4.60	-0.01	0.00	0.00	0.00	0.00	0.00	0.00
Total	-13.25	-9.87	-10.69	-6.23	-4.85	6.87	2.21	-2.30	-10.72	-11.50	-10.45	-8.60	-7.10	-5.83	-4.70	-3.70

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

	2021Q1	2021Q2	2021Q3	2021Q4	2022Q1	2022Q2	2022Q3	$2022\mathrm{Q}4$	$2023\mathrm{Q}1$	2023Q2	2023Q3	$2023\mathrm{Q}4$	$2024\mathrm{Q}1$	2024Q2	2024Q3	2024Q4
Cons. gap	-4.95	-9.57	-9.22	-6.24	-10.17	0.55	-1.57	-0.77	-4.96	-0.68	-2.75	-3.10	-3.06	-2.77	-2.33	-1.84
Invest. gap	-8.67	1.77	2.56	-1.65	-2.65	-1.00	-2.97	0.29	-0.41	-0.42	-0.57	-0.62	-0.59	-0.53	-0.44	-0.35
Gov.demand gap	1.95	2.23	-0.00	3.02	2.47	1.52	2.00	-3.46	-3.59	-9.23	-6.92	-5.09	-3.73	-2.71	-1.94	-1.35
Export gap	-4.91	-2.32	-4.31	-1.93	0.10	0.56	0.52	-0.18	-0.78	-0.65	-0.47	-0.33	-0.19	-0.07	0.05	0.15
Import gap	4.64	3.45	3.74	2.18	1.70	-2.40	-0.77	0.81	3.75	4.02	3.66	3.01	2.49	2.04	1.65	1.29
Shock	5.79	-0.55	1.48	-0.28	3.89	-2.30	0.65	-1.23	1.98	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Total	-6.16	-4.98	-5.74	-4.90	-4.66	-3.08	-2.15	-4.55	-4.01	-6.96	-7.06	-6.13	-5.10	-4.04	-3.02	-2.10

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

	2021Q1	2021Q2	2021Q3	$2021\mathrm{Q}4$	2022Q1	2022Q2	2022Q3	$2022\mathrm{Q4}$	$2023\mathrm{Q}1$	2023Q2	2023Q3	$2023\mathrm{Q}4$	2024Q1	2024Q2	2024Q3	2024Q4
Cons.	5.07	4.90	4.60	4.38	4.37	4.61	4.99	5.32	5.49	5.50	5.50	5.51	5.52	5.52	5.53	5.54
Invest.	0.80	0.79	0.74	0.70	0.70	0.75	0.83	0.89	0.92	0.93	0.93	0.93	0.93	0.93	0.93	0.93
Gov.demand	2.22	2.37	1.25	0.55	0.32	0.85	1.96	2.57	2.74	2.04	2.02	2.00	1.99	1.97	1.96	1.94
Export	2.35	2.21	1.96	1.78	1.72	1.83	2.04	2.21	2.29	2.25	2.21	2.18	2.14	2.11	2.08	2.05
Import	-2.01	-2.08	-2.27	-2.42	-2.44	-2.30	-2.06	-1.87	-1.79	-1.82	-1.86	-1.89	-1.92	-1.95	-1.98	-2.01
Total	8.43	8.19	6.28	4.99	4.67	5.74	7.76	9.13	9.66	8.89	8.81	8.73	8.65	8.58	8.51	8.45

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

	2021Q1	2021Q2	2021Q3	2021Q4	2022Q1	2022Q2	2022Q3	2022Q4	2023Q1	2023Q2	2023Q3	2023Q4	2024Q1	2024Q2	2024Q3	2024Q4
Lag	-1.94	0.69	0.49	0.85	3.51	5.39	8.44	5.58	7.81	4.43	1.75	5.34	3.08	1.85	1.33	1.23
Expectation	0.04	1.10	0.33	2.77	3.54	6.79	4.10	5.22	2.06	5.93	3.42	2.06	1.47	1.37	1.53	1.83
Direct	0.54	0.54	0.29	0.21	0.17	-0.14	0.00	0.30	0.52	0.93	0.91	0.46	0.38	0.33	0.29	0.25
Output gap	-0.98	-0.80	-0.92	-0.78	-0.75	-0.49	-0.34	-0.73	-0.64	-1.11	-1.13	-0.98	-0.82	-0.65	-0.48	-0.34
REER gap	0.17	0.27	0.31	0.27	0.18	-0.03	-0.15	-0.27	-0.26	-0.11	-0.05	-0.03	0.01	0.04	0.07	0.09
Shock	3.71	-0.73	1.40	4.50	5.31	7.24	0.37	7.25	0.36	-6.18	6.96	0.00	0.00	0.00	0.00	0.00
Total	1.53	1.08	1.89	7.81	11.97	18.75	12.40	17.35	9.85	3.89	11.87	6.85	4.12	2.95	2.73	3.07

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

	2021Q1	2021Q2	2021Q3	2021Q4	2022Q1	2022Q2	2022Q3	2022Q4	2023Q1	2023Q2	2023Q3	2023Q4	2024Q1	2024Q2	2024Q3	2024Q4
Foreign CPI	8.37	9.20	3.46	0.46	1.02	-4.16	-3.80	-2.07	-1.05	3.77	4.46	4.06	3.06	2.96	2.90	2.86
Exchange rate	3.74	3.01	3.67	5.04	3.69	2.63	5.00	9.16	12.55	15.92	14.73	6.00	5.33	4.42	3.61	2.97
Trend adjustment	-1.35	-1.37	-1.38	-1.38	-1.33	-1.26	-1.18	-1.12	-1.07	-1.01	-0.96	-0.92	-0.87	-0.83	-0.79	-0.75
Total	10.76	10.84	5.75	4.12	3.38	-2.79	0.02	5.97	10.43	18.68	18.22	9.15	7.52	6.56	5.73	5.09

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

	2021Q1	2021Q2	2021Q3	2021Q4	2022Q1	2022Q2	2022Q3	$2022\mathrm{Q4}$	2023Q1	2023Q2	2023Q3	$2023\mathrm{Q}4$	2024Q1	2024Q2	2024Q3	2024Q4
Lag	1.29	-6.55	-1.88	-1.26	-2.81	11.25	14.13	13.82	15.73	12.05	5.98	1.89	-0.48	-1.31	-1.71	-1.92
Expectation	-1.44	1.83	2.03	2.32	10.84	10.37	9.73	10.49	8.66	2.97	-0.75	-2.06	-2.69	-3.02	-2.28	-0.89
Direct	3.76	3.24	-0.91	0.14	4.80	2.89	-2.78	-0.19	1.28	1.45	0.52	-0.13	0.70	0.62	-0.29	-0.17
RER gap	0.45	1.39	1.25	1.49	1.89	1.60	-0.08	-1.25	-1.79	-1.86	-1.86	-1.86	-1.59	-1.31	-1.25	-1.19
AgrOutp gap	-0.17	0.30	0.18	2.01	5.54	4.87	6.00	6.94	12.38	4.95	1.98	0.79	0.32	0.13	0.05	0.02
Shock	-22.59	-5.58	-4.28	-12.74	11.88	9.38	12.47	15.13	-1.82	-2.46	-0.48	0.00	0.00	0.00	0.00	0.00
Total	-18.70	-5.38	-3.60	-8.03	32.14	40.36	39.48	44.94	34.43	17.09	5.39	-1.37	-3.75	-4.90	-5.48	-4.14

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

	2021Q1	2021Q2	2021Q3	2021Q4	2022Q1	2022Q2	2022Q3	$2022\mathrm{Q4}$	2023Q1	2023Q2	2023Q3	2023Q4	2024Q1	2024Q2	2024Q3	2024Q4
Foreign food inflation	41.00	36.81	-5.20	3.78	51.23	32.42	-27.46	-6.52	3.96	1.25	-7.69	-6.34	1.83	1.25	-7.69	-6.34
Exchange rate	3.74	3.01	3.67	5.04	3.69	2.63	5.00	9.16	12.55	15.92	14.73	6.00	5.33	4.42	3.61	2.97
Trend adjustment	-7.12	-7.46	-7.54	-7.40	-6.89	-6.14	-5.29	-4.51	-3.68	-2.73	-1.81	-0.96	-0.18	0.52	1.14	1.68
Total	37.62	32.37	-9.07	1.42	48.03	28.90	-27.75	-1.86	12.84	14.45	5.22	-1.30	6.97	6.20	-2.93	-1.69

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

	2021Q1	2021Q2	2021Q3	2021Q4	2022Q1	2022Q2	2022Q3	2022Q4	2023Q1	2023Q2	2023Q3	2023Q4	2024Q1	2024Q2	2024Q3	2024Q4
Lag	2.56	-0.62	-0.82	2.77	2.13	6.09	6.11	3.15	3.84	-0.53	-1.50	0.47	1.10	1.34	1.44	1.49
Expectation	2.86	3.71	5.48	5.06	8.01	7.66	4.27	5.03	1.61	1.38	3.22	3.91	4.21	4.35	4.41	4.44
Direct	2.28	0.84	0.35	0.59	1.47	0.99	-1.13	0.22	0.13	-0.40	-0.23	-0.22	-0.10	-0.01	0.05	0.09
RER gap	-0.15	0.31	0.37	0.58	1.07	1.32	0.63	0.58	0.67	0.53	0.40	0.25	0.14	0.08	0.05	0.03
Shock	-10.05	-7.50	5.69	-0.48	11.66	8.40	2.70	6.37	-8.36	-6.99	0.00	0.00	0.00	0.00	0.00	0.00
Total	-2.50	-3.26	11.07	8.51	24.35	24.45	12.58	15.35	-2.10	-6.01	1.88	4.41	5.36	5.76	5.96	6.05

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

	2021Q1	2021Q2	2021Q3	2021Q4	2022Q1	2022Q2	2022Q3	$2022\mathrm{Q4}$	2023Q1	2023Q2	2023Q3	$2023\mathrm{Q}4$	2024Q1	2024Q2	2024Q3	2024Q4
Foreign energy inflation	119.71	49.04	23.74	34.38	79.64	55.54	-53.77	8.85	0.00	-31.39	-22.44	-14.12	-8.14	-3.62	-0.30	1.67
Exchange rate	3.74	3.01	3.67	5.04	3.69	2.63	5.00	9.16	12.55	15.92	14.73	6.00	5.33	4.42	3.61	2.97
Trend adjustment	-9.34	-9.90	-10.15	-10.08	-9.65	-8.91	-7.95	-6.92	-5.84	-4.73	-3.69	-2.76	-1.94	-1.24	-0.66	-0.18
Total	114.12	42.15	17.26	29.34	73.68	49.27	-56.72	11.09	6.71	-20.20	-11.41	-10.87	-4.76	-0.44	2.65	4.46

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

	2021Q1	2021Q2	2021Q3	2021Q4	2022Q1	2022Q2	2022Q3	2022Q4	2023Q1	2023Q2	2023Q3	$2023\mathrm{Q}4$	2024Q1	2024Q2	2024Q3	2024Q4
Lag	-0.53	0.05	-0.08	-0.05	-0.54	-1.48	-1.30	-1.60	-1.85	-3.30	-1.32	-0.53	-0.21	-0.08	-0.03	-0.01
Shock	0.64	-0.24	-0.04	-1.29	-3.15	-1.77	-2.70	-3.02	-6.40	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Total	0.11	-0.20	-0.12	-1.34	-3.69	-3.25	-4.00	-4.62	-8.25	-3.30	-1.32	-0.53	-0.21	-0.08	-0.03	-0.01

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

	2021Q1	2021Q2	2021Q3	$2021\mathrm{Q}4$	2022Q1	2022Q2	2022Q3	2022Q4	$2023\mathrm{Q}1$	2023Q2	2023Q3	2023Q4	$2024\mathrm{Q}1$	2024Q2	2024Q3	2024Q4
Lag	4.09	4.04	4.05	4.05	4.03	4.13	4.29	4.70	5.30	5.68	5.96	5.95	5.47	5.13	4.92	4.83
Neutral rate	1.43	1.44	1.44	1.44	1.43	1.42	1.41	1.42	1.43	1.43	1.43	1.43	1.43	1.43	1.43	1.43
Inflation reaction	-0.33	-0.05	-0.28	0.00	0.06	0.35	0.01	0.02	-0.36	-0.01	-0.22	-0.30	-0.29	-0.25	-0.19	-0.12
Output gap	-0.25	-0.20	-0.23	-0.20	-0.19	-0.12	-0.09	-0.18	-0.16	-0.28	-0.28	-0.25	-0.20	-0.16	-0.12	-0.08
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
Shock	0.47	0.12	0.42	0.04	0.10	-0.23	0.38	0.94	1.13	0.63	0.55	0.00	0.00	0.00	0.00	0.00
Total	5.05	5.06	5.06	5.04	5.16	5.36	5.87	6.62	7.10	7.45	7.44	6.84	6.41	6.15	6.04	6.06

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

	2021Q1	2021Q2	2021Q3	$2021\mathrm{Q}4$	2022Q1	2022Q2	2022Q3	2022Q4	2023Q1	2023Q2	2023Q3	2023Q4	2024Q1	2024Q2	2024Q3	2024Q4
Expectation	1.62	1.55	1.63	1.75	1.74	1.84	1.96	2.18	2.27	2.54	2.11	1.70	1.61	1.51	1.43	1.36
IR differential	-0.97	-0.97	-0.98	-0.96	-0.88	-0.66	-0.55	-0.65	-0.59	-0.59	-0.57	-0.43	-0.35	-0.37	-0.37	-0.37
Premium	0.41	0.42	0.42	0.43	0.43	0.44	0.44	0.44	0.44	0.43	0.43	0.43	0.43	0.42	0.42	0.42
Target	1.49	-0.70	-0.73	-0.69	0.50	3.23	6.03	7.95	8.75	5.26	4.59	4.31	3.65	2.86	2.13	1.57
Shock	1.19	2.72	3.32	4.52	1.89	-2.22	-2.88	-0.76	1.68	8.28	8.16	0.00	0.00	0.00	0.00	0.00
Total	3.74	3.01	3.67	5.04	3.69	2.63	5.00	9.16	12.55	15.92	14.73	6.00	5.33	4.42	3.61	2.97

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

	2021Q1	2021Q2	2021Q3	2021Q4	2022Q1	2022Q2	2022Q3	2022Q4	2023Q1	2023Q2	2023Q3	2023Q4	2024Q1	2024Q2	2024Q3	2024Q4
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
RER trend	1.35	1.37	1.38	1.38	1.33	1.26	1.18	1.12	1.07	1.01	0.96	0.92	0.87	0.83	0.79	0.75
CPI target	5.18	5.24	5.28	5.31	5.31	5.29	5.26	5.25	5.23	5.20	5.16	5.14	5.11	5.09	5.07	5.05
Core RP trend	-0.09	-0.04	-0.02	0.00	-0.01	-0.04	-0.07	-0.08	-0.09	-0.12	-0.15	-0.17	-0.20	-0.22	-0.24	-0.25
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
CPI deviation	0.99	0.15	0.83	-0.00	-0.18	-1.06	-0.03	-0.06	1.07	0.03	0.66	0.89	0.88	0.75	0.56	0.36
RER gap	-3.63	-5.71	-6.53	-5.74	-3.92	0.66	3.29	5.70	5.58	2.44	1.09	0.60	-0.12	-0.89	-1.53	-1.96
Shock	0.04	0.10	0.12	0.17	0.07	-0.08	-0.11	-0.03	0.06	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Total	1.86	-0.87	-0.91	-0.87	0.62	4.04	7.54	9.93	10.94	6.57	5.74	5.39	4.56	3.57	2.67	1.96

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

	2021Q1	2021Q2	2021Q3	2021Q4	2022Q1	2022Q2	2022Q3	$2022\mathrm{Q4}$	2023Q1	2023Q2	2023Q3	$2023\mathrm{Q}4$	2024Q1	2024Q2	2024Q3	2024Q4
Foreign RIR	-1.26	-1.37	-1.47	-1.55	-1.60	-1.55	-1.45	-1.33	-1.20	-1.06	-0.93	-0.80	-0.70	-0.60	-0.52	-0.45
Premium	2.05	2.08	2.11	2.15	2.17	2.20	2.20	2.20	2.19	2.17	2.16	2.14	2.13	2.11	2.10	2.09
Exp. RER trend depr.	1.28	1.30	1.31	1.31	1.27	1.20	1.12	1.06	1.01	0.96	0.92	0.87	0.83	0.79	0.75	0.71
Total	2.08	2.01	1.95	1.91	1.84	1.84	1.87	1.93	2.01	2.08	2.15	2.21	2.26	2.29	2.32	2.35

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

	2021Q1	2021Q2	2021Q3	2021Q4	2022Q1	2022Q2	2022Q3	$2022\mathrm{Q4}$	2023Q1	2023Q2	2023Q3	2023Q4	2024Q1	2024Q2	2024Q3	2024Q4
Structural	18.35	18.39	18.42	18.44	18.47	18.48	18.50	18.52	18.55	18.57	18.59	18.62	18.64	18.67	18.69	18.71
Cyclical	-0.28	-0.31	-0.32	-0.23	-0.28	-0.01	-0.05	-0.12	-0.22	-0.22	-0.25	-0.22	-0.19	-0.16	-0.12	-0.09
Discretionary	-0.52	3.12	0.05	1.04	2.41	-0.48	-0.77	-1.77	0.12	-0.87	0.00	0.00	0.00	0.00	0.00	0.00
Total	17.55	21.20	18.15	19.26	20.60	17.99	17.67	16.63	18.45	17.48	18.35	18.40	18.45	18.51	18.56	18.62

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

•	2021Q1	2021Q2	2021Q3	2021Q4	2022Q1	2022Q2	2022Q3	2022Q4	2023Q1	2023Q2	2023Q3	2023Q4	2024Q1	2024Q2	2024Q3	2024Q4
Cons. gap	-0.08	-0.15	-0.14	-0.10	-0.16	0.01	-0.02	-0.01	-0.08	-0.01	-0.04	-0.05	-0.05	-0.04	-0.04	-0.03
Imp. gap	-0.08	-0.06	-0.06	-0.04	-0.03	0.04	0.01	-0.01	-0.06	-0.07	-0.06	-0.05	-0.04	-0.03	-0.03	-0.02
Ouput gap	-0.12	-0.10	-0.11	-0.10	-0.09	-0.06	-0.04	-0.09	-0.08	-0.14	-0.14	-0.12	-0.10	-0.08	-0.06	-0.04
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
Total	-0.28	-0.31	-0.32	-0.23	-0.28	-0.01	-0.05	-0.12	-0.22	-0.22	-0.25	-0.22	-0.19	-0.16	-0.12	-0.09

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

	2021Q1	2021Q2	2021Q3	2021Q4	2022Q1	2022Q2	2022Q3	2022Q4	2023Q1	2023Q2	2023Q3	2023Q4	2024Q1	2024Q2	2024Q3	2024Q4
Lag	18.13	18.17	18.21	18.23	18.26	18.28	18.30	18.32	18.34	18.36	18.38	18.41	18.43	18.46	18.48	18.50
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
Shock	0.01	0.01	0.00	0.00	-0.00	-0.01	-0.01	-0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Total	18.35	18.39	18.42	18.44	18.47	18.48	18.50	18.52	18.55	18.57	18.59	18.62	18.64	18.67	18.69	18.71

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

	2021Q1	2021Q2	2021Q3	2021Q4	2022Q1	2022Q2	2022Q3	$2022\mathrm{Q4}$	2023Q1	2023Q2	2023Q3	2023Q4	2024Q1	2024Q2	2024Q3	2024Q4
Structural	26.12	26.26	26.21	26.04	25.82	25.69	25.74	25.87	26.02	26.02	26.02	26.02	26.02	26.02	26.02	26.01
Cyclical	0.14	0.11	0.13	0.11	0.11	0.07	0.05	0.10	0.09	0.16	0.16	0.14	0.12	0.09	0.07	0.05
Discretionary	3.66	3.70	1.36	4.58	3.90	2.45	2.77	-2.84	-3.11	-8.79	-6.15	-4.30	-3.01	-2.11	-1.48	-1.03
Total	29.93	30.08	27.70	30.73	29.83	28.21	28.56	23.14	23.00	17.40	20.03	21.85	23.12	24.00	24.61	25.03

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

	2021Q1	2021Q2	2021Q3	2021Q4	2022Q1	2022Q2	2022Q3	2022Q4	2023Q1	2023Q2	2023Q3	$2023\mathrm{Q}4$	2024Q1	2024Q2	2024Q3	2024Q4
Lag	3.35	2.56	2.59	0.95	3.20	2.73	1.71	1.94	-1.98	-2.18	-6.15	-4.30	-3.01	-2.11	-1.48	-1.03
Shock	0.32	1.14	-1.23	3.63	0.69	-0.28	1.05	-4.77	-1.13	-6.61	0.00	0.00	0.00	0.00	0.00	0.00
Total	3.66	3.70	1.36	4.58	3.90	2.45	2.77	-2.84	-3.11	-8.79	-6.15	-4.30	-3.01	-2.11	-1.48	-1.03

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

	2021Q1	2021Q2	2021Q3	2021Q4	2022Q1	2022Q2	2022Q3	2022Q4	2023Q1	2023Q2	2023Q3	2023Q4	2024Q1	2024Q2	2024Q3	2024Q4
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
Output gap	0.14	0.11	0.13	0.11	0.11	0.07	0.05	0.10	0.09	0.16	0.16	0.14	0.12	0.09	0.07	0.05
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
Total	0.14	0.11	0.13	0.11	0.11	0.07	0.05	0.10	0.09	0.16	0.16	0.14	0.12	0.09	0.07	0.05

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

	2021Q1	2021Q2	2021Q3	2021Q4	2022Q1	2022Q2	2022Q3	2022Q4	2023Q1	2023Q2	2023Q3	2023Q4	2024Q1	2024Q2	2024Q3	2024Q4
Lag	24.74	24.82	24.95	24.89	24.73	24.53	24.41	24.45	24.58	24.72	24.72	24.72	24.72	24.72	24.72	24.71
Steady state	1.30	1.30	1.30	1.30	1.30	1.30	1.30	1.30	1.30	1.30	1.30	1.30	1.30	1.30	1.30	1.30
Shock	0.08	0.14	-0.04	-0.16	-0.21	-0.14	0.03	0.12	0.14	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Total	26.12	26.26	26.21	26.04	25.82	25.69	25.74	25.87	26.02	26.02	26.02	26.02	26.02	26.02	26.02	26.01

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

	2021Q1	2021Q2	2021Q3	2021Q4	2022Q1	2022Q2	2022Q3	$2022\mathrm{Q4}$	2023Q1	2023Q2	2023Q3	2023Q4	2024Q1	2024Q2	2024Q3	2024Q4
Structural	4.67	4.68	4.70	4.73	4.74	4.75	4.77	4.80	4.86	4.91	4.97	5.02	5.07	5.11	5.16	5.20
Cyclical	0.07	0.06	0.07	0.06	0.06	0.04	0.03	0.05	0.05	0.08	0.08	0.07	0.06	0.05	0.04	0.03
Discretionary	-2.58	-1.56	-1.54	1.53	-0.68	-1.09	0.03	-4.20	-0.03	8.19	0.00	0.00	0.00	0.00	0.00	0.00
Total	2.16	3.18	3.23	6.32	4.11	3.70	4.83	0.65	4.87	13.19	5.05	5.09	5.13	5.16	5.19	5.23

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

	2021Q1	2021Q2	2021Q3	2021Q4	2022Q1	2022Q2	2022Q3	2022Q4	2023Q1	2023Q2	2023Q3	2023Q4	2024Q1	2024Q2	2024Q3	2024Q4
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
Output gap	0.07	0.06	0.07	0.06	0.06	0.04	0.03	0.05	0.05	0.08	0.08	0.07	0.06	0.05	0.04	0.03
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
Total	0.07	0.06	0.07	0.06	0.06	0.04	0.03	0.05	0.05	0.08	0.08	0.07	0.06	0.05	0.04	0.03

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

	2021Q1	2021Q2	2021Q3	2021Q4	2022Q1	2022Q2	2022Q3	2022Q4	2023Q1	2023Q2	2023Q3	2023Q4	2024Q1	2024Q2	2024Q3	$2024\mathrm{Q}4$
Lag	4.45	4.43	4.44	4.46	4.49	4.50	4.51	4.54	4.56	4.61	4.67	4.72	4.77	4.81	4.86	4.90
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
Shock	-0.08	-0.06	-0.04	-0.03	-0.06	-0.05	-0.04	-0.04	-0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Total	4.67	4.68	4.70	4.73	4.74	4.75	4.77	4.80	4.86	4.91	4.97	5.02	5.07	5.11	5.16	5.20

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

	2021Q1	2021Q2	2021Q3	2021Q4	2022Q1	2022Q2	2022Q3	2022Q4	2023Q1	2023Q2	2023Q3	2023Q4	2024Q1	2024Q2	2024Q3	$2024\mathrm{Q}4$
Demand	29.93	30.08	27.70	30.73	29.83	28.21	28.56	23.14	23.00	17.40	20.03	21.85	23.12	24.00	24.61	25.03
Other expenditures	2.16	3.18	3.23	6.32	4.11	3.70	4.83	0.65	4.87	13.19	5.05	5.09	5.13	5.16	5.19	5.23
Revenues	-17.55	-21.20	-18.15	-19.26	-20.60	-17.99	-17.67	-16.63	-18.45	-17.48	-18.35	-18.40	-18.45	-18.51	-18.56	-18.62
Total	14.53	12.05	12.77	17.79	13.34	13.91	15.71	7.15	9.42	13.10	6.74	8.55	9.80	10.66	11.24	11.64

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

	2021Q1	2021Q2	2021Q3	2021Q4	2022Q1	2022Q2	2022Q3	2022Q4	2023Q1	2023Q2	2023Q3	2023Q4	2024Q1	2024Q2	2024Q3	2024Q4
Demand	0.14	0.11	0.13	0.11	0.11	0.07	0.05	0.10	0.09	0.16	0.16	0.14	0.12	0.09	0.07	0.05
Other expenditures	0.07	0.06	0.07	0.06	0.06	0.04	0.03	0.05	0.05	0.08	0.08	0.07	0.06	0.05	0.04	0.03
Revenues	0.28	0.31	0.32	0.23	0.28	0.01	0.05	0.12	0.22	0.22	0.25	0.22	0.19	0.16	0.12	0.09
Total	0.49	0.48	0.52	0.40	0.44	0.12	0.13	0.28	0.36	0.46	0.49	0.44	0.37	0.30	0.23	0.17

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

	2021Q1	2021Q2	2021Q3	2021Q4	2022Q1	2022Q2	2022Q3	2022Q4	2023Q1	2023Q2	2023Q3	2023Q4	2024Q1	2024Q2	2024Q3	2024Q4
Demand	3.66	3.70	1.36	4.58	3.90	2.45	2.77	-2.84	-3.11	-8.79	-6.15	-4.30	-3.01	-2.11	-1.48	-1.03
Other expenditures	-2.58	-1.56	-1.54	1.53	-0.68	-1.09	0.03	-4.20	-0.03	8.19	0.00	0.00	0.00	0.00	0.00	0.00
Revenues	0.52	-3.12	-0.05	-1.04	-2.41	0.48	0.77	1.77	-0.12	0.87	0.00	0.00	0.00	0.00	0.00	0.00
Total	1.60	-0.97	-0.23	5.07	0.80	1.83	3.57	-5.27	-3.27	0.28	-6.15	-4.30	-3.01	-2.11	-1.48	-1.03

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

	2021Q1	2021Q2	2021Q3	$2021\mathrm{Q}4$	2022Q1	2022Q2	2022Q3	2022Q4	2023Q1	2023Q2	2023Q3	2023Q4	2024Q1	2024Q2	2024Q3	$2024\mathrm{Q}4$
Demand	26.12	26.26	26.21	26.04	25.82	25.69	25.74	25.87	26.02	26.02	26.02	26.02	26.02	26.02	26.02	26.01
Other expenditures	4.67	4.68	4.70	4.73	4.74	4.75	4.77	4.80	4.86	4.91	4.97	5.02	5.07	5.11	5.16	5.20
Revenues	-18.35	-18.39	-18.42	-18.44	-18.47	-18.48	-18.50	-18.52	-18.55	-18.57	-18.59	-18.62	-18.64	-18.67	-18.69	-18.71
Total	12.44	12.55	12.49	12.32	12.09	11.96	12.01	12.15	12.33	12.36	12.39	12.42	12.44	12.46	12.49	12.50

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

	2021Q1	2021Q2	2021Q3	$2021\mathrm{Q}4$	2022Q1	2022Q2	2022Q3	$2022\mathrm{Q4}$	2023Q1	2023Q2	2023Q3	2023Q4	2024Q1	2024Q2	2024Q3	2024Q4
Structural	12.44	12.55	12.49	12.32	12.09	11.96	12.01	12.15	12.33	12.36	12.39	12.42	12.44	12.46	12.49	12.50
Discretionary	1.60	-0.97	-0.23	5.07	0.80	1.83	3.57	-5.27	-3.27	0.28	-6.15	-4.30	-3.01	-2.11	-1.48	-1.03
Cyclical	0.49	0.48	0.52	0.40	0.44	0.12	0.13	0.28	0.36	0.46	0.49	0.44	0.37	0.30	0.23	0.17
Total	14.53	12.05	12.77	17.79	13.34	13.91	15.71	7.15	9.42	13.10	6.74	8.55	9.80	10.66	11.24	11.64

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

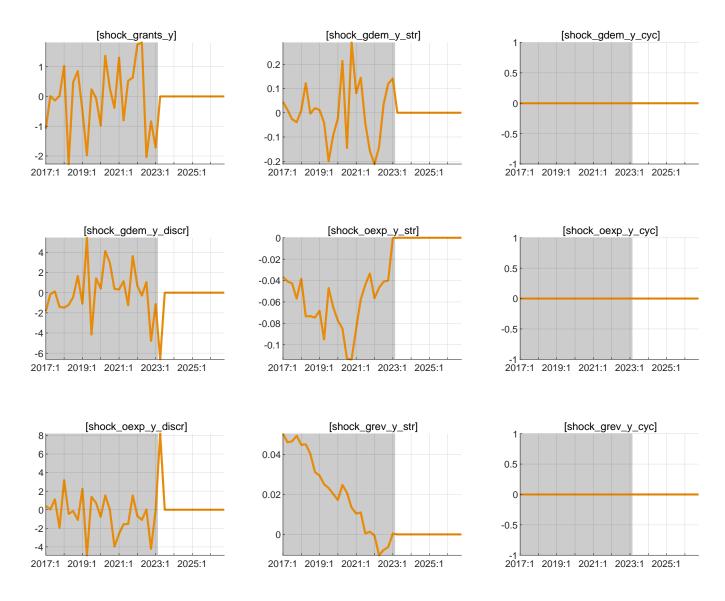
	2021Q1	2021Q2	2021Q3	2021Q4	2022Q1	2022Q2	2022Q3	2022Q4	$2023\mathrm{Q}1$	2023Q2	2023Q3	2023Q4	2024Q1	2024Q2	2024Q3	2024Q4
Discr. deficit	1.60	-0.97	-0.23	5.07	0.80	1.83	3.57	-5.27	-3.27	0.28	-6.15	-4.30	-3.01	-2.11	-1.48	-1.03
Change in struct. deficit	0.02	0.11	-0.06	-0.16	-0.23	-0.13	0.05	0.14	0.18	0.03	0.03	0.03	0.02	0.02	0.02	0.02
Total	1.62	-0.86	-0.29	4.90	0.57	1.70	3.62	-5.14	-3.09	0.31	-6.12	-4.28	-2.99	-2.09	-1.46	-1.02

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

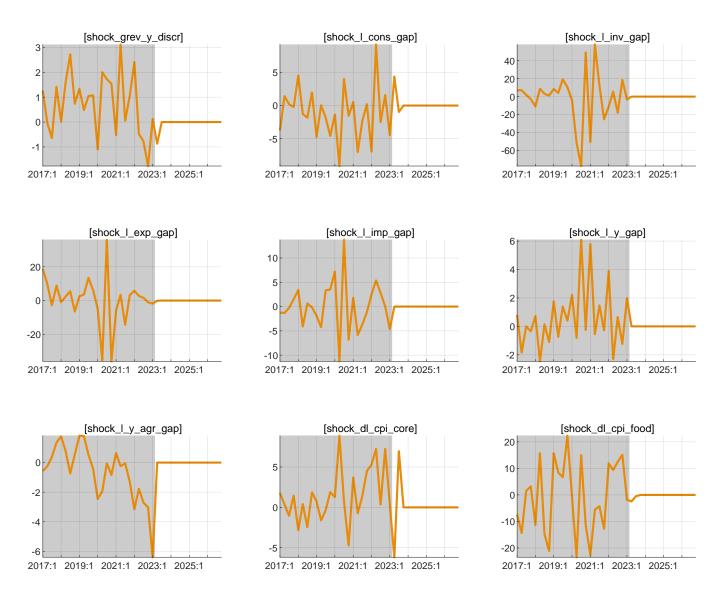
	2021Q1	2021Q2	2021Q3	2021Q4	2022Q1	2022Q2	2022Q3	$2022\mathrm{Q4}$	2023Q1	2023Q2	2023Q3	2023Q4	2024Q1	2024Q2	2024Q3	2024Q4
Chg. of velocity	0.62	0.60	0.58	0.56	0.54	0.53	0.52	0.52	0.52	0.53	0.54	0.55	0.55	0.56	0.56	0.57
Lag	11.54	11.56	10.71	12.12	8.84	4.70	-2.34	-1.99	-6.65	-4.56	4.35	5.22	6.62	7.62	8.31	8.74
GDP growth	4.43	3.87	0.97	2.50	1.70	3.62	3.44	-0.14	3.55	-0.88	2.53	3.74	3.83	3.85	3.78	3.64
Interest rate	-0.32	-0.32	-0.32	-0.33	-0.30	-0.26	-0.18	-0.07	-0.01	0.04	0.04	-0.05	-0.11	-0.15	-0.17	-0.16
Shock	0.25	-0.41	5.38	-2.23	-4.07	-11.93	-4.28	-7.81	-3.94	11.08	0.00	0.00	0.00	0.00	0.00	0.00
Total	16.52	15.30	17.32	12.63	6.71	-3.35	-2.84	-9.49	-6.52	6.21	7.46	9.45	10.89	11.87	12.48	12.78

### 6 Shocks

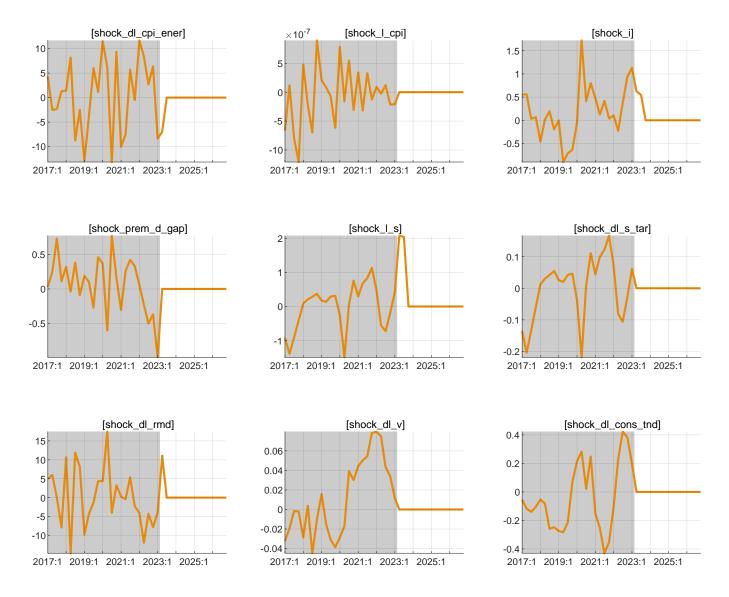
#### Shocks (page 1)



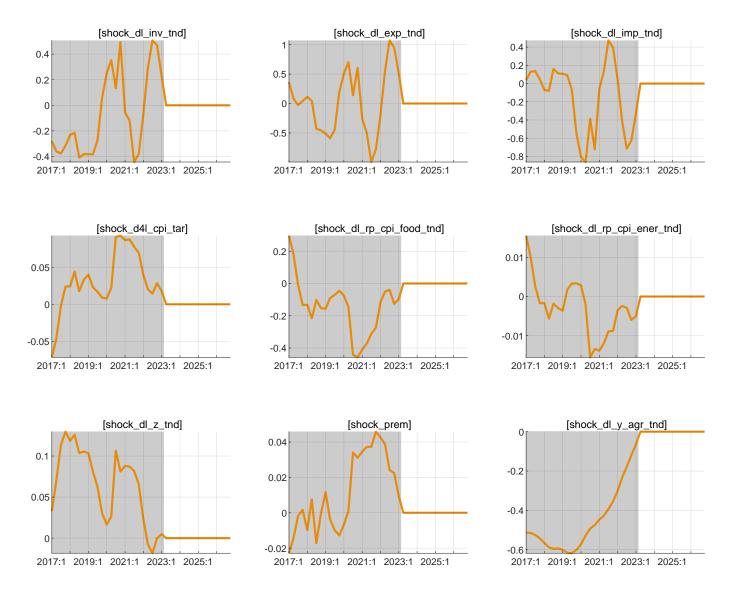
#### Shocks (page 2)



### Shocks (page 3)

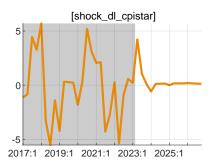


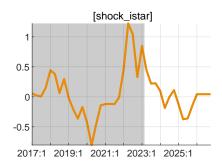
#### Shocks (page 4)

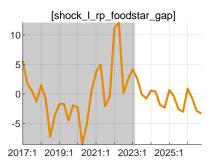


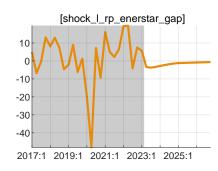
#### Shocks (page 5)

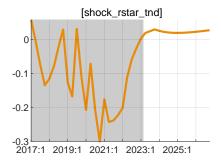


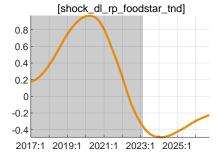


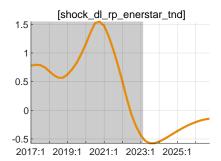












Shocks

	2021Q1	2021Q2	2021Q3	2021Q4	2022Q1	2022Q2	2022Q3	2022Q4	2023Q1	2023Q2	2023Q3	2023Q4	2024Q1	2024Q2	2024Q3	2024Q4
shock_grants_y	1.30	-0.80	0.53	0.63	1.74	1.81	-2.04	-0.84	-1.72	0.00	0.00	0.00	0.00	0.00	0.00	0.00
$shock\_gdem\_y\_str$	0.08	0.14	-0.04	-0.16	-0.21	-0.14	0.03	0.12	0.14	0.00	0.00	0.00	0.00	0.00	0.00	0.00
${\rm shock\_gdem\_y\_cyc}$	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
${ m shock\_gdem\_y\_discr}$	0.32	1.14	-1.23	3.63	0.69	-0.28	1.05	-4.77	-1.13	-6.61	0.00	0.00	0.00	0.00	0.00	0.00
$shock\_oexp\_y\_str$	-0.08	-0.06	-0.04	-0.03	-0.06	-0.05	-0.04	-0.04	-0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
${\rm shock\_oexp\_y\_cyc}$	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
$shock\_oexp\_y\_discr$	-2.58	-1.56	-1.54	1.53	-0.68	-1.09	0.03	-4.20	-0.03	8.19	0.00	0.00	0.00	0.00	0.00	0.00
${\rm shock\_grev\_y\_str}$	0.01	0.01	0.00	0.00	-0.00	-0.01	-0.01	-0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
${ m shock\_grev\_y\_cyc}$	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
${\rm shock\_grev\_y\_discr}$	-0.52	3.12	0.05	1.04	2.41	-0.48	-0.77	-1.77	0.12	-0.87	0.00	0.00	0.00	0.00	0.00	0.00
${\rm shock\_l\_cons\_gap}$	0.52	-7.02	-2.38	0.21	-6.97	9.23	-2.50	1.59	-4.47	4.38	-0.97	0.00	0.00	0.00	0.00	0.00
${\rm shock\_l\_inv\_gap}$	-50.56	58.14	12.35	-25.27	-11.28	5.54	-18.03	18.62	-3.22	-0.06	0.00	0.00	0.00	0.00	0.00	0.00
${\rm shock\_l\_exp\_gap}$	-5.93	3.42	-14.41	3.15	5.81	2.74	1.62	-1.03	-1.81	-0.12	0.00	0.00	0.00	0.00	0.00	0.00
${\rm shock\_l\_imp\_gap}$	1.78	-5.84	-3.69	-1.15	2.50	5.38	2.81	0.03	-4.60	-0.01	0.00	0.00	0.00	0.00	0.00	0.00
${\rm shock}\_{\rm l}\_{\rm y}\_{\rm gap}$	5.79	-0.55	1.48	-0.28	3.89	-2.30	0.65	-1.23	1.98	0.00	0.00	0.00	0.00	0.00	0.00	0.00
$shock\_l\_y\_agr\_gap$	0.64	-0.24	-0.04	-1.29	-3.15	-1.77	-2.70	-3.02	-6.40	0.00	0.00	0.00	0.00	0.00	0.00	0.00
${ m shock\_dl\_cpi\_core}$	3.71	-0.73	1.40	4.50	5.31	7.24	0.37	7.25	0.36	-6.18	6.96	0.00	0.00	0.00	0.00	0.00
${ m shock\_dl\_cpi\_food}$	-22.59	-5.58	-4.28	-12.74	11.88	9.38	12.47	15.13	-1.82	-2.46	-0.48	0.00	0.00	0.00	0.00	0.00
${ m shock\_dl\_cpi\_ener}$	-10.05	-7.50	5.69	-0.48	11.66	8.40	2.70	6.37	-8.36	-6.99	0.00	0.00	0.00	0.00	0.00	0.00
${ m shock}_{-}$ l $_{-}$ cpi	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
${ m shock\_i}$	0.47	0.12	0.42	0.04	0.10	-0.23	0.38	0.94	1.13	0.63	0.55	0.00	0.00	0.00	0.00	0.00
${\rm shock\_prem\_d\_gap}$	-0.30	0.26	0.42	0.33	0.06	-0.23	-0.50	-0.37	-0.99	0.00	0.00	0.00	0.00	0.00	0.00	0.00
${ m shock}\_{ m l}\_{ m s}$	0.30	0.68	0.83	1.13	0.47	-0.56	-0.72	-0.19	0.42	2.07	2.04	0.00	0.00	0.00	0.00	0.00
${ m shock\_dl\_s\_tar}$	0.04	0.10	0.12	0.17	0.07	-0.08	-0.11	-0.03	0.06	0.00	0.00	0.00	0.00	0.00	0.00	0.00
${\rm shock\_dl\_rmd}$	0.25	-0.41	5.38	-2.23	-4.07	-11.93	-4.28	-7.81	-3.94	11.08	0.00	0.00	0.00	0.00	0.00	0.00
$\rm shock\_dl\_v$	0.04	0.05	0.05	0.08	0.08	0.07	0.04	0.03	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.00
${\rm shock\_dl\_cons\_tnd}$	-0.15	-0.25	-0.43	-0.35	-0.10	0.23	0.42	0.38	0.20	0.00	0.00	0.00	0.00	0.00	0.00	0.00
${\rm shock\_dl\_inv\_tnd}$	-0.06	-0.12	-0.44	-0.38	-0.07	0.29	0.51	0.47	0.23	0.00	0.00	0.00	0.00	0.00	0.00	0.00
$\rm shock\_dl\_exp\_tnd$	-0.26	-0.50	-0.99	-0.78	-0.19	0.56	1.07	0.95	0.51	0.00	0.00	0.00	0.00	0.00	0.00	0.00
${\rm shock\_dl\_imp\_tnd}$	-0.06	0.14	0.47	0.40	0.04	-0.42	-0.71	-0.62	-0.32	0.00	0.00	0.00	0.00	0.00	0.00	0.00
$shock\_d4l\_cpi\_tar$	0.09	0.09	0.08	0.07	0.04	0.02	0.01	0.03	0.02	0.00	0.00	0.00	0.00	0.00	0.00	0.00
$shock\_dl\_rp\_cpi\_food\_tnd$	-0.41	-0.37	-0.31	-0.27	-0.12	-0.05	-0.04	-0.13	-0.10	0.00	0.00	0.00	0.00	0.00	0.00	0.00
${ m shock\_dl\_rp\_cpi\_ener\_tnd}$	-0.01	-0.01	-0.01	-0.01	-0.00	-0.00	-0.00	-0.01	-0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.00
$\rm shock\_dl\_z\_tnd$	0.09	0.09	0.08	0.07	0.02	-0.01	-0.02	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
$\operatorname{shock\_prem}$	0.03	0.04	0.04	0.05	0.04	0.04	0.02	0.02	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.00

	2021Q1	2021Q2	2021Q3	2021Q4	2022Q1	2022Q2	2022Q3	2022Q4	2023Q1	2023Q2	2023Q3	2023Q4	2024Q1	2024Q2	2024Q3	2024Q4
shock_dl_y_agr_tnd	-0.45	-0.43	-0.39	-0.35	-0.30	-0.23	-0.18	-0.12	-0.06	0.00	0.00	0.00	0.00	0.00	0.00	0.00
${\rm shock\_l\_ystar\_gap}$	0.26	0.26	0.25	0.23	0.23	0.20	0.18	0.16	0.13	0.11	0.09	0.08	0.06	0.05	0.05	0.04
${\rm shock\_dl\_cpistar}$	2.06	2.10	-4.29	-2.71	0.26	-5.37	-0.87	0.57	0.21	4.22	1.05	0.10	-0.58	0.12	0.13	0.14
${\rm shock\_istar}$	-0.12	-0.12	-0.12	-0.01	0.46	1.22	1.04	0.33	0.85	0.44	0.22	0.23	0.10	-0.19	-0.00	0.11
$shock\_l\_rp\_foodstar\_gap$	3.69	4.93	-2.10	-0.46	11.09	12.04	0.12	2.42	4.17	2.64	-0.07	-0.79	0.57	0.42	-1.84	-2.35
$shock\_l\_rp\_enerstar\_gap$	16.07	5.04	2.22	6.43	19.40	19.58	-4.12	7.52	5.65	-3.41	-3.73	-3.35	-2.78	-2.30	-1.81	-1.43
${\rm shock\_rstar\_tnd}$	-0.18	-0.24	-0.24	-0.22	-0.20	-0.11	-0.06	-0.03	0.00	0.02	0.02	0.03	0.03	0.02	0.02	0.02
$shock\_dl\_rp\_foodstar\_tnd$	0.81	0.68	0.54	0.39	0.23	0.06	-0.10	-0.22	-0.32	-0.40	-0.45	-0.48	-0.49	-0.49	-0.48	-0.45
$shock\_dl\_rp\_enerstar\_tnd$	1.47	1.29	1.06	0.79	0.50	0.19	-0.08	-0.28	-0.44	-0.54	-0.57	-0.57	-0.55	-0.51	-0.46	-0.41