Forecast report

Round: 2024 Sept main round, time: 04-Sep-2024 11:13:17.

1 Forecast tables

Main indicators

	2023Q4	2024Q1	2024Q2	2024Q3	2024Q4	2025Q1	2025Q2	2025Q3	2025Q4	2026Q1	2026Q2	2026Q3	2026Q4	2027Q1	2027Q2	2027Q3	2027Q4
CPI, y-on-y change	8.92	4.69	5.09	6.77	9.60	15.15	17.88	17.07	14.51	11.29	8.19	5.65	3.84	2.73	2.22	2.15	2.38
	8.95	8.07	8.86	8.91	8.34	7.26	6.21	5.41	4.80	4.40	4.20	4.16	4.24	4.38	4.57	4.76	4.95
GDP, y-on-y change	9.98	9.67	10.80	8.00	-3.45	-12.39	-19.32	-25.48	-22.79	-20.57	-17.83	-13.31	-9.72	-6.40	-3.71	-2.37	-1.45
	10.00	9.00	8.46	3.25	0.15	-1.63	-1.85	0.49	1.71	2.94	4.06	4.54	4.85	5.05	5.17	5.25	5.31
Interbank rate, pct	8.25	8.28	8.29	7.50	10.02	11.43	11.96	11.80	11.25	10.52	9.78	9.13	8.59	8.20	7.91	7.74	7.66
	8.25	8.00	8.93	9.38	9.53	9.46	9.27	9.03	8.77	8.54	8.36	8.21	8.08	7.99	7.89	7.81	7.76
Exchange rate, y-on-y change	17.74	17.34	14.58	11.87	8.92	8.23	9.32	9.57	10.96	11.48	11.20	10.33	9.12	7.79	6.51	5.39	4.47
	17.74	18.04	14.49	10.08	6.70	4.31	4.50	4.48	4.37	4.15	3.90	3.66	3.45	3.29	3.18	3.12	3.09
Deficit, pct. of GDP	9.21	14.82	11.90	8.50	8.50	9.30	9.30	7.80	7.70	7.50	7.40	9.10	9.54	9.81	9.96	10.02	10.03
	9.80	11.80	11.80	9.90	9.80	9.60	9.50	9.50	9.81	9.99	10.09	10.13	10.13	10.10	10.06	10.01	9.95

GDP growth, y-on-y percentage changes

	-2023Q4	2024Q1	2024Q2	2024Q3	2024Q4	2025Q1	2025Q2	2025Q3	2025Q4	2026Q1	2026Q2	2026Q3	2026Q4	2027Q1	2027Q2	2027Q3	2027Q4
GDP, y-on-y change in %	9.98	9.67	10.80	8.00	-3.45	-12.39	-19.32	-25.48	-22.79	-20.57	-17.83	-13.31	-9.72	-6.40	-3.71	-2.37	-1.45
	10.00	9.00	8.46	3.25	0.15	-1.63	-1.85	0.49	1.71	2.94	4.06	4.54	4.85	5.05	5.17	5.25	5.31
Consumption, y-on-y change	14.68	26.80	23.05	22.14	12.46	1.19	-1.15	-14.66	-13.92	-12.87	-11.29	-8.24	-5.07	-1.98	0.81	2.55	3.74
	9.39	18.33	15.93	3.44	4.26	2.73	1.63	2.05	2.82	3.77	4.75	5.53	6.03	6.34	6.52	6.63	6.68
Investment, y-on-y change	-20.20	108.42	135.33	17.06	71.05	-27.13	-22.26	-20.68	-17.79	-15.23	-12.66	-9.27	-5.95	-2.82	-0.05	1.83	3.17
	11.58	29.56	70.56	-4.46	-0.36	-0.82	-0.35	0.87	2.10	3.32	4.43	5.29	5.88	6.27	6.51	6.66	6.74
Gov. dem., y-on-y change	8.33	11.86	-12.65	8.40	-2.13	-17.41	-29.23	-25.23	-22.45	-22.77	-20.01	-9.08	-3.99	1.06	4.12	2.95	2.14
	12.44	11.31	-17.31	4.48	2.73	-8.06	-8.65	3.15	6.01	8.40	10.31	8.79	7.72	6.96	6.43	6.06	5.81
Export, y-on-y change	42.24	49.43	28.25	25.14	-10.69	-30.38	-24.80	-25.41	-18.98	-13.61	-9.14	-5.51	-2.70	-0.63	0.78	1.65	2.13
	22.62	1.41	2.28	2.95	-3.44	0.96	2.24	3.35	4.23	4.93	5.45	5.80	6.01	6.15	6.24	6.30	6.34
Import, y-on-y change	27.48	122.54	69.05	58.37	54.18	-5.60	10.08	3.47	3.97	3.25	4.03	8.74	11.66	14.68	16.99	17.39	17.56
	17.52	27.61	15.01	2.11	8.78	5.60	4.26	7.75	8.82	9.82	10.76	10.67	10.55	10.41	10.25	10.09	9.92

GDP growth, q-on-q change in %

	$2023\mathrm{Q}4$	2024Q1	2024Q2	2024Q3	2024Q4	$2025\mathrm{Q}1$	2025Q2	2025Q3	$2025\mathrm{Q4}$	2026Q1	2026Q2	$2026\mathrm{Q}3$	2026Q4	2027Q1	2027Q2	2027Q3	2027Q4
GDP, q-on-q change in %	10.68	10.89	6.62	3.97	-29.30	-24.84	-23.32	-24.32	-18.52	-15.79	-12.18	-6.26	-4.19	-2.68	-1.64	-0.95	-0.51
	11.89	6.92	1.26	-6.17	-0.97	-0.49	0.39	3.08	3.91	4.43	4.80	5.01	5.14	5.23	5.29	5.34	5.37

	2023Q4	2024Q1	2024Q2	2024Q3	2024Q4	2025Q1	2025Q2	2025Q3	2025Q4	2026Q1	2026Q2	2026Q3	2026Q4	2027Q1	2027Q2	2027Q3	2027Q4
Consumption, q-on-q change	17.60	30.53	-5.45	53.35	-15.50	-14.43	-13.90	-14.81	-12.52	-10.18	-7.48	-2.48	0.19	2.14	3.50	4.41	4.96
	-1.75	7.75	6.56	1.48	1.42	1.54	2.06	3.20	4.50	5.37	5.95	6.29	6.50	6.62	6.68	6.71	6.70
Investment, q-on-q change	-83.66	2288.12	-37.03	-23.59	-25.50	-21.35	-18.43	-17.18	-14.04	-11.09	-8.05	-3.56	-0.75	1.36	2.87	3.91	4.58
	-16.16	2.13	-0.57	-2.13	-0.81	0.24	1.32	2.76	4.13	5.10	5.77	6.19	6.47	6.64	6.74	6.79	6.81
Gov. dem., q-on-q change	9.28	68.64	46.51	-48.86	-27.38	-14.48	-21.03	-36.27	-15.94	-15.89	-9.16	6.41	4.51	3.24	2.36	1.73	1.25
	6.33	55.59	3.34	-30.30	-0.63	-0.17	0.73	13.27	10.87	9.17	8.00	7.16	6.56	6.15	5.86	5.68	5.56
Export, q-on-q change	147.50	95.58	-42.03	-12.62	-35.78	-27.77	-21.11	-15.43	-10.60	-6.62	-3.46	-1.10	0.52	1.57	2.15	2.39	2.42
	31.59	-13.88	-1.16	0.30	1.82	2.93	3.92	4.73	5.34	5.73	5.98	6.13	6.21	6.29	6.33	6.35	6.37
${\bf Import},\ {\bf q\text{-}on\text{-}q}\ {\bf change}$	14.74	672.11	-43.02	24.63	3.06	8.50	5.36	-2.72	5.09	5.50	8.60	16.12	16.84	17.37	17.65	17.70	17.54
	-17.31	20.20	12.55	-2.82	6.50	6.76	6.93	10.86	10.79	10.76	10.65	10.48	10.33	10.18	10.00	9.83	9.66

CPI, y-on-y change in %

	2023Q4	2024Q1	2024Q2	2024Q3	2024Q4	2025Q1	2025Q2	2025Q3	$2025\mathrm{Q4}$	2026Q1	2026Q2	2026Q3	2026Q4	2027Q1	2027Q2	2027Q3	2027Q4
Headline CPI, y-on-y change	8.92	4.69	5.09	6.77	9.60	15.15	17.88	17.07	14.51	11.29	8.19	5.65	3.84	2.73	2.22	2.15	2.38
	8.95	8.07	8.86	8.91	8.34	7.26	6.21	5.41	4.80	4.40	4.20	4.16	4.24	4.38	4.57	4.76	4.95
Core CPI, y-on-y change	7.62	5.30	5.89	8.59	12.36	18.22	22.06	20.90	17.28	12.86	8.68	5.34	2.98	1.58	0.96	0.92	1.26
	7.62	7.89	9.52	10.50	10.32	9.19	7.83	6.58	5.57	4.87	4.45	4.26	4.21	4.28	4.40	4.55	4.70
Food CPI, y-on-y change	18.72	2.53	1.49	-1.11	-1.54	4.09	2.50	2.68	3.58	4.47	5.17	5.67	5.93	6.02	5.99	5.92	5.84
	18.93	10.52	6.11	1.75	-0.59	-1.71	-1.66	-0.68	0.40	1.28	2.06	2.82	3.51	4.14	4.71	5.21	5.64
Energy CPI, y-on-y change	2.27	2.74	4.56	5.29	5.81	7.73	9.50	9.97	10.02	9.88	9.62	9.30	8.93	8.57	8.21	7.88	7.57
	2.18	4.56	7.86	8.11	7.65	7.25	6.91	6.68	6.52	6.41	6.32	6.25	6.20	6.18	6.17	6.18	6.19

CPI, q-on-q change in %

	$2023\mathrm{Q4}$	2024Q1	2024Q2	2024Q3	2024Q4	2025Q1	2025Q2	2025Q3	$2025\mathrm{Q4}$	2026Q1	2026Q2	2026Q3	$2026\mathrm{Q4}$	2027Q1	2027Q2	2027Q3	2027Q4
Headline CPI, q-on-q change	7.71	-2.16	6.20	16.13	19.56	19.22	16.64	12.98	9.43	6.39	4.14	2.77	2.09	1.92	2.10	2.50	3.02
	8.83	10.02	9.15	7.64	6.60	5.69	4.93	4.41	4.16	4.08	4.13	4.27	4.46	4.67	4.87	5.05	5.21
Core CPI, q-on-q change	6.45	2.74	5.76	19.65	24.58	23.91	20.18	15.15	10.32	6.28	3.35	1.61	0.78	0.60	0.87	1.43	2.13
	9.23	11.53	11.25	10.00	8.54	7.02	5.80	4.98	4.48	4.22	4.14	4.19	4.31	4.46	4.63	4.79	4.93
Food CPI, q-on-q change	3.14	-18.28	9.74	3.38	1.38	2.08	3.18	4.07	5.00	5.65	5.97	6.07	6.04	5.99	5.88	5.78	5.71
	6.90	3.57	-0.09	-3.11	-2.58	-1.04	0.11	0.84	1.70	2.51	3.22	3.87	4.46	5.03	5.49	5.87	6.18
Energy CPI, q-on-q change	7.46	2.41	3.19	8.20	9.62	10.06	10.15	10.04	9.82	9.50	9.13	8.74	8.37	8.04	7.71	7.41	7.15
	8.85	8.33	7.91	7.37	6.98	6.73	6.57	6.45	6.35	6.27	6.20	6.17	6.16	6.18	6.19	6.19	6.19

Fiscal indicators

	2023Q4	2024Q1	2024Q2	$202\overline{4Q3}$	$2024\mathrm{Q}4$	$2025\mathrm{Q}1$	2025Q2	$2025\mathrm{Q}3$	2025Q4	2026Q1	2026Q2	2026Q3	$2026\mathrm{Q4}$	2027Q1	2027Q2	2027Q3	$20\overline{27}Q$
Deficit, percent of GDP	9.21	14.82	11.90	8.50	8.50	9.30	9.30	7.80	7.70	7.50	7.40	9.10	9.54	9.81	9.96	10.02	10.0
	9.80	11.80	11.80	9.90	9.80	9.60	9.50	9.50	9.81	9.99	10.09	10.13	10.13	10.10	10.06	10.01	9.9
Str. deficit, percent of GDP	11.82	11.83	11.69	11.56	11.43	11.31	11.19	11.08	10.97	10.86	10.76	10.66	10.57	10.48	10.39	10.30	10.2
	11.61	11.47	11.35	11.22	11.11	10.99	10.88	10.78	10.68	10.58	10.49	10.40	10.31	10.23	10.15	10.08	10.0
Cyc. deficit, percent of GDP	-0.56	-1.25	-1.39	-1.74	-1.34	-1.02	-0.71	-0.36	-0.12	0.07	0.21	0.24	0.24	0.22	0.18	0.15	0.1
	-0.21	-0.29	-0.28	-0.13	-0.06	0.01	0.06	0.08	0.08	0.07	0.06	0.05	0.04	0.03	0.02	0.01	0.0
Discr. deficit, percent of GDP	-2.04	4.24	1.60	-1.32	-1.59	-0.99	-1.18	-2.91	-3.14	-3.43	-3.57	-1.80	-1.26	-0.88	-0.62	-0.43	-0.3
	-1.60	0.62	0.74	-1.20	-1.25	-1.40	-1.45	-1.35	-0.95	-0.66	-0.46	-0.32	-0.23	-0.16	-0.11	-0.08	-0.0
Fiscal impulse, percent of GDP	-2.05	4.25	1.46	-1.45	-1.72	-1.11	-1.29	-3.03	-3.25	-3.54	-3.67	-1.90	-1.35	-0.97	-0.70	-0.52	-0.3
	-1.74	0.48	0.61	-1.32	-1.37	-1.52	-1.56	-1.46	-1.05	-0.76	-0.56	-0.41	-0.31	-0.24	-0.19	-0.15	-0.1

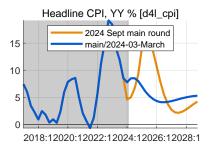
Auxiliary model results

	$2023\mathrm{Q4}$	2024Q1	2024Q2	2024Q3	2024Q4	2025Q1	2025Q2	2025Q3	2025Q4	2026Q1	2026Q2	2026Q3	2026Q4	2027Q1	2027Q2	20270
Deficit, % of GDP	9.21	14.82	11.90	8.50	8.50	9.30	9.30	7.80	7.70	7.50	7.40	9.10	9.54	9.81	9.96	10.0
	9.80	11.80	11.80	9.90	9.80	9.60	9.50	9.50	9.81	9.99	10.09	10.13	10.13	10.10	10.06	10.0
Grants, $\%$ of GDP	3.97	3.63	3.31	3.16	3.08	3.04	3.02	3.01	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.0
	4.01	3.51	3.25	3.13	3.06	3.03	3.02	3.01	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.0
Deficit in foreign currency, $\%$ of GDP	7.86	2.43	7.24	4.16	4.57	4.95	4.70	3.28	3.10	2.93	2.91	4.44	4.95	5.30	5.53	5.6
	4.35	6.60	7.76	6.21	6.10	5.88	5.75	5.72	5.95	6.07	6.13	6.13	6.11	6.06	5.99	5.9
Deficit in local currency, $\%$ of GDP	-2.61	8.76	1.35	1.19	0.85	1.31	1.58	1.51	1.59	1.57	1.49	1.66	1.60	1.51	1.43	1.3
	1.43	1.69	0.79	0.56	0.64	0.69	0.73	0.77	0.86	0.91	0.96	0.99	1.02	1.04	1.07	1.0
Debt in foreign currency, $\%$ of GDP	56.65	55.84	55.71	56.40	57.89	60.10	63.36	67.98	72.73	77.74	82.83	87.74	92.22	96.05	99.20	101.8
	55.63	56.97	56.27	56.94	58.01	59.35	60.84	62.07	63.23	64.25	65.09	65.83	66.46	66.99	67.43	67.8
Debt in local currency, $\%$ of GDP	13.32	12.86	12.55	12.45	12.55	12.81	13.30	14.08	14.88	15.72	16.58	17.40	18.13	18.74	19.22	19.6
	14.74	14.59	13.97	13.74	13.64	13.62	13.66	13.67	13.67	13.66	13.64	13.61	13.57	13.53	13.48	13.4
Resource balance ratio $\%$ of GDP	-13.49	-24.45	-21.00	-24.54	-29.61	-34.50	-38.85	-42.31	-46.67	-51.05	-55.75	-61.21	-66.66	-72.04	-77.33	-82.4
	-13.72	-16.71	-17.90	-17.81	-18.42	-18.95	-19.43	-20.19	-20.87	-21.49	-22.05	-22.56	-23.03	-23.46	-23.85	-24.2
Net private capital flows mln USD	517.02	108.45	-43.95	227.37	136.79	1.39	-74.08	-86.53	-53.37	-7.59	45.73	95.00	136.81	164.21	181.48	190.4
	-88.46	287.17	150.00	73.25	93.16	76.22	78.43	89.83	108.90	117.86	123.95	128.46	133.80	134.36	134.58	135.1

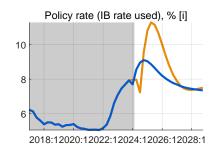
	$2023\mathrm{Q4}$	2024Q1	2024Q2	2024Q3	2024Q4	2025Q1	2025Q2	2025Q3	2025Q4	2026Q1	2026Q2	2026Q3	2026Q4	2027Q1	2027Q2	20270
Money demand, annualized growth in %	28.75	13.76	16.90	23.73	14.02	7.01	0.85	-5.46	-8.65	-10.53	-10.83	-8.97	-6.79	-4.54	-2.35	-0.3
	28.62	25.76	20.79	14.33	11.52	9.58	8.41	8.40	8.76	9.25	9.79	10.33	10.83	11.28	11.69	12.0
log change GDP deflator (from CPI, PM)	4.12	2.91	5.26	15.48	20.16	19.50	16.39	12.28	8.36	5.09	2.72	1.39	0.87	0.94	1.38	2.0
	6.69	7.84	9.27	7.55	6.45	5.63	4.76	4.20	3.97	3.97	4.09	4.29	4.54	4.81	5.05	5.

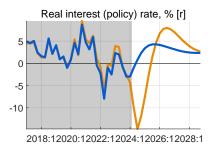
2 Forecast charts

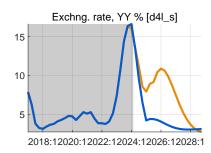
Main indicators

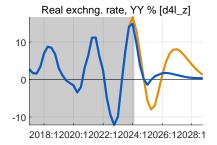


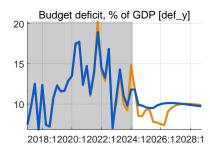




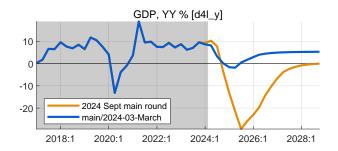


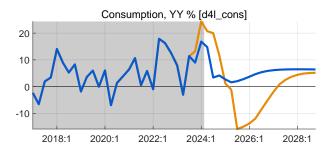


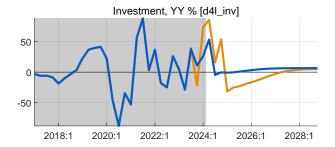


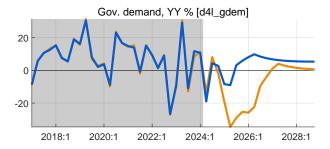


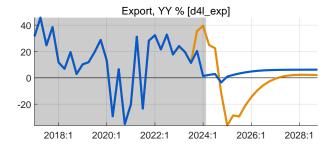
GDP growth, y-on-y

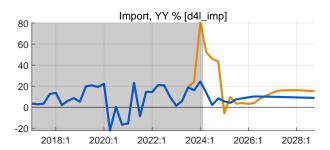




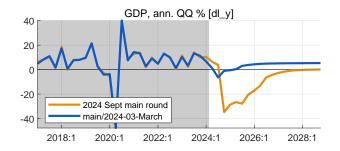


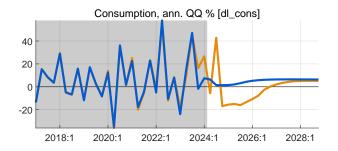


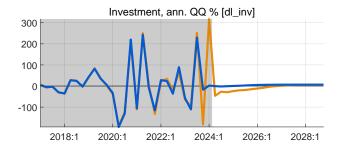


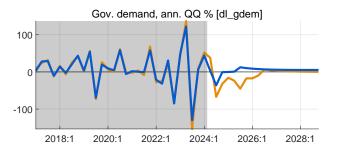


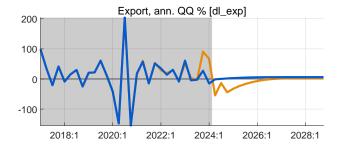
GDP growth, q-on-q

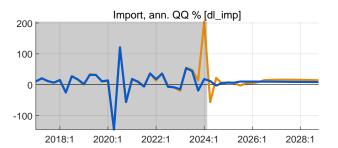




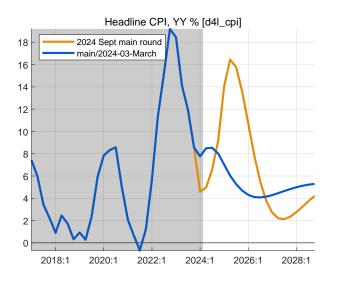


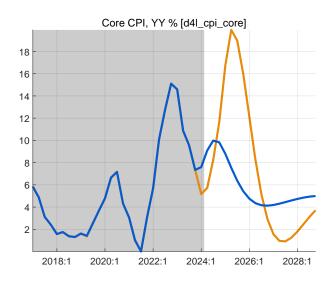


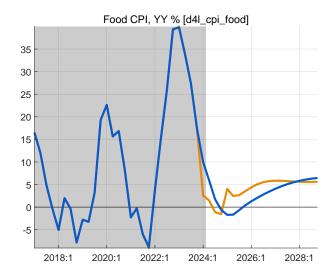


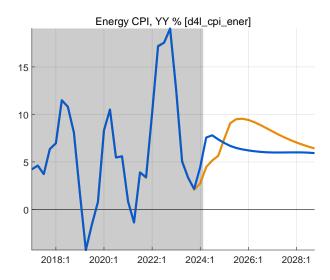


Inflation, y-on-y

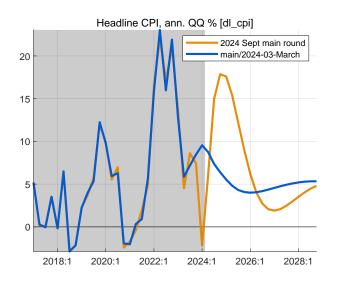


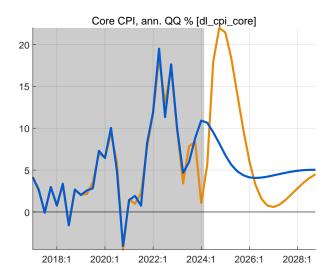


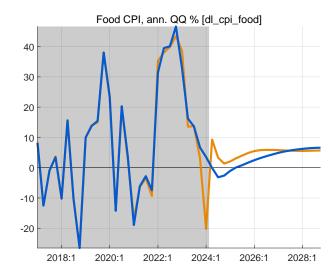


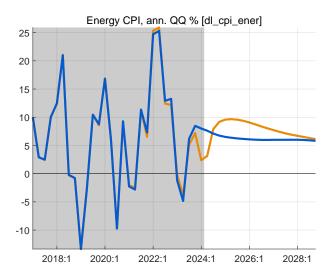


Inflation, q-on-q

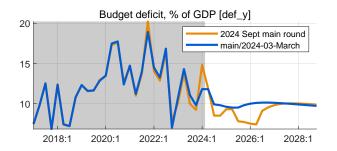


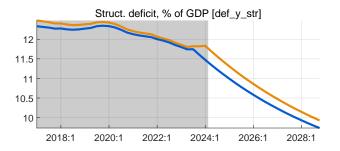




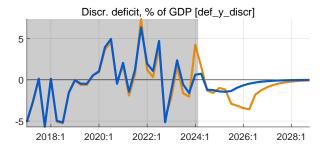


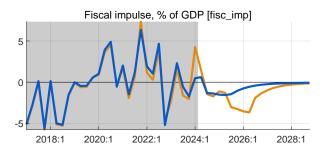
Budget deficit



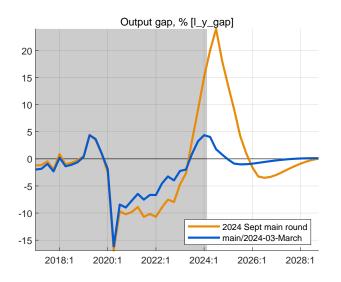


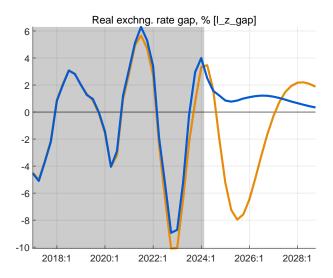


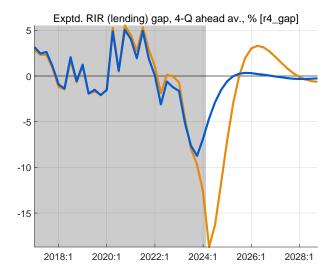




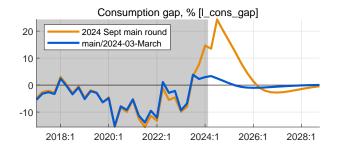
Main cyclical indicators

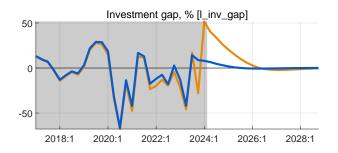


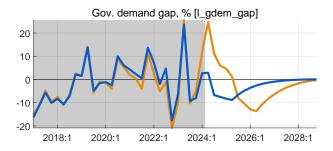




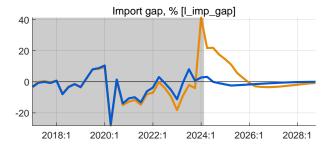
GDP cyclical indicators



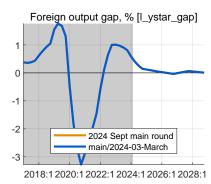


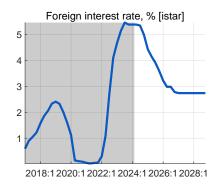


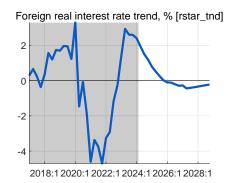


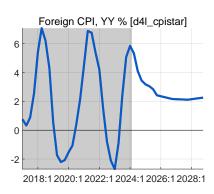


External variables



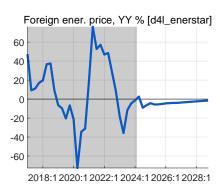










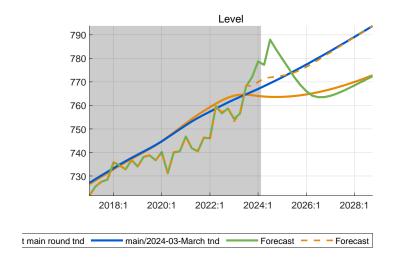


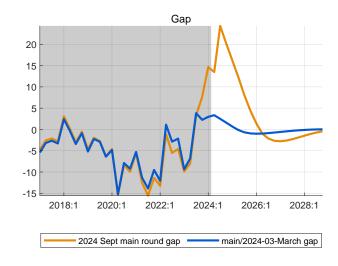


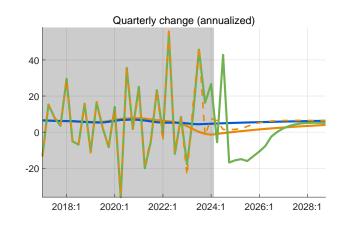
3 Trends and gaps

Consumption, $100*\log [l_cons]$

2024 Sept main round tnd



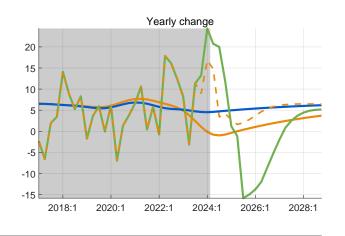




Forecast -

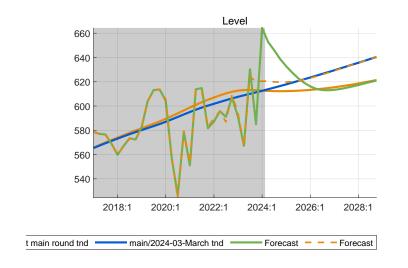
main/2024-03-March tnd

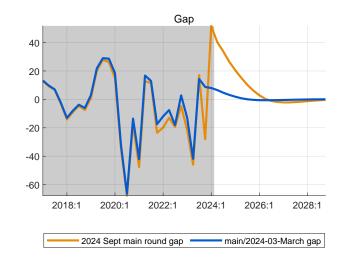
t main round tnd

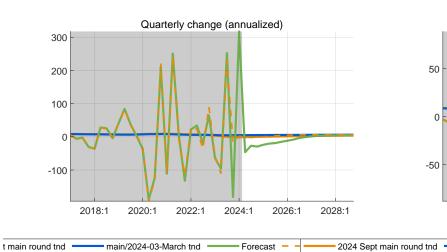


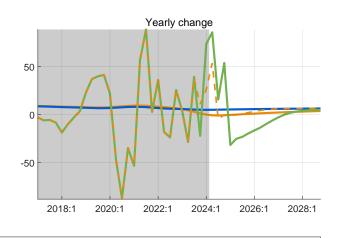
Forecast - - Forecast

Investment, $100*\log [l_inv]$

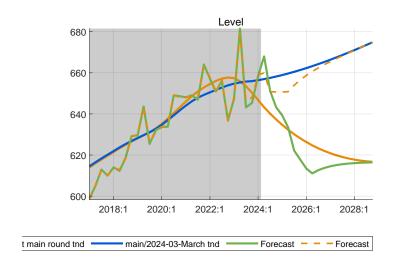


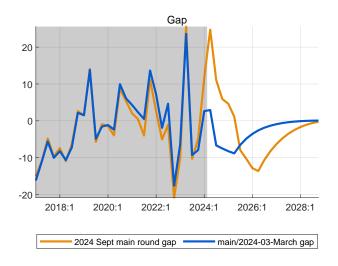


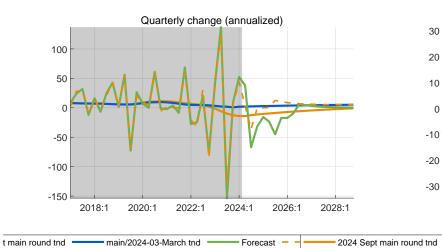


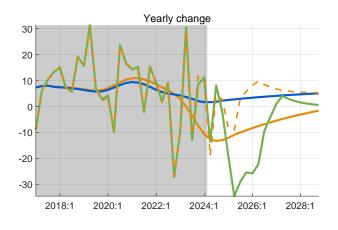


Gov. demand, $100*\log [l_gdem]$



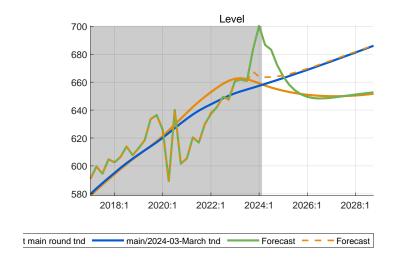


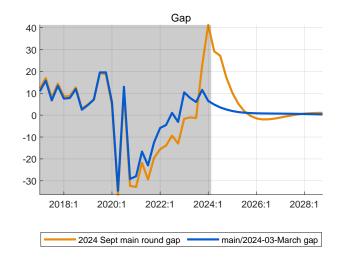


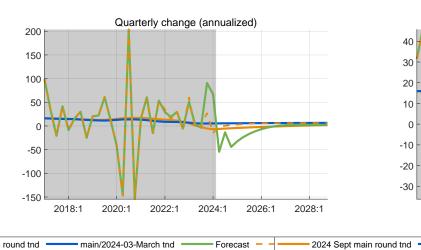


Forecast - - Forecast

Export, $100*\log [l_exp]$



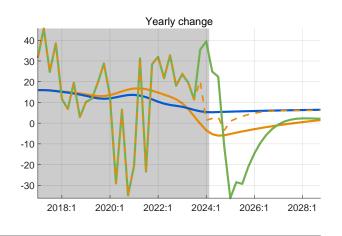




Forecast -

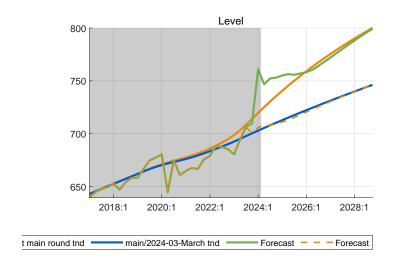
main/2024-03-March tnd

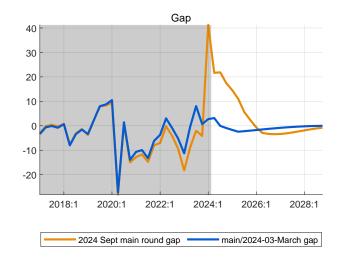
t main round tnd

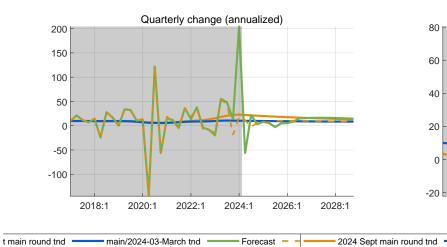


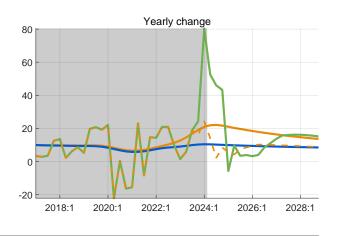
Forecast - - Forecast

Import, $100*\log [l_imp]$



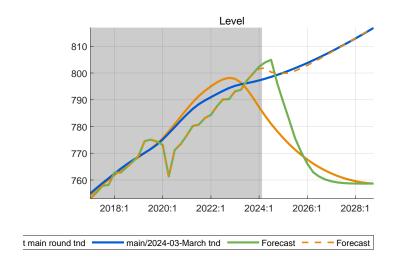


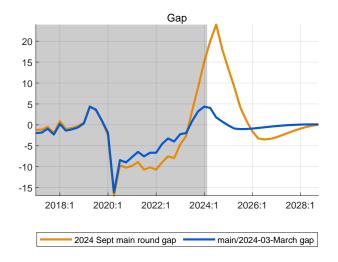


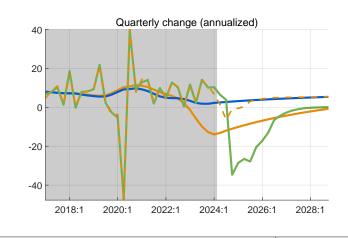


GDP, 100*log [l_y]

2024 Sept main round tnd



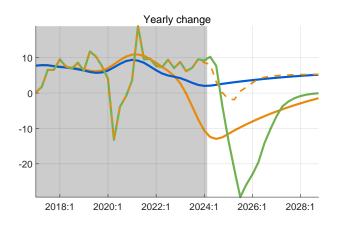




Forecast -

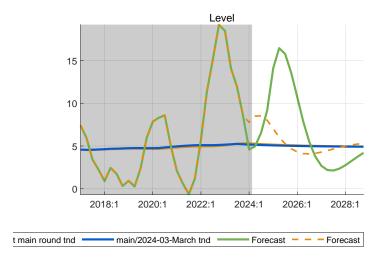
main/2024-03-March tnd

t main round tnd

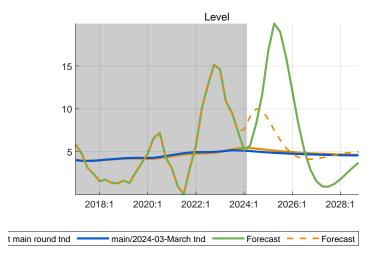


Forecast - - Forecast

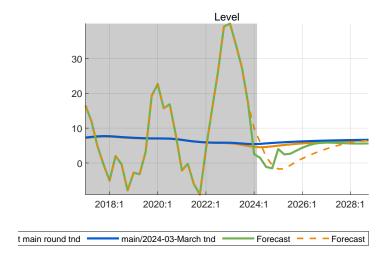
Headline CPI, YY % [d4l_cpi]



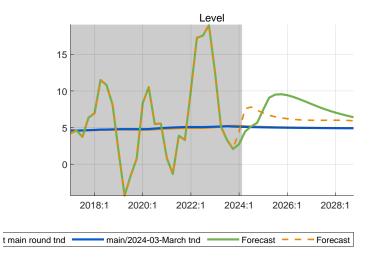
Core CPI, YY % [d4l_cpi_core]



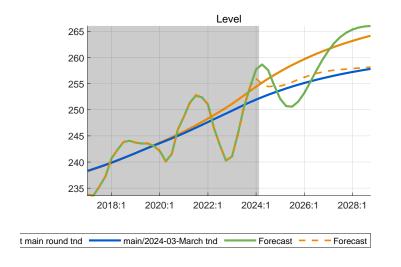
Food CPI, YY % [d4l_cpi_food]

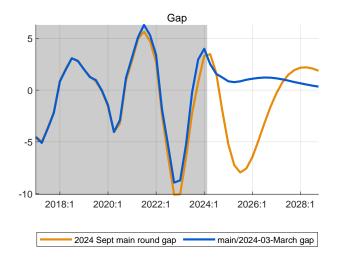


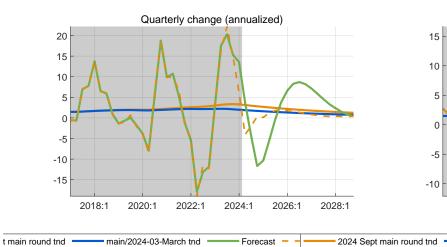
Energy CPI, YY % [d4l_cpi_ener]

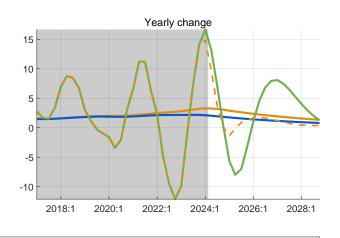


Real exchag. rate, 100*log [l_z]

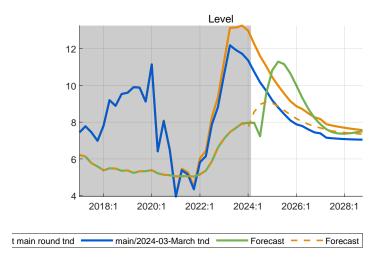




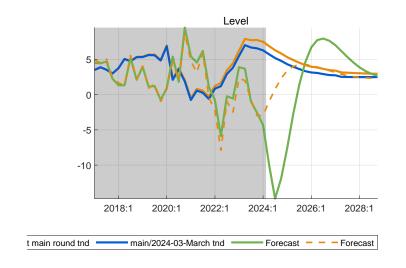


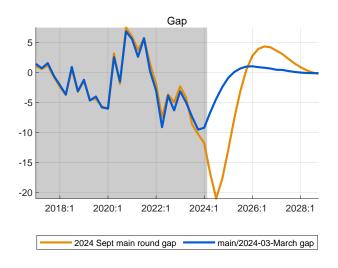


Policy rate (IB rate used), % [i]

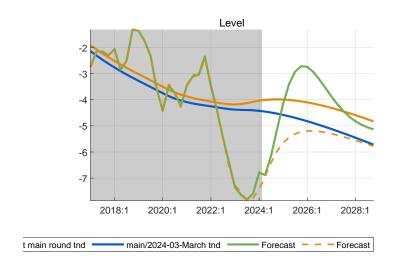


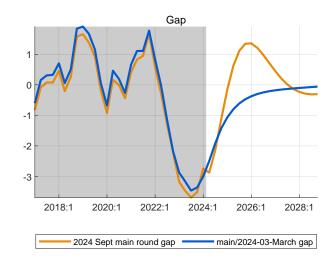
Real interest (policy) rate, % [r]

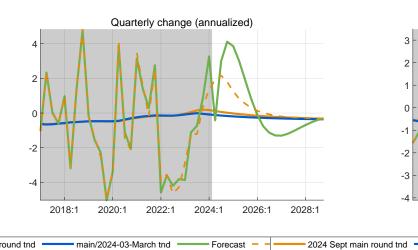




Core rel. price, $100*\log [l_rp_cpi_core]$



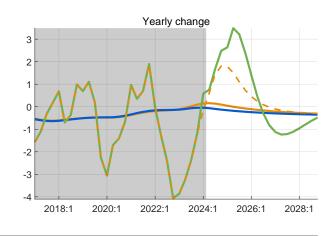




Forecast - -

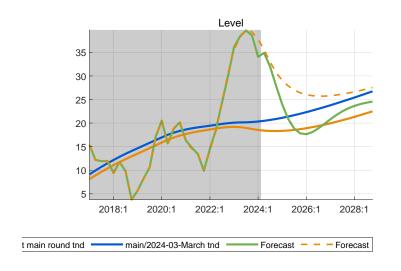
main/2024-03-March tnd

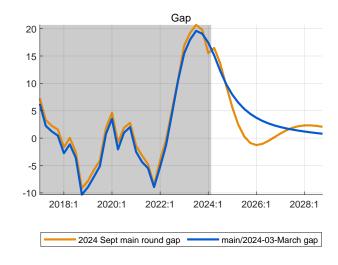
t main round tnd

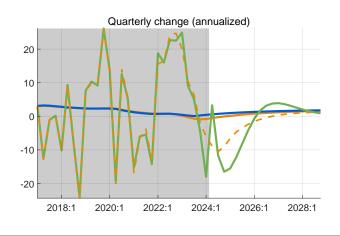


Food rel. price, 100*log [l_rp_cpi_food]

2024 Sept main round tnd



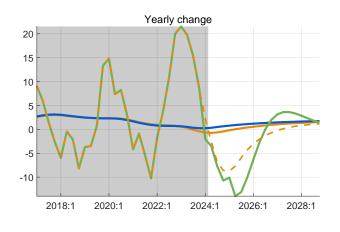




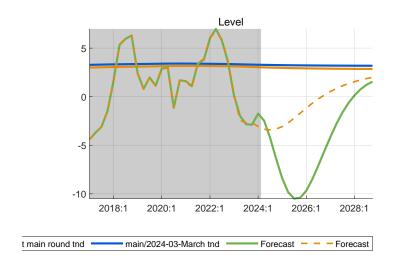
Forecast -

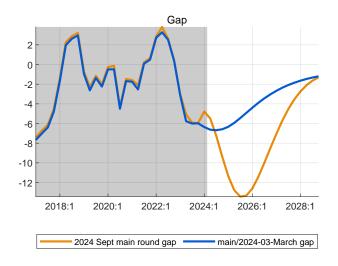
main/2024-03-March tnd

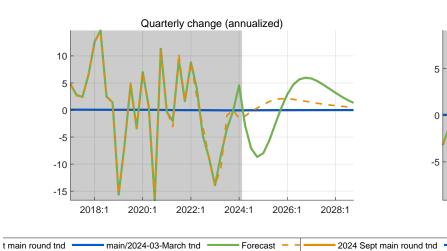
t main round tnd

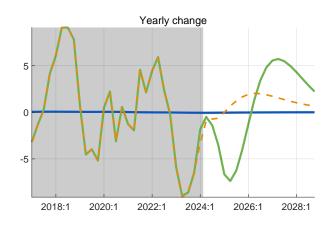


Energy rel. price, 100*log [l_rp_cpi_ener]



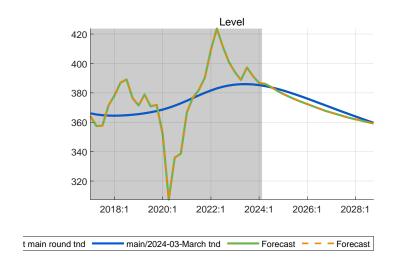


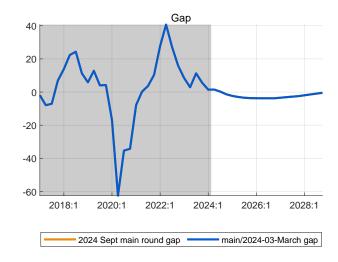


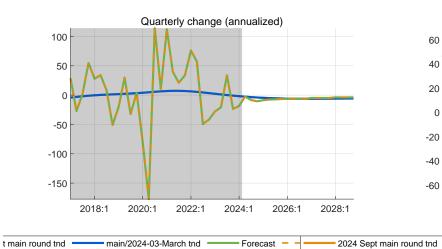


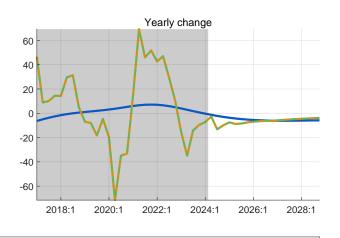
Forecast - - Forecast

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



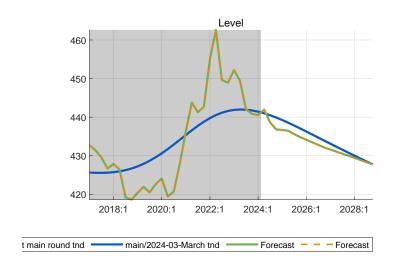


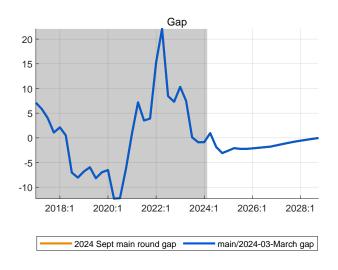


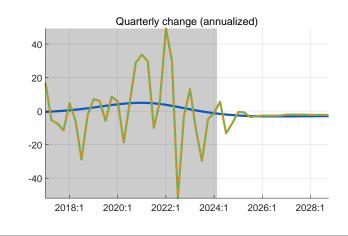


Foreign rel. food price, $100*\log [l_rp_foodstar]$

2024 Sept main round tnd



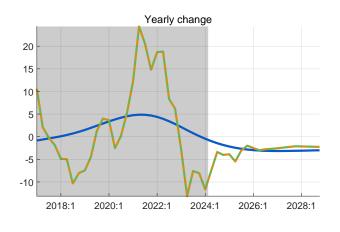




Forecast -

main/2024-03-March tnd

t main round tnd

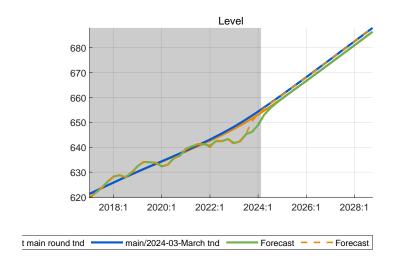


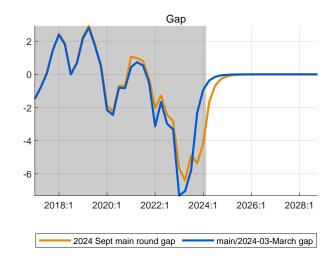
Forecast - - Forecast

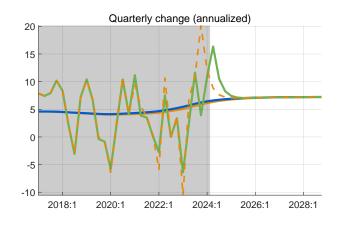
main/2024-03-March tnd

Agric. GDP, $100*\log [l_y_{agr}]$

2024 Sept main round tnd



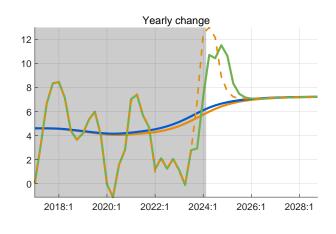




Forecast -

main/2024-03-March tnd

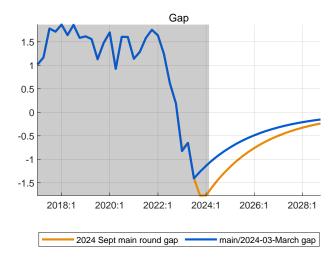
t main round tnd



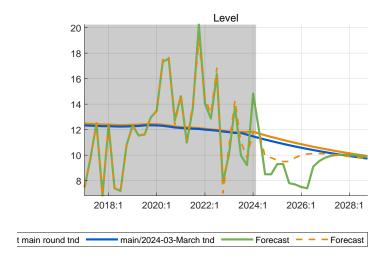
Forecast - - Forecast

main/2024-03-March tnd

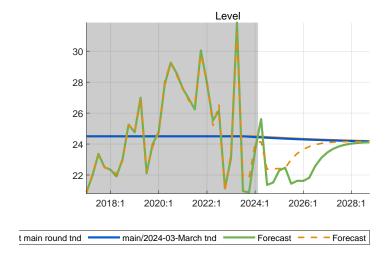
Lending premium, % [prem_d]



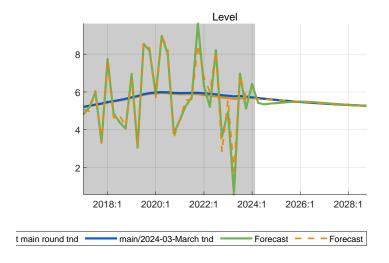
Budget deficit, % of GDP [def_y]



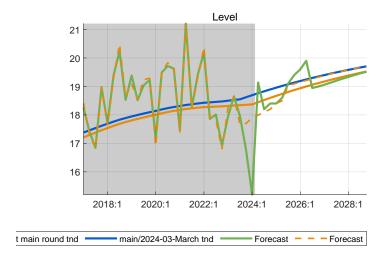
Govt. demand (G&S), % GDP [gdem_y]



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

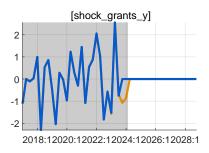


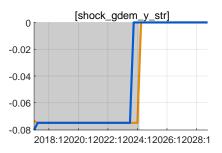
Govt. rev., % of GDP [grev_y]

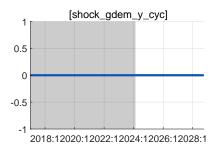


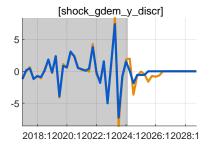
4 Shocks

Shocks (page 1)

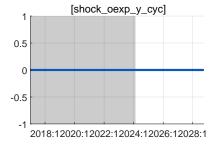


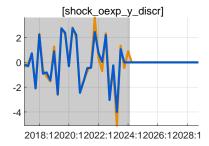




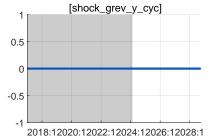




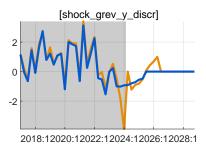


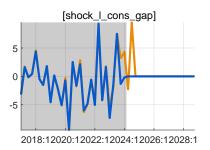


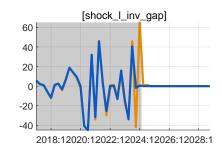




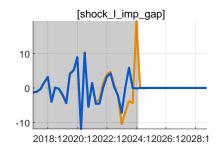
Shocks (page 2)

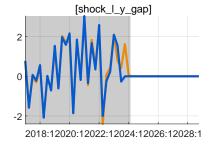


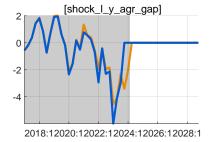


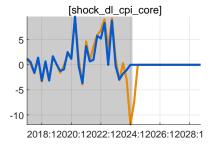






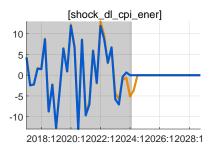


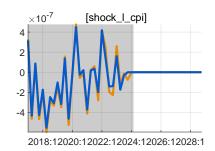


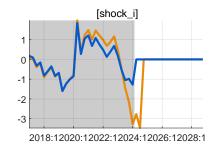


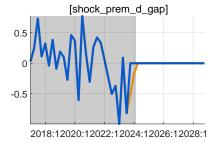


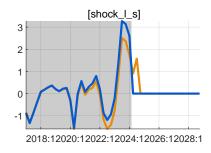
Shocks (page 3)



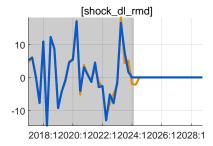


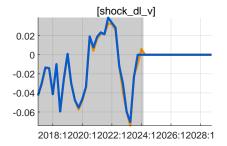


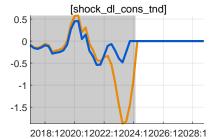




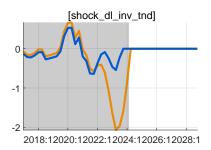


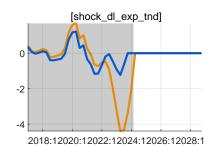


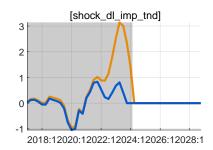


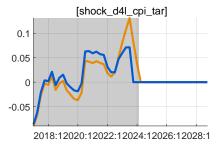


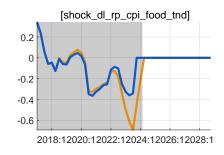
Shocks (page 4)

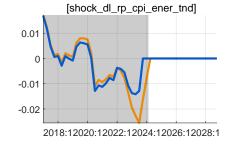


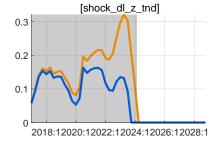


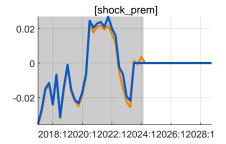


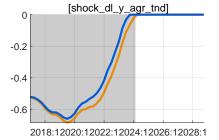






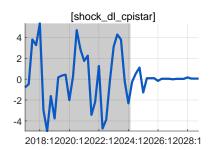




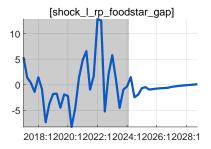


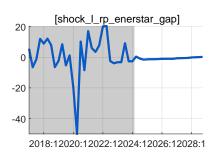
Shocks (page 5)

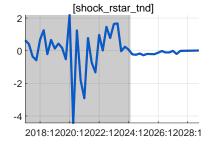


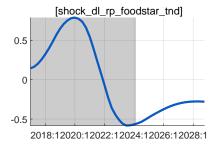


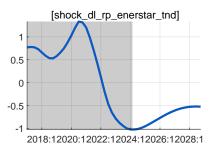












Shocks

	2023Q4	2024Q1	2024Q2	2024Q3	2024Q4	2025Q1	2025Q2	2025Q3	2025Q4	2026Q1	2026Q2	2026Q3	2026Q4	2027Q1	2027Q2	2027Q3	2027Q4
$shock_grants_y$	-1.08	-0.86	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	0.00	0.00	0.00	0.00	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
$shock_gdem_y_str$	-0.08	-0.07	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	0.00	0.00	0.00	0.00	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
${\rm shock_gdem_y_cyc}$	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	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
${ m shock_gdem_y_discr}$	-0.99	1.84	1.98	-3.66	-0.72	-0.06	-0.44	-1.64	-0.72	-0.86	-0.64	0.00	0.00	0.00	0.00	0.00	0.00
	-0.77	1.52	0.04	-1.87	-0.58	-0.57	-0.56	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
${\rm shock_oexp_y_str}$	-0.01	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	0.00	0.00	0.00	0.00	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
${\rm shock_oexp_y_cyc}$	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	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
${\rm shock_oexp_y_discr}$	-0.45	0.90	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	0.00	0.00	0.00	0.00	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
${\rm shock_grev_y_str}$	-0.01	-0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	0.00	0.00	0.00	0.00	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
${\rm shock_grev_y_cyc}$	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	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
$shock_grev_y_discr$	-1.82	-3.89	0.00	-1.22	-0.90	-0.82	-0.53	0.08	0.44	0.68	1.00	0.00	0.00	0.00	0.00	0.00	0.00
	-1.02	-0.93	-0.91	-0.79	-0.72	-0.55	-0.48	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
${\rm shock_l_cons_gap}$	3.20	4.33	-2.27	9.50	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
	-1.32	-0.19	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
${\rm shock_l_inv_gap}$	-41.54	64.96	0.69	1.35	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
	-1.87	0.69	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
${\rm shock_l_exp_gap}$	23.18	25.61	1.53	7.80	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
	6.82	-2.00	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
${\rm shock_l_imp_gap}$	-4.39	19.39	0.01	-0.14	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	-0.16	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
${\rm shock_l_y_gap}$	1.62	0.06	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	0.00	0.00	0.00	0.00	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
$shock_l_y_agr_gap$	-3.42	-2.03	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	0.00	0.00	0.00	0.00	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
${ m shock_dl_cpi_core}$	-2.95	-11.91	-7.51	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
	-1.03	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
${\rm shock_dl_cpi_food}$	-10.95	-23.83	12.23	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

	$2023\mathrm{Q4}$	2024Q1	2024Q2	2024Q3	2024Q4	2025Q1	2025Q2	2025Q3	2025Q4	2026Q1	2026Q2	2026Q3	2026Q4	2027Q1	2027Q2	2027Q3	2027Q4
	-3.25	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
${ m shock_dl_cpi_ener}$	-0.62	-5.12	-3.63	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
	0.67	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
${ m shock}_{-}{ m l}_{-}{ m cpi}$	-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	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 _i	-2.15	-3.27	-2.77	-3.47	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
	-0.98	-1.28	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
${\rm shock_prem_d_gap}$	-0.51	-0.17	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	0.00	0.00	0.00	0.00	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
$shock_l_s$	2.37	1.75	0.90	1.58	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
	3.14	2.60	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
$shock_dl_s_tar$	0.35	0.26	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	0.00	0.00	0.00	0.00	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
${ m shock_dl_rmd}$	5.11	-1.99	-2.19	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
	1.65	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
$shock_dl_v$	-0.01	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	0.00	0.00	0.00	0.00	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
${\rm shock_dl_cons_tnd}$	-1.45	-0.85	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	0.00	0.00	0.00	0.00	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
$shock_dl_inv_tnd$	-1.59	-0.86	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	0.00	0.00	0.00	0.00	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
$shock_dl_exp_tnd$	-3.38	-2.02	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	0.00	0.00	0.00	0.00	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
${ m shock_dl_imp_tnd}$	2.34	1.36	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	0.00	0.00	0.00	0.00	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
$shock_d4l_cpi_tar$	0.08	0.04	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	0.00	0.00	0.00	0.00	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
$shock_dl_rp_cpi_food_tnd$	-0.45	-0.22	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	0.00	0.00	0.00	0.00	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
${ m shock_dl_rp_cpi_ener_tnd}$	-0.02	-0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	0.00	0.00	0.00	0.00	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
$shock_dl_z_tnd$	0.20	0.10	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	0.00	0.00	0.00	0.00	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
${ m shock_prem}$	-0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	0.00	0.00	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
$shock_dl_y_agr_tnd$	-0.06	-0.02	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	0.00	0.00	0.00	0.00	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

	2023Q4	2024Q1	2024Q2	2024Q3	2024Q4	2025Q1	2025Q2	2025Q3	2025Q4	2026Q1	2026Q2	2026Q3	2026Q4	2027Q1	2027Q2	2027Q3	2027Q4
shock_l_ystar_gap	-0.04	-0.18	-0.15	-0.12	-0.09							-0.02	-0.02			0.03	0.03
	-0.04	-0.18	-0.15	-0.12	-0.09	-0.01	-0.02	-0.02	-0.02	-0.02	-0.02	-0.02	-0.02	0.02	0.02	0.03	0.03
${\rm shock_dl_cpistar}$	-0.20	-2.32	-0.25	0.54	1.11	-1.27	0.09	0.09	0.09	-0.17	0.04	0.04	0.04	-0.01	0.03	0.03	0.03
	-0.20	-2.32	-0.25	0.54	1.11	-1.27	0.09	0.09	0.09	-0.17	0.04	0.04	0.04	-0.01	0.03	0.03	0.03
${\rm shock_istar}$	0.10	0.17	0.17	0.13	-0.19	-0.41	-0.16	-0.13	-0.22	-0.28	-0.18	0.05	-0.15	-0.00	0.04	0.04	0.04
	0.10	0.17	0.17	0.13	-0.19	-0.41	-0.16	-0.13	-0.22	-0.28	-0.18	0.05	-0.15	-0.00	0.04	0.04	0.04
$shock_l_rp_foodstar_gap$	-0.96	-0.32	1.50	-2.44	-1.94	-0.67	-0.48	-0.95	-0.85	-0.75	-0.70	-0.65	-0.60	-0.42	-0.32	-0.23	-0.15
	-0.96	-0.32	1.50	-2.44	-1.94	-0.67	-0.48	-0.95	-0.85	-0.75	-0.70	-0.65	-0.60	-0.42	-0.32	-0.23	-0.15
$shock_l_rp_enerstar_gap$	-2.64	-2.64	0.45	-0.83	-1.54	-1.36	-1.26	-1.26	-1.16	-1.05	-1.03	-1.02	-1.01	-0.68	-0.59	-0.52	-0.45
	-2.64	-2.64	0.45	-0.83	-1.54	-1.36	-1.26	-1.26	-1.16	-1.05	-1.03	-1.02	-1.01	-0.68	-0.59	-0.52	-0.45
${\rm shock_rstar_tnd}$	0.24	0.07	-0.22	-0.25	-0.17	-0.28	-0.20	-0.20	-0.21	-0.12	-0.02	-0.11	-0.11	-0.01	-0.20	-0.01	-0.01
	0.24	0.07	-0.22	-0.25	-0.17	-0.28	-0.20	-0.20	-0.21	-0.12	-0.02	-0.11	-0.11	-0.01	-0.20	-0.01	-0.01
$shock_dl_rp_foodstar_tnd$	-0.58	-0.57	-0.55	-0.54	-0.51	-0.48	-0.45	-0.42	-0.40	-0.38	-0.35	-0.33	-0.32	-0.30	-0.29	-0.29	-0.28
	-0.58	-0.57	-0.55	-0.54	-0.51	-0.48	-0.45	-0.42	-0.40	-0.38	-0.35	-0.33	-0.32	-0.30	-0.29	-0.29	-0.28
$shock_dl_rp_enerstar_tnd$	-1.00	-1.02	-1.03	-1.01	-0.99	-0.95	-0.91	-0.87	-0.82	-0.77	-0.73	-0.68	-0.64	-0.61	-0.58	-0.56	-0.54
	-1.00	-1.02	-1.03	-1.01	-0.99	-0.95	-0.91	-0.87	-0.82	-0.77	-0.73	-0.68	-0.64	-0.61	-0.58	-0.56	-0.54