

Chartbook

Overview of macroeconomic,
financial and monetary indicators

———— Spring 2023



Czech National Bank — Chartbook — Spring 2023



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The chartbook is a parallel publication to the Monetary Policy Report. It contains an up-to-date overview of the main macroeconomic, financial and monetary indicators that enter the CNB's monetary policy decisions. Unless stated otherwise, the historical data are sourced from the CZSO or the CNB. The outlook (indicated by the grey area) is the CNB forecast, with a few exceptions. The deadline for this issue was 28 April 2023.

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A — Forecasts of key variables

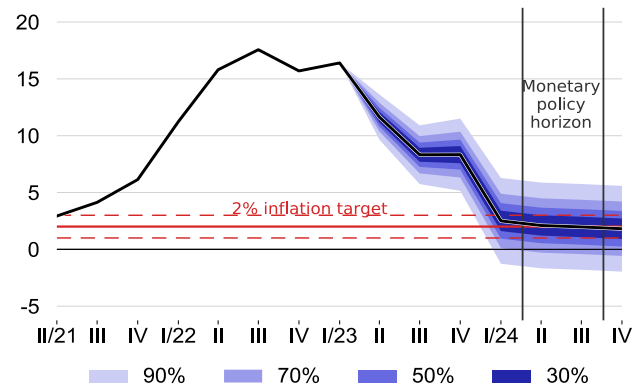
		2022	2023	2024	
Headline inflation	in % pp	15.1 (0.0)	11.2 (0.4)	2.1 (0.0)	The upward revision of the inflation forecast this year is due mainly to higher food price inflation and, to a lesser extent, core inflation.
Monetary policy -relevant inflation	in % pp	14.6 (0.0)	11.1 (0.5)	2.1 (0.0)	The differences in the revision of monetary policy-relevant inflation relative to headline inflation are negligible.
GDP	y-o-y changes % pp	2.5 (-0.1)	0.5 (0.8)	3.0 (0.8)	GDP growth is higher this year due to higher gross fixed capital formation and a larger contribution of net exports, joined next year by a stronger recovery in household consumption.
Interest rates	3M PRIBOR in % pp	6.3 (0.0)	6.8 (-0.2)	4.6 (-0.2)	The market interest rate outlook is slightly lower compared with the winter forecast.
Exchange rate	CZK/EUR	24.6 (0.0)	23.7 (-0.8)	24.3 (-0.2)	The forecast expects the koruna to be stronger than in the previous projection.

Note: Changes compared to the previous forecast in brackets (a green label indicates an increase in value or a shift to a weaker koruna, while a red label indicates a decrease in value or a shift to a stronger koruna).

A — Forecasts of key variables

Chart A.1
Headline inflation

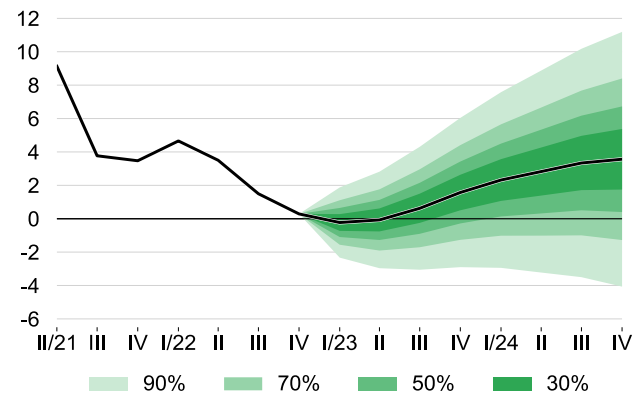
year on year in %; confidence intervals in colour



The confidence intervals of the headline inflation forecast reflect the predictive power of past forecasts and are symmetric. They widen linearly for the first five quarters and then stay constant. This is consistent with both the past predictive power and the stabilising role of monetary policy.

Chart A.3
GDP

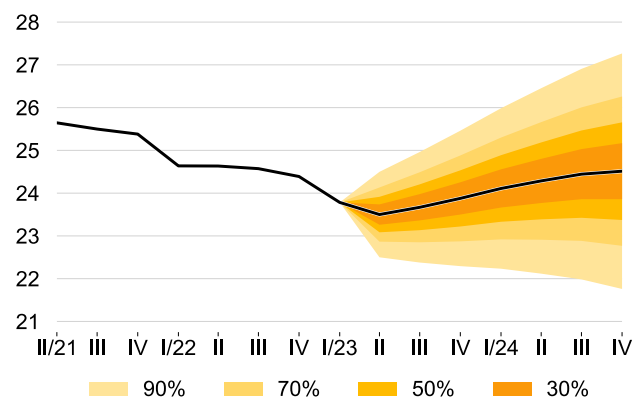
y-o-y changes in %; seasonally adjusted; confidence intervals in colour



The confidence intervals of the GDP growth forecast reflect the predictive power of past forecasts. They are symmetric and linearly widening.

Chart A.5
Exchange rate

CZK/EUR; confidence intervals in colour



The confidence intervals of the CZK/EUR exchange rate reflect the predictive power of past forecasts. They are symmetric and linearly widening.

Chart A.2
Headline inflation – comp. with previous forecast

year on year in %; differences in pp

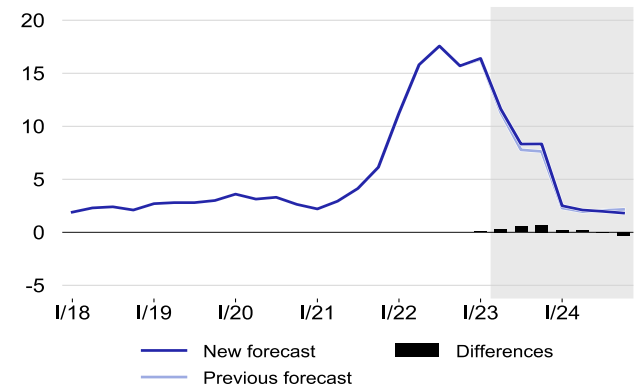


Chart A.4
GDP – comparison with previous forecast

y-o-y changes in %; differences in pp; seasonally adjusted

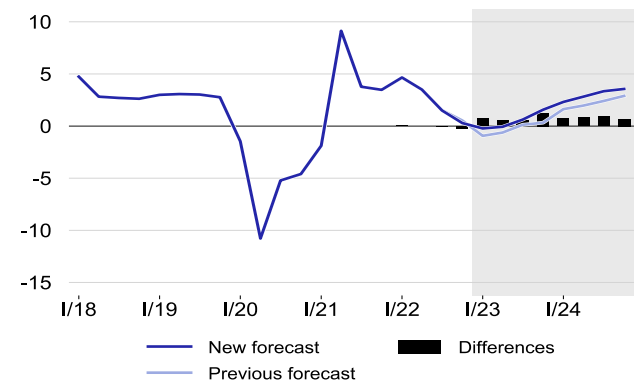
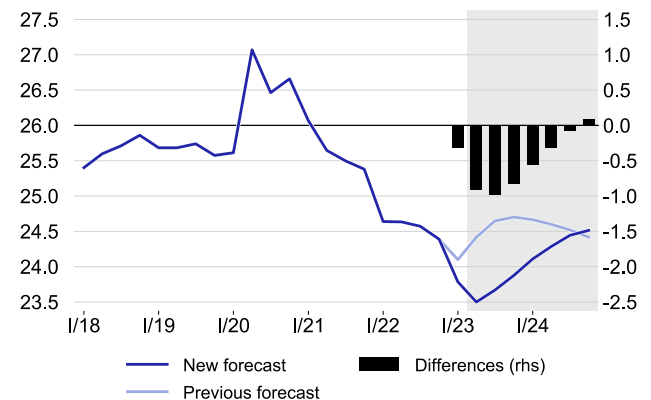


Chart A.6
Exchange rate – comp. with previous forecast

CZK/EUR; differences in CZK (right-hand scale)

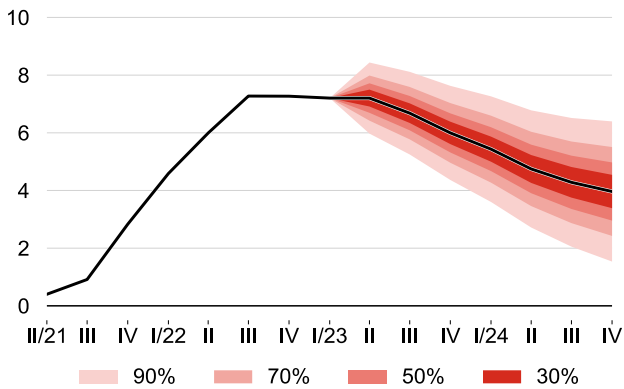


A — Forecasts of key variables

Chart A.7

Interest rate

3M PRIBOR in %; confidence intervals in colour



The confidence intervals of the 3M PRIBOR forecast reflect the predictive power of past forecasts. They are symmetric; linearly widening and limited below by the zero lower bound.

Chart A.8

Interest rate – comparison with previous forecast

3M PRIBOR; differences in pp

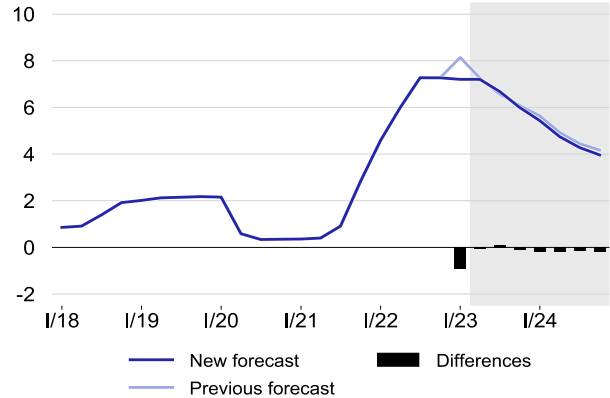


Chart A.10

Monetary policy-relevant inflation – comparison with previous forecast

year on year in %; differences in pp

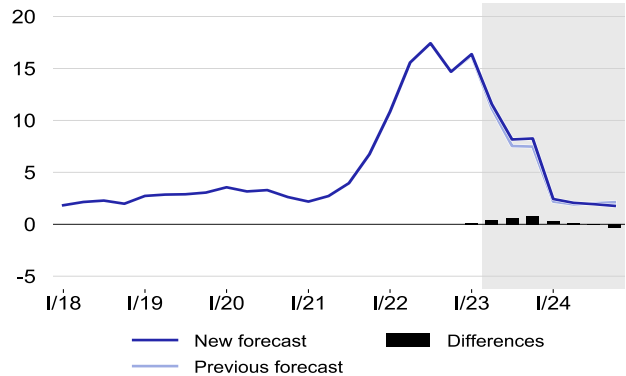
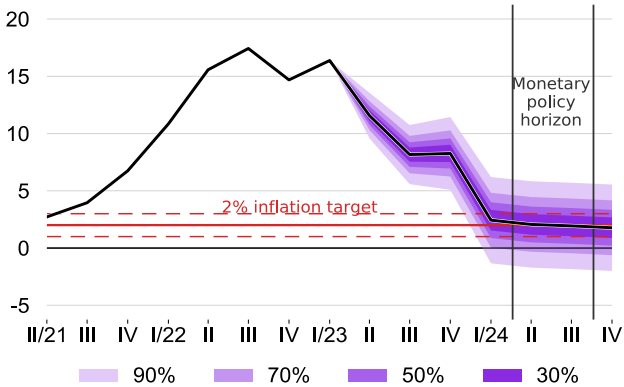


Chart A.9

Monetary policy-relevant inflation

year on year in %; confidence intervals in colour

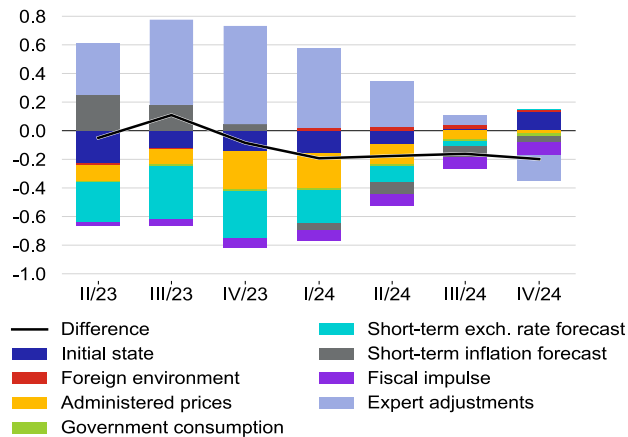


The confidence intervals of the monetary policy-relevant inflation forecast reflect the predictive power of past forecasts and are symmetric. They widen linearly for the first five quarters and then stay constant. This is consistent with both the past predictive power and the stabilising role of monetary policy.

Chart A.11

Decomposition of changes in int. rate forecast

3M PRIBOR; differences from previous forecast in pp



A — Forecasts of key variables

Table A.1

Key macroeconomic indicators – years

	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024
DEMAND AND SUPPLY												
Gross domestic product												
GDP (CZK bn, constant p. of 2015, seas. adjusted)	4290.8	4387.8	4627.4	4740.8	4994.2	5154.3	5307.2	5014.3	5189.6	5317.3	5342.4	5503.4
GDP (CZK bn, current p., seas. adjusted)	4141.9	4344.6	4627.4	4794.9	5116.8	5416.4	5793.9	5710.7	6107.0	6793.6	7405.2	7834.9
GDP (% , y-o-y, real terms, seas. adjusted)	0.0	2.3	5.5	2.5	5.3	3.2	3.0	-5.5	3.5	2.5	0.5	3.0
GDP (% , q-o-q, real terms, seas. adjusted)	-	-	-	-	-	-	-	-	-	-	-	-
Household consumption (% , y-o-y, real terms, seas. adjusted)	0.9	1.4	3.9	3.7	4.0	3.3	2.6	-7.4	4.1	-0.9	-2.6	4.1
Government consumption (% , y-o-y, real terms, seas. adjusted)	2.4	1.0	1.8	2.5	1.8	3.9	2.5	4.2	1.4	0.6	1.6	1.3
Gross capital formation (% , y-o-y, real terms, seas. adjusted)	-4.2	7.1	13.1	-3.9	6.5	7.7	4.5	-9.2	19.1	8.5	-6.1	-2.1
Gross fixed capital formation (% , y-o-y, real terms, seas. adjusted)	-2.2	3.3	9.8	-3.1	5.1	10.0	5.9	-6.0	0.8	6.2	2.9	4.8
Exports of goods and services (% , y-o-y, real terms, seas. adjusted)	0.3	8.7	6.2	4.1	7.6	3.7	1.3	-8.1	6.8	5.7	7.4	6.6
Imports of goods and services (% , y-o-y, real terms, seas. adjusted)	0.1	10.0	7.0	2.7	6.5	5.8	1.5	-8.2	13.2	5.7	2.8	4.9
Net exports (CZK bn, constant p. of 2015, seas. adjusted)	295.5	283.3	276.7	337.5	401.7	338.1	338.4	315.6	96.8	102.0	312.8	413.7
PRICES												
Main price indicators												
Consumer Price Index (% , y-o-y, average)	1.4	0.4	0.3	0.7	2.5	2.1	2.8	3.2	3.8	15.1	11.2	2.1
Administered prices (14.21%)* (% , y-o-y, average)	2.2	-3.0	0.0	0.2	0.0	1.8	4.4	3.1	-0.2	20.9	27.6	1.3
Food prices (incl. alcoholic beverages and tobacco) (26.50%)* (% , y-o-y, average)	3.1	1.8	0.1	0.2	3.6	1.6	2.6	4.2	2.1	12.9	10.3	-0.2
Core inflation (56.14%)* (% , y-o-y, average)	-0.5	0.5	1.2	1.2	2.4	2.1	2.7	3.4	4.8	13.2	8.2	3.5
Fuel prices (3.15%)* (% , y-o-y, average)	-2.1	0.2	-13.5	-8.5	6.7	6.3	-0.4	-11.4	16.7	33.6	-12.5	0.9
Monetary policy-relevant inflation (% , y-o-y, average)	0.6	0.2	0.2	0.5	2.5	2.1	2.9	3.2	3.9	14.6	11.1	2.1
Partial price indicators												
Industrial producer prices (% , y-o-y, average)	0.8	-0.8	-3.2	-3.3	1.8	2.0	2.6	0.1	7.1	24.3	6.2	0.9
Agricultural prices (% , y-o-y, average)	5.0	-3.7	-5.9	-5.8	7.4	-0.1	5.4	-3.8	7.4	31.8	-0.2	-7.2
LABOUR MARKET												
Average monthly wage (% , y-o-y, nominal terms)	-0.1	2.9	3.2	4.4	6.7	8.2	7.9	4.6	4.7	6.5	8.8	7.9
Average monthly wage in market sectors (% , y-o-y, nominal terms)	-0.3	3.0	3.2	4.3	6.7	7.7	7.6	4.1	5.1	7.2	9.7	8.5
Average monthly wage (% , y-o-y, real terms)	-1.6	2.6	2.8	3.8	4.3	6.0	5.0	1.5	0.9	-8.6	-2.2	5.8
Unit labour costs (% , y-o-y)	0.9	1.6	-0.4	3.1	3.9	6.2	4.7	5.9	2.2	6.5	8.6	5.0
Aggregate labour productivity (% , y-o-y)	-0.4	1.7	3.9	0.9	3.6	1.9	2.8	-3.8	3.1	0.7	0.4	2.9
ILO general unemployment rate (% , average, age 15–64, seas. adjusted)	7.0	6.2	5.1	4.0	2.9	2.3	2.0	2.6	2.9	2.4	2.5	2.8
Share of unemployed persons (MLSA) (% , average, seas. adjusted)	7.7	7.7	6.5	5.5	4.2	3.2	2.8	3.6	3.8	3.4	3.7	4.2
Employment (ILO) (% , y-o-y)	0.9	0.7	1.3	1.8	1.5	1.2	-0.1	-1.6	-1.5	1.6	0.1	0.1
Full-time employment (% , y-o-y)	-1.0	1.1	2.1	1.8	2.2	1.5	-0.3	-1.7	-0.3	0.9	0.1	0.2
PUBLIC FINANCE												
Government budget balance (ESA2010) (CZK bn, current prices)	-53.2	-90.2	-29.8	34.1	76.7	48.3	16.7	-329.2	-310.6	-247.5	-286.0	-192.1
Government budget balance/GDP** (% , nominal terms)	-1.3	-2.1	-0.6	0.7	1.5	0.9	0.3	-5.8	-5.1	-3.6	-3.9	-2.5
Government debt (ESA2010) (CZK bn, current prices)	1840.2	1818.9	1836.0	1754.7	1749.7	1734.6	1740.3	2149.8	2566.7	2997.1	3259.0	3459.3
Government debt/GDP** (% , nominal terms)	44.4	41.9	39.7	36.6	34.2	32.1	30.0	37.7	42.0	44.1	44.0	44.2
EXTERNAL RELATIONS												
Current account												
Trade balance (CZK bn, current prices)	167.0	220.0	187.7	258.5	259.3	200.9	239.8	280.3	69.0	-99.3	214.8	318.5
Trade balance/GDP (% , nominal terms)	4.0	5.1	4.1	5.4	5.1	3.7	4.1	4.9	1.1	-1.5	2.9	4.1
Balance of services (CZK bn, current prices)	70.4	55.7	86.6	106.6	124.6	120.0	106.0	103.5	105.0	89.9	109.6	124.2
Current account (CZK bn, current prices)	-21.8	7.9	20.7	85.2	79.1	24.1	19.2	113.7	-168.0	-415.3	8.5	85.1
Current account/GDP (% , nominal terms)	-0.5	0.2	0.4	1.8	1.5	0.4	0.3	2.0	-2.8	-6.1	0.1	1.1
Foreign direct investment												
Direct investment (CZK bn, current prices)	7.4	-80.4	49.7	-186.5	-45.9	-51.0	-137.1	-149.1	-28.5	-172.4	-140.0	-140.0
Exchange rates												
CZK/USD (average)	19.6	20.8	24.6	24.4	23.4	21.7	22.9	23.2	21.7	23.4	22.0	21.9
CZK/EUR (average)	26.0	27.5	27.3	27.0	26.3	25.6	25.7	26.5	25.6	24.6	23.7	24.3
MONEY AND INTEREST RATES												
M3 (% , y-o-y, average)	5.1	5.1	7.3	9.1	11.7	6.6	6.3	9.0	9.6	6.4	8.8	11.5
2W repo rate (% , average)	0.1	0.1	0.1	0.1	0.2	1.1	1.9	0.8	0.9	5.9	6.6	4.4
3M PRIBOR (% , average)	0.5	0.4	0.3	0.3	0.4	1.3	2.1	0.9	1.1	6.3	6.8	4.6
EXTERNAL ASSUMPTIONS												
Foreign GDP (% , y-o-y, seas. adjusted, effective)	0.3	1.9	2.0	2.0	2.8	1.8	1.5	-5.0	4.0	2.7	0.5	1.4
Foreign GDP (% , q-o-q, seas. adjusted, effective)	-	-	-	-	-	-	-	-	-	-	-	-
Foreign HICP (% , y-o-y, seas. adjusted, effective)	1.6	0.6	0.4	0.3	1.6	2.0	1.5	0.6	2.9	9.2	6.8	2.6
Foreign PPI (% , y-o-y, seas. adjusted, effective)	-0.1	-1.6	-2.5	-2.3	2.7	3.3	1.1	-1.6	11.0	35.0	4.2	0.1
Brent crude oil (in USD/barrel) (average)	108.8	99.5	53.6	45.0	54.8	71.5	64.2	43.2	70.8	98.9	80.6	75.8
3M EURIBOR (% , average)	0.2	0.2	0.0	-0.3	-0.3	-0.3	-0.4	-0.4	-0.5	0.3	3.2	3.1
USD/EUR (average)	1.3	1.3	1.1	1.1	1.1	1.2	1.1	1.1	1.2	1.1	1.1	1.1

* figures in brackets are constant weights in current consumer basket

** CNB calculation

- data not available/forecasted/released

data in bold = CNB forecast

A — Forecasts of key variables

Table A.2

Key macroeconomic indicators – quarters

	2022				2023				2024			
	QI	QII	QIII	QIV	QI	QII	QIII	QIV	QI	QII	QIII	QIV
DEMAND AND SUPPLY												
Gross domestic product												
GDP (CZK bn, constant p. of 2015, seas. adjusted)	1329.6	1333.2	1329.6	1324.9	1326.6	1332.2	1337.9	1345.7	1357.4	1369.8	1382.6	1393.6
GDP (CZK bn, current p., seas. adjusted)	1639.3	1678.0	1741.5	1734.7	1819.5	1831.5	1859.6	1894.7	1929.6	1954.7	1969.5	1981.1
GDP (% , y-o-y, real terms, seas. adjusted)	4.7	3.5	1.5	0.3	-0.2	-0.1	0.6	1.6	2.3	2.8	3.3	3.6
GDP (% , q-o-q, real terms, seas. adjusted)	0.6	0.3	-0.3	-0.4	0.1	0.4	0.4	0.6	0.9	0.9	0.9	0.8
Household consumption (% , y-o-y, real terms, seas. adjusted)	8.0	0.0	-5.2	-5.5	-5.9	-4.8	-1.6	2.2	4.0	4.3	4.3	4.1
Government consumption (% , y-o-y, real terms, seas. adjusted)	2.0	1.4	-1.8	0.9	1.1	2.0	3.5	0.0	1.3	1.3	1.3	1.4
Gross capital formation (% , y-o-y, real terms, seas. adjusted)	14.4	11.6	5.8	2.7	-2.1	-5.6	-8.1	-8.4	-7.0	-4.0	0.1	2.9
Gross fixed capital formation (% , y-o-y, real terms, seas. adjusted)	7.1	6.0	7.2	4.6	2.0	3.2	2.0	4.6	5.8	5.3	4.3	3.8
Exports of goods and services (% , y-o-y, real terms, seas. adjusted)	0.4	1.7	11.1	9.7	7.8	8.3	6.1	7.3	8.2	7.6	5.7	5.2
Imports of goods and services (% , y-o-y, real terms, seas. adjusted)	5.3	2.2	7.6	7.6	3.7	3.3	1.5	2.7	4.9	5.3	4.5	4.8
Net exports (CZK bn, constant p. of 2015, seas. adjusted)	15.0	15.6	32.2	39.3	60.5	71.5	86.1	94.7	101.9	102.9	104.7	104.3
PRICES												
Main price indicators												
Consumer Price Index (% , y-o-y, average)	11.2	15.8	17.6	15.7	16.4	11.6	8.3	8.3	2.5	2.1	2.0	1.8
Administered prices (14.21%)* (% , y-o-y, average)	15.7	23.4	28.1	16.4	32.8	24.4	18.9	34.2	1.3	1.2	1.5	1.3
Food prices (incl. alcoholic beverages and tobacco) (26.50%)* (% , y-o-y, average)	6.2	11.4	15.2	18.8	18.2	12.5	7.6	2.8	-0.2	-0.4	-0.2	0.0
Core inflation (56.14%)* (% , y-o-y, average)	10.5	13.8	14.7	13.9	11.9	9.2	6.7	5.1	4.3	3.6	3.2	2.9
Fuel prices (3.15%)* (% , y-o-y, average)	36.9	46.3	36.1	15.1	-3.7	-19.1	-17.7	-9.6	0.2	1.2	1.3	0.9
Monetary policy-relevant inflation (% , y-o-y, average)	10.8	15.6	17.4	14.7	16.4	11.6	8.2	8.3	2.4	2.1	1.9	1.8
Partial price indicators												
Industrial producer prices (% , y-o-y, average)	21.8	27.7	25.9	21.8	15.0	5.3	2.8	2.4	-0.1	1.1	1.1	1.4
Agricultural prices (% , y-o-y, average)	23.3	38.8	37.1	27.9	19.6	-4.7	-5.5	-7.4	-11.1	-7.0	-5.8	-4.7
LABOUR MARKET												
Average monthly wage (% , y-o-y, nominal terms)	7.3	4.4	6.2	7.9	9.1	8.6	8.9	8.7	8.9	8.2	7.5	6.9
Average monthly wage in market sectors (% , y-o-y, nominal terms)	8.1	4.6	7.1	8.9	9.4	9.4	9.9	9.9	9.9	9.0	8.0	7.2
Average monthly wage (% , y-o-y, real terms)	-3.5	-9.8	-9.7	-6.7	-6.3	-2.7	0.5	0.3	6.3	6.0	5.4	5.0
Unit labour costs (% , y-o-y)	6.4	4.7	5.9	9.0	9.2	8.3	9.7	7.2	6.5	5.5	4.3	3.6
Aggregate labour productivity (% , y-o-y)	3.4	1.1	-0.1	-1.2	-1.2	0.4	1.0	1.5	2.3	2.7	3.2	3.4
ILO general unemployment rate (% , average, age 15–64, seas. adjusted)	2.4	2.5	2.4	2.2	2.4	2.5	2.5	2.7	2.7	2.7	2.8	2.9
Share of unemployed persons (MLSA) (% , average, seas. adjusted)	3.3	3.3	3.4	3.7	3.6	3.6	3.7	3.9	4.0	4.1	4.2	4.3
Employment (ILO) (% , y-o-y)	2.3	2.2	1.2	0.9	0.4	-0.1	0.1	0.0	0.1	0.1	0.1	0.2
Full-time employment (% , y-o-y)	0.8	1.1	0.8	0.9	0.5	0.1	0.0	0.0	0.1	0.2	0.3	0.4
PUBLIC FINANCE												
Government budget balance (ESA2010) (CZK bn, current prices)	-	-	-	-	-	-	-	-	-	-	-	-
Government budget balance/GDP** (% , nominal terms)	-	-	-	-	-	-	-	-	-	-	-	-
Government debt (ESA2010) (CZK bn, current prices)	-	-	-	-	-	-	-	-	-	-	-	-
Government debt/GDP** (% , nominal terms)	-	-	-	-	-	-	-	-	-	-	-	-
EXTERNAL RELATIONS												
Current account												
Trade balance (CZK bn, current prices)	6.1	-38.1	-51.5	-15.9	66.7	64.0	36.9	47.3	97.2	93.5	57.8	70.0
Trade balance/GDP (% , nominal terms)	0.4	-2.2	-2.9	-0.9	3.9	3.4	2.0	2.4	5.4	4.8	2.9	3.4
Balance of services (CZK bn, current prices)	24.2	31.2	28.7	5.8	17.5	36.8	33.2	22.1	34.2	32.5	28.7	28.9
Current account (CZK bn, current prices)	-19.2	-85.2	-227.2	-83.6	51.3	-3.5	-37.9	-1.4	93.9	9.6	-39.4	21.1
Current account/GDP (% , nominal terms)	-1.2	-5.0	-12.9	-4.7	3.0	-0.2	-2.0	-0.1	5.2	0.5	-2.0	1.0
Foreign direct investment												
Direct investment (CZK bn, current prices)	-16.4	-32.2	-32.3	-91.5	-35.0	-35.0	-35.0	-35.0	-35.0	-35.0	-35.0	-35.0
Exchange rates												
CZK/USD (average)	22.0	23.1	24.4	23.9	22.2	21.9	22.0	22.0	22.0	22.0	21.9	21.9
CZK/EUR (average)	24.6	24.6	24.6	24.4	23.8	23.5	23.7	23.9	24.1	24.3	24.4	24.5
MONEY AND INTEREST RATES												
M3 (% , y-o-y, average)	6.0	6.2	6.4	7.3	8.5	8.4	8.9	9.4	10.5	11.4	12.0	12.0
2W repo rate (% , average)	4.2	5.6	7.0	7.0	7.0	7.0	6.5	5.8	5.2	4.5	4.1	3.8
3M PRIBOR (% , average)	4.6	6.0	7.3	7.3	7.2	7.2	6.7	6.0	5.4	4.7	4.3	4.0
EXTERNAL ASSUMPTIONS												
Foreign GDP (% , y-o-y, seas. adjusted, effective)	4.6	3.1	1.9	1.5	1.0	0.4	0.2	0.6	0.9	1.2	1.6	1.8
Foreign GDP (% , q-o-q, seas. adjusted, effective)	0.6	0.6	0.4	-0.1	0.1	0.1	0.1	0.3	0.4	0.5	0.5	0.5
Foreign HICP (% , y-o-y, seas. adjusted, effective)	6.6	8.8	10.2	11.2	9.4	7.7	6.2	4.2	3.4	2.8	2.4	2.1
Foreign PPI (% , y-o-y, seas. adjusted, effective)	30.9	36.3	43.1	29.8	16.8	7.5	-3.3	-2.1	-0.9	0.0	0.6	0.7
Brent crude oil (in USD/barrel) (average)	97.9	112.0	97.7	88.6	82.2	81.3	80.1	78.6	77.4	76.3	75.3	74.3
3M EURIBOR (% , average)	-0.5	-0.4	0.5	1.8	2.6	3.4	3.5	3.4	3.3	3.2	3.0	2.9
USD/EUR (average)	1.1	1.1	1.0	1.0	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1

* figures in brackets are constant weights in current consumer basket

** CNB calculation

- data not available/forecasted/released

data in bold = CNB forecast

B — Economic developments abroad

		2022	2023	2024	
GDP (in the effective EA)	y-o-y changes in % pp	2.7 (0.0)	0.5 (0.1)	1.4 (0.1)	The effective euro area growth outlook has increased slightly for both this year and the next.
Consumer prices (in the effective EA)	y-o-y changes in % pp	9.2 (0.0)	6.8 (0.6)	2.6 (0.4)	The inflation outlook has shifted higher, due chiefly to higher food prices, counteracted by a decline in energy prices.
Producer prices (in the effective EA)	y-o-y changes in % pp	35.0 (0.0)	4.2 (4.9)	0.1 (1.4)	Industrial producer prices have been revised upwards due to lower pass-through of the decline in market prices of natural gas and electricity (especially in Slovakia).
Brent crude oil price	USD/barrel	98.9 (0.0)	80.6 (-0.1)	75.8 (-0.6)	The falling outlook for oil prices is virtually unchanged.
3M EURIBOR	% pp	0.3 (0.0)	3.2 (0.9)	3.1 (0.0)	The market interest rate outlook remains stable.
Exchange rate	USD/EUR	1.05 (0.00)	1.08 (0.03)	1.11 (0.04)	The expected euro-dollar exchange rate has shifted towards a slightly stronger euro, as US economic activity is expected to weaken.

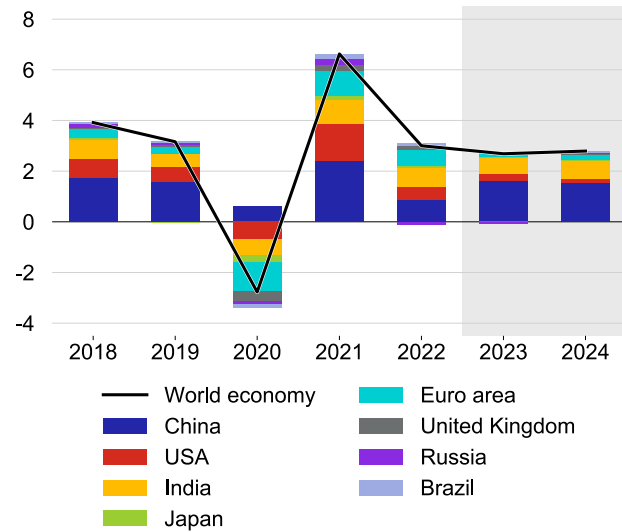
Note: Changes compared to the previous forecast in brackets (a green label indicates an increase in value or a shift to a weaker dollar, while a red label indicates a decrease in value or a shift to a stronger dollar).

B — Economic developments abroad

Chart B.1 (CF, CNB calculation)

Economic growth abroad

real GDP; y-o-y changes in %; contributions in pp

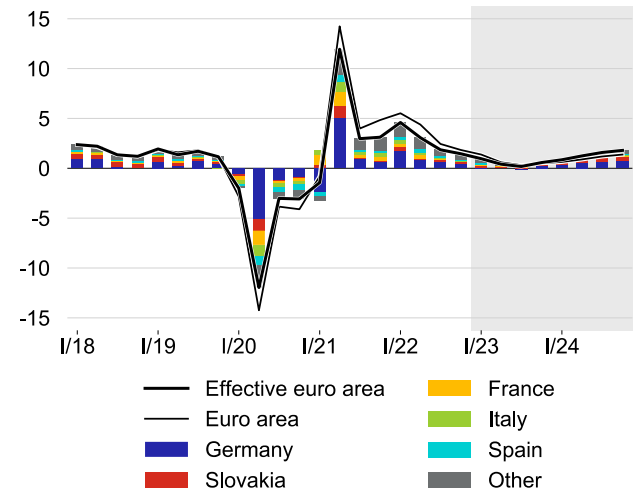


The growth of the world economy is proxied by the growth of the eight largest economies, which account for around 75% of global GDP. The weights of the industrial economies are calculated on the basis of nominal GDP at PPP.

Chart B.2 (Eurostat, CNB forecast)

Economic growth in euro area

real GDP; y-o-y changes in %; contributions in pp; seasonally adjusted



Other comprises 12 other euro area countries. Its forecasted growth corresponds to the average growth of the five countries shown in the chart.

Chart B.3 (Eurostat, CNB calculation)

Structure of GDP in euro area

y-o-y changes in %; contributions in pp; seasonally adjusted

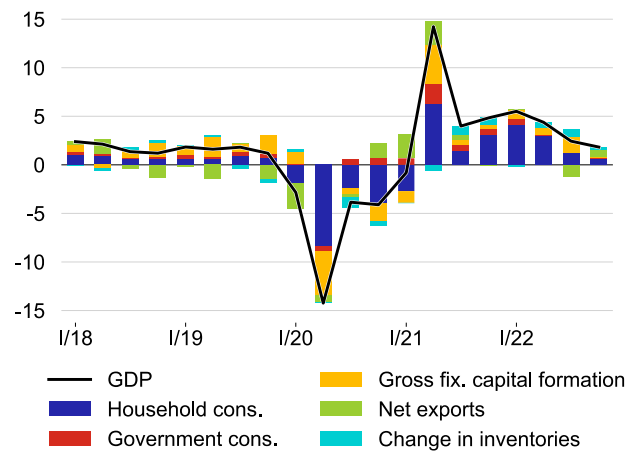


Chart B.4 (Eurostat, CNB forecast)

GDP level in effective euro area

index (2000 = 100)

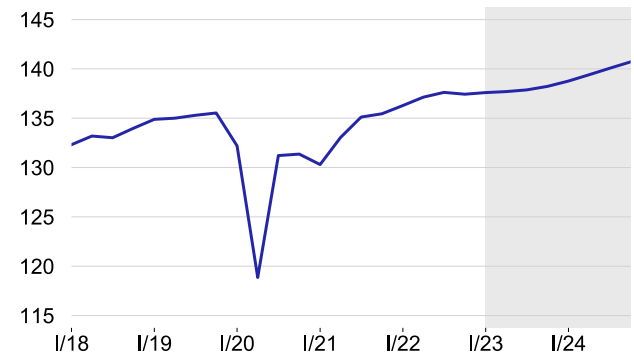


Chart B.5 (Eurostat)

Sentiment indicator for industry

subindex of the Economic sentiment indicator (ESI)

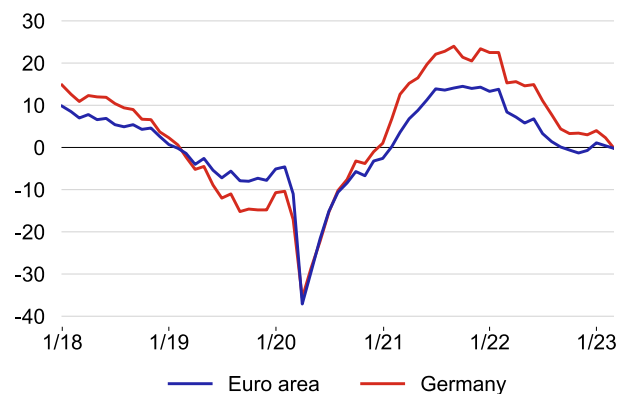
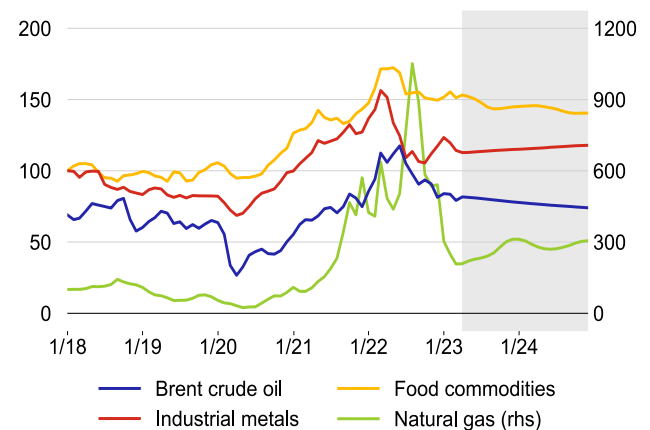


Chart B.6 (Bloomberg, World Bank, CNB calculation)

Prices of crude oil and other commodities

oil in USD/barrel; other commodities: index (January 2018 = 100); average price of natural gas in Europe

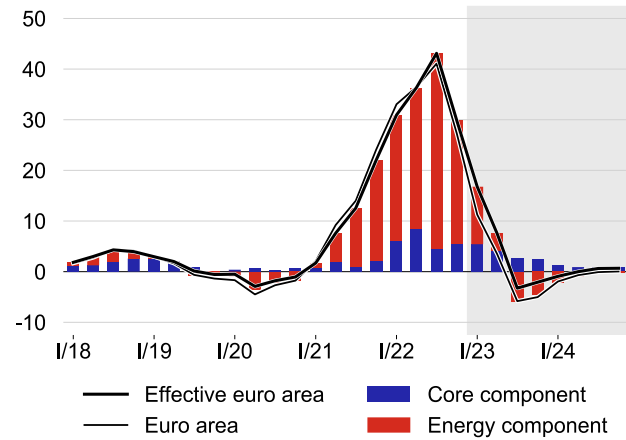


B — Economic developments abroad

Chart B.7 (Eurostat, CNB forecast)

Industrial producer prices in euro area

y-o-y changes in %; contributions in pp; seasonally adjusted



The energy component is determined by developments in industries strongly linked to the oil price and, since mid-2021, also in the electricity and gas industries. The rest of the PPI index in effective terms is the core component.

Chart B.8 (Eurostat, CNB forecast)

Industrial producer prices by country

y-o-y changes in %; contributions in pp; seasonally adjusted

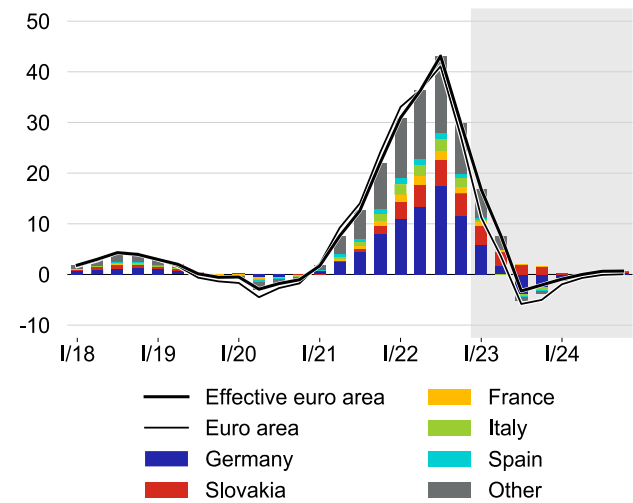
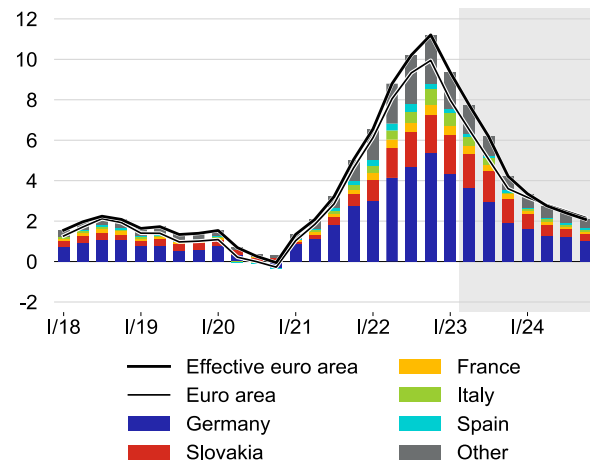


Chart B.9 (Eurostat, CNB forecast)

Consumer price inflation in euro area

HICP; year on year in %; contributions in pp; seasonally adjusted



Other comprises 12 other euro area countries. Its forecasted growth corresponds to the average growth of the five countries shown in the chart.

Chart B.10 (Bloomberg, CNB calculation)

Euro exchange rate

USD/EUR; NEER of euro against currencies of euro area countries' 18 main partners (January 2018 = 100; right-hand scale)

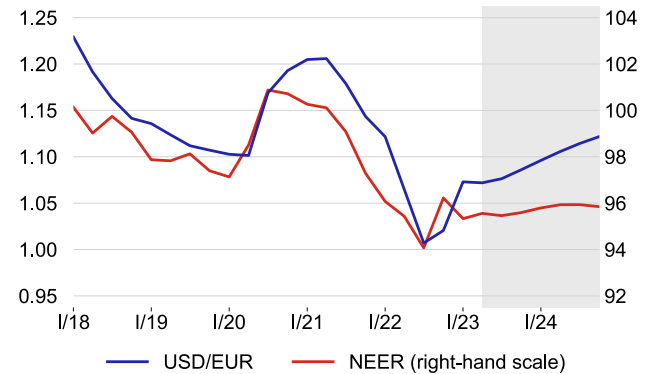


Chart B.11 (Bloomberg, CNB calculation)

3M EURIBOR and 3M USD LIBOR

%; differences in pp

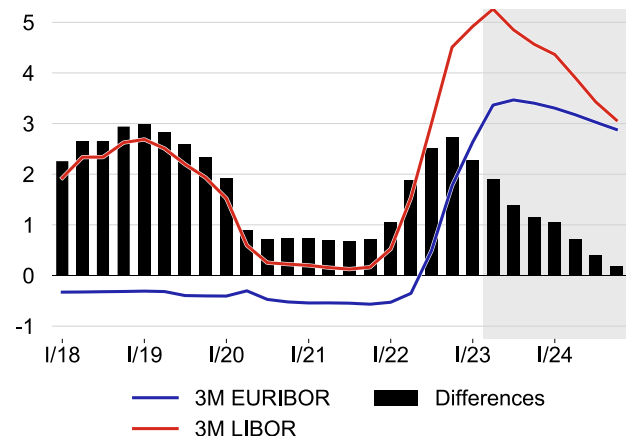
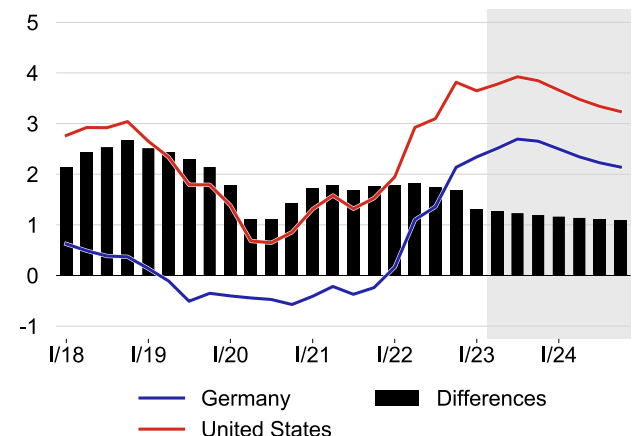


Chart B.12 (Bloomberg, CNB calculation)

10Y government bond yields

%; differences in pp



C — Domestic economic activity

		2022	2023	2024	
GDP	y-o-y changes in % pp	2.5 (-0.1)	0.5 (0.8)	3.0 (0.8)	GDP growth is higher this year due to higher gross fixed capital formation and a larger contribution of net exports, joined next year by a stronger recovery in household consumption.
Household consumption	y-o-y changes in % pp	-0.9 (-0.6)	-2.6 (-0.4)	4.1 (1.0)	The forecast for household consumption is lower this year due to a deeper fall at the end of last year; the outlook for 2024 is conversely higher, mainly due to faster real wage growth.
Government consumption	y-o-y changes in % pp	0.6 (0.3)	1.6 (0.3)	1.3 (0.1)	The government consumption forecast has been revised upwards slightly this year due to higher non-wage expenditure; it remains almost unchanged next year.
Gross fixed capital formation	y-o-y changes in % pp	6.2 (1.1)	2.9 (2.0)	4.8 (0.1)	The faster total investment growth this year is due to firms' better financial condition and to higher observed data at the end of 2022.
Net exports	contr. to GDP growth pp	0.2 (-0.4)	3.4 (0.3)	1.5 (0.2)	The contribution of net exports is slightly higher this year and the next than previously forecasted, due to slightly stronger external demand.

Note: Changes compared to the previous forecast in brackets (a green label indicates an increase in value and a red label a decrease).

C — Domestic economic activity

Chart C.1
Potential output

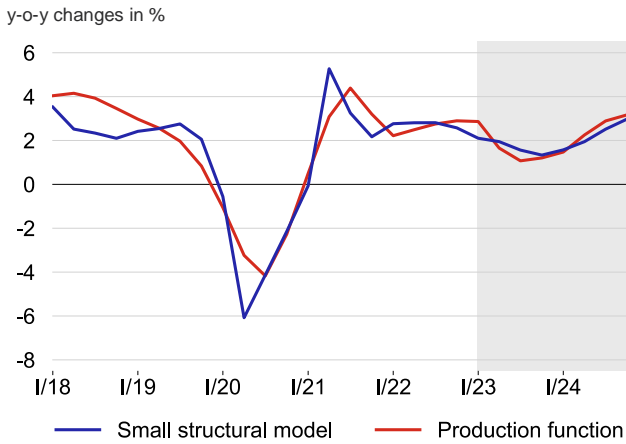


Chart C.2
Output gap

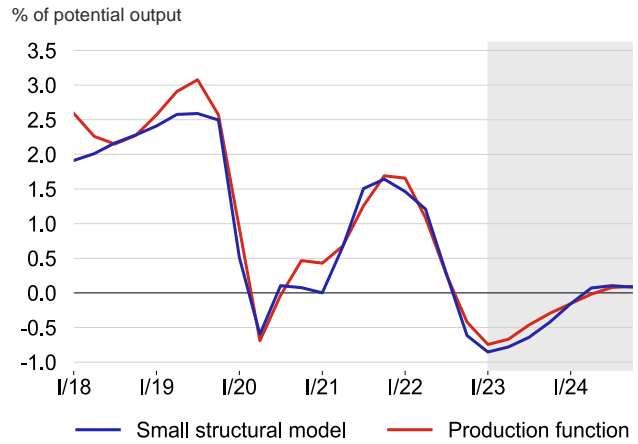


Chart C.3
Gross domestic product

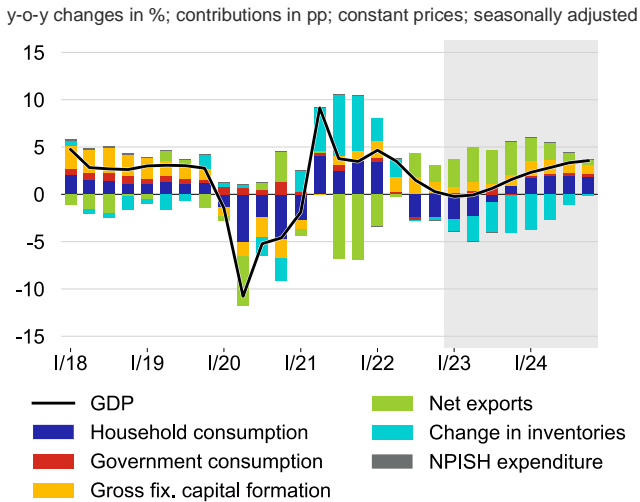
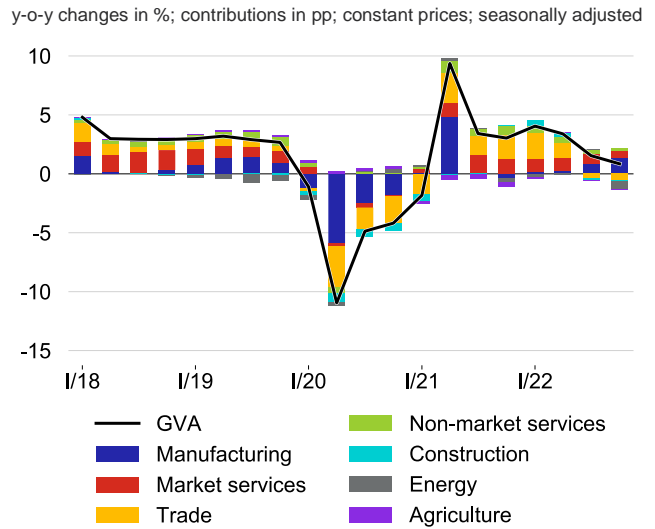


Chart C.4
Gross value added



Trade also includes hotels and restaurants and transport. Energy also includes mining and quarrying.

Chart C.5
Disposable income and household consumption

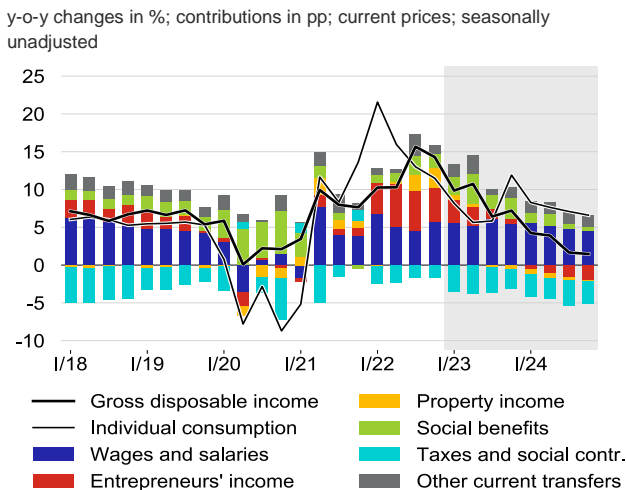
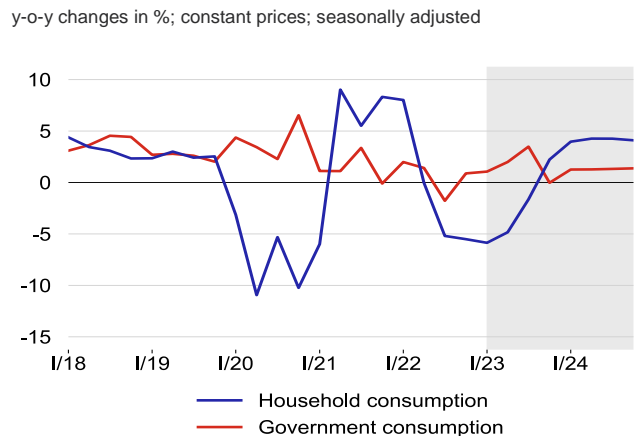


Chart C.6
Household and government consumption



C — Domestic economic activity

Chart C.7

Gross capital formation

y-o-y changes in %; contributions in pp; constant prices; seasonally adjusted

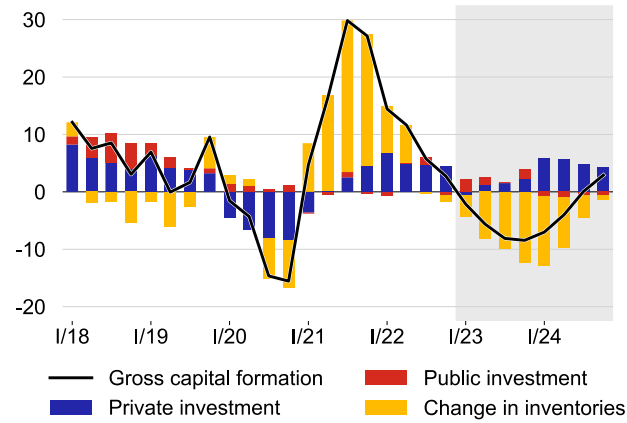


Chart C.8

Gross fixed capital formation by type of capital

y-o-y changes in %; contributions in pp; constant prices; seasonally adjusted

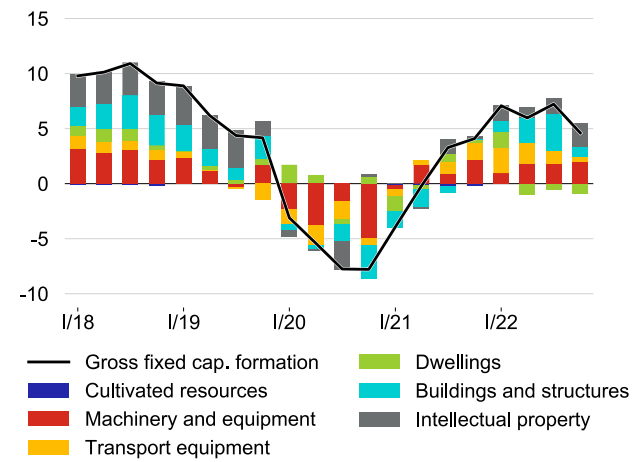


Chart C.9

Gross fixed capital formation by sector

y-o-y changes in %; contributions in pp; constant prices; seasonally adjusted

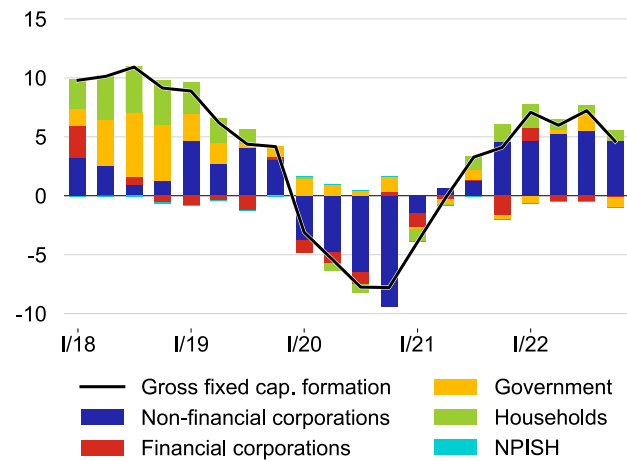


Chart C.10

Exports and imports

y-o-y changes in % and CZK billions; constant prices; seasonally adjusted

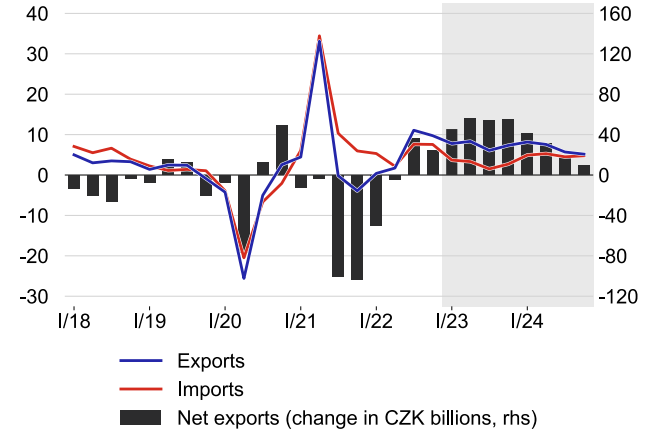


Chart C.11

Industrial production and construction output

y-o-y changes in %; constant prices; seasonally adjusted

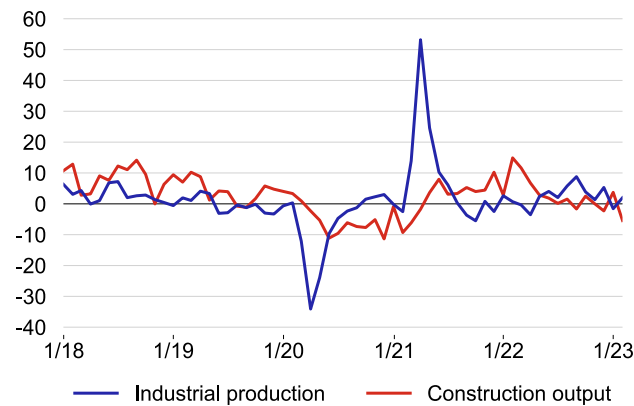
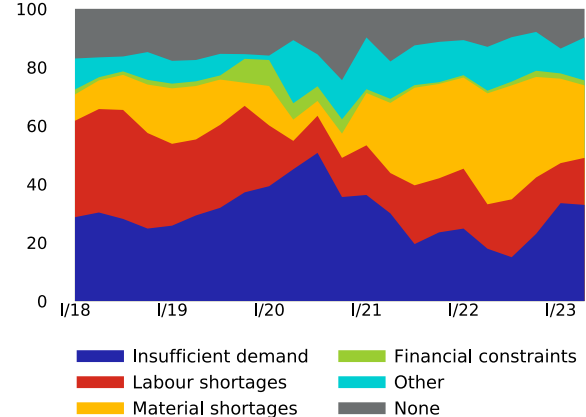


Chart C.12

Barriers to growth in industry

%



C — Domestic economic activity

Chart C.13

Key financial indicators

y-o-y changes in %; current prices; seasonally unadjusted

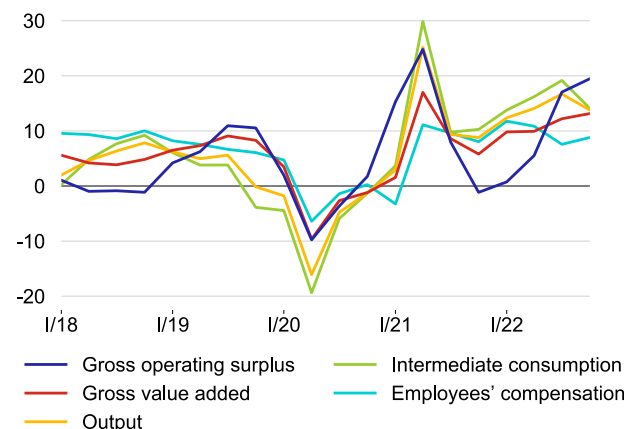


Chart C.14

Retail sales and sales in services

y-o-y changes in %; constant prices; seasonally adjusted

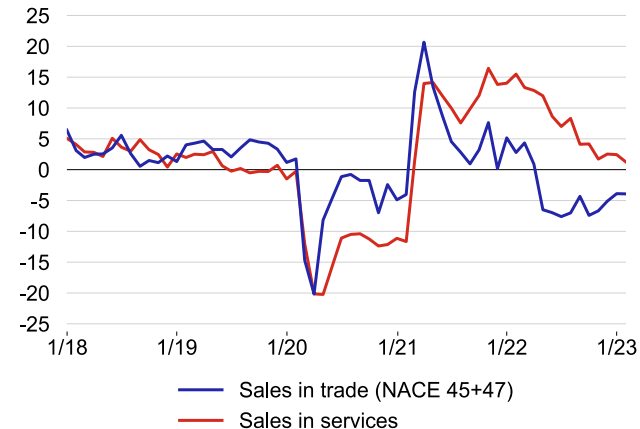


Chart C.15

Consumer confidence balance

balance is difference in % between answers of households expressing improvement and deterioration in expected and ongoing tendencies

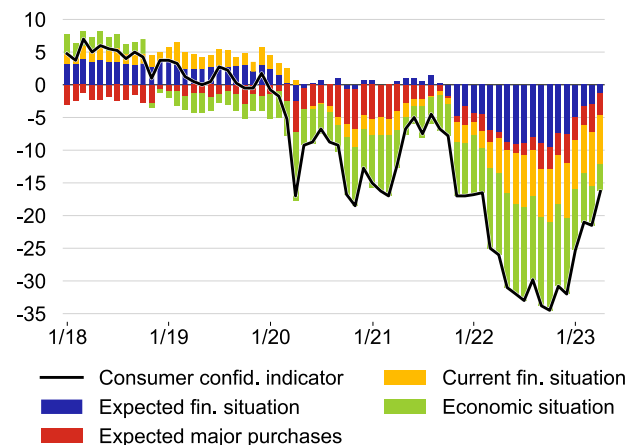


Chart C.16

Business confidence indicator

balance is difference in % between answers of enterprises expressing improvement and deterioration in expected and ongoing tendencies

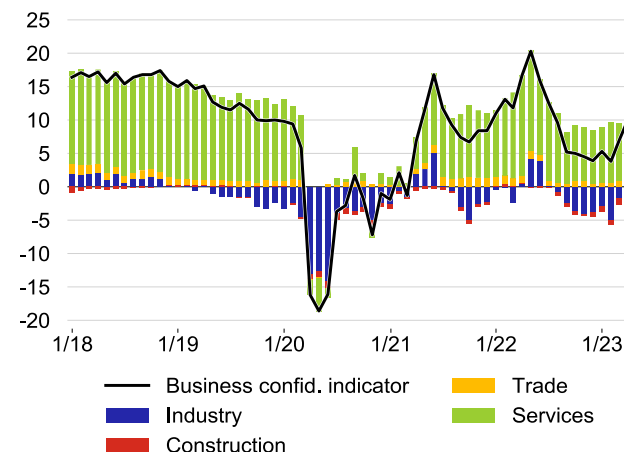


Chart C.17 (CZSO; Stat. survey of CNB and Confederation of Industry of CR)

Capacity utilisation

in %

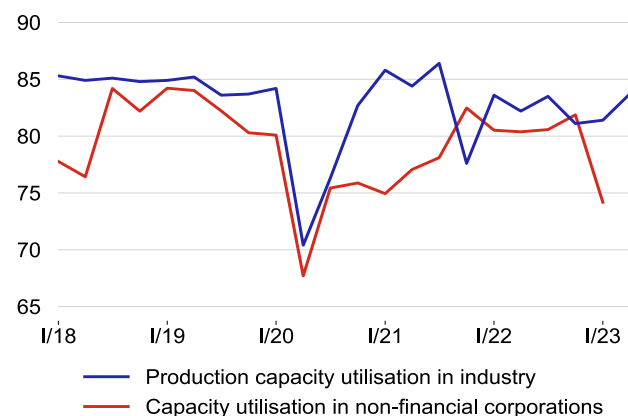


Table C.1

Expected indicators of FMIE, CF and corporations

1Y horizon; y-o-y changes in % unless otherwise indicated

	12/22	1/23	2/23	3/23	4/23
FMIE:					
CPI	7.0	4.8	3.8	3.7	3.5
CPI, 3Y horizon	2.7	2.6	2.7	2.6	2.6
Real GDP in 2023	0.0	0.0	0.2	0.2	0.1
Real GDP in 2024		2.4	2.6	2.7	2.6
Nominal wages in 2023	7.4	8.1	7.9	7.8	8.2
Nominal wages in 2024		5.5	5.9	6.0	6.0
CZK/EUR exchange rate (level)	24.7	24.4	24.3	24.2	24.1
2W repo rate (%)	6.0	5.9	5.8	5.6	5.6
1Y PRIBOR (%)	5.7	5.7	5.5	5.5	5.3
Corporations:					
CPI	10.2			8.9	
CPI, 3Y horizon	7.0			6.2	
CF:					
Real GDP in 2023	0.1	0.0	0.0	0.0	0.0
Real GDP in 2024		2.8	2.9	2.7	2.6
Nominal wages in 2023	7.6	7.5	7.7	8.1	8.4
Nominal wages in 2024		5.9	6.1	6.3	6.2
CZK/EUR exchange rate (level)	24.8	24.7	24.4	24.2	24.0
3M PRIBOR (%)	5.8	5.4	5.6	5.5	5.4

D — The labour market

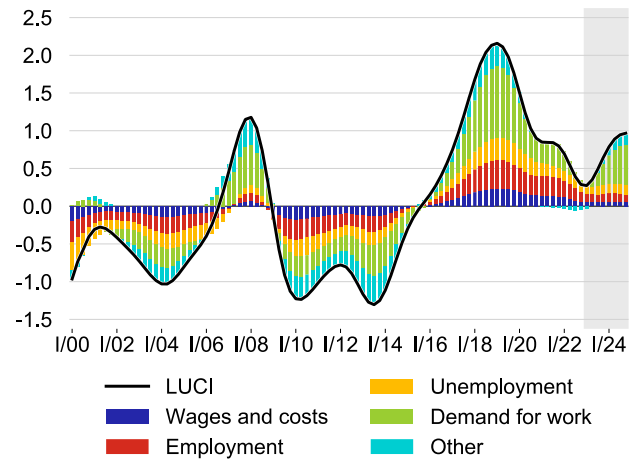
		2022	2023	2024	
Employment	y-o-y changes in % pp	1.6 (0.1)	0.1 (0.5)	0.1 (0.3)	The faster growth in employment mainly reflects the better economic situation and higher observed data at the end of 2022.
Unemployment (ILO)	% pp	2.4 (0.0)	2.5 (-0.2)	2.8 (-0.5)	The outlook for the general unemployment rate is lower due to its lower-than-expected increase and to an earlier and stronger economic recovery this year.
Average monthly nominal wage	y-o-y changes in % pp	6.5 (-0.1)	8.8 (0.4)	7.9 (0.9)	The higher wage growth reflects accelerated wage growth in late 2022 and early 2023, a better-than-expected condition of firms and an earlier renewal of growth in demand for labour.

Note: Changes compared to the previous forecast in brackets (a green label indicates an increase in value and a red label a decrease).

D — The labour market

Chart D.1
LUCI – Labour Utilisation Composite Index

index; standard deviations



Positive values mean that the labour market is above its long-term equilibrium level. Negative values indicate the opposite situation.

Chart D.2
Employment

y-o-y changes in %; Labour Force Survey methodology

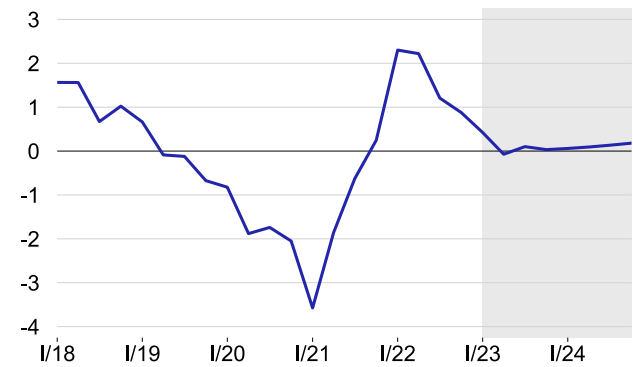


Chart D.3
Number of employees (full-time equivalent) – sectors

y-o-y changes in %; contributions in pp

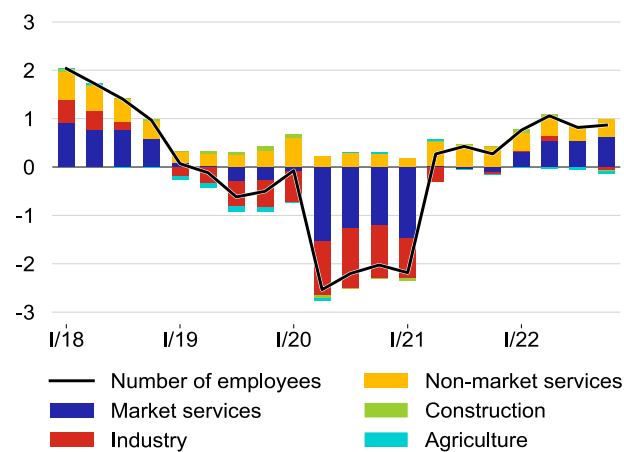


Chart D.4
Number of employees (full-time equivalent) – structure

y-o-y changes in %; contributions in pp

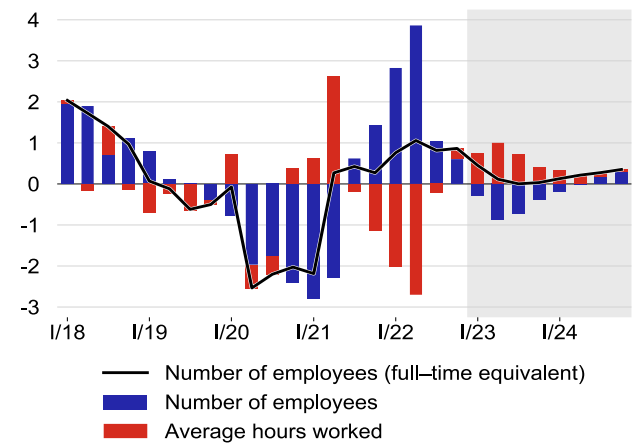


Chart D.5 (MLSA, CZSO, CNB forecast)
Unemployment

%; seasonally adjusted

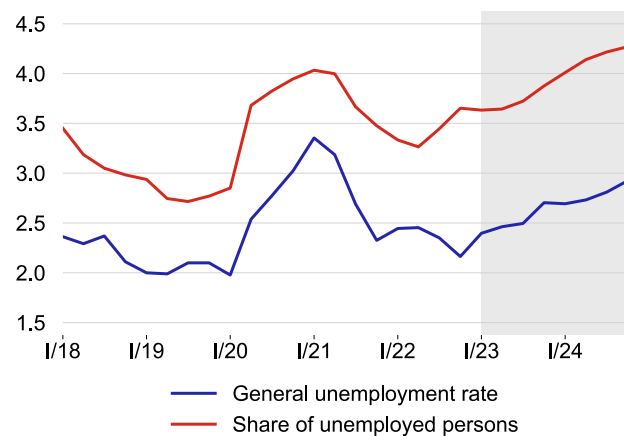
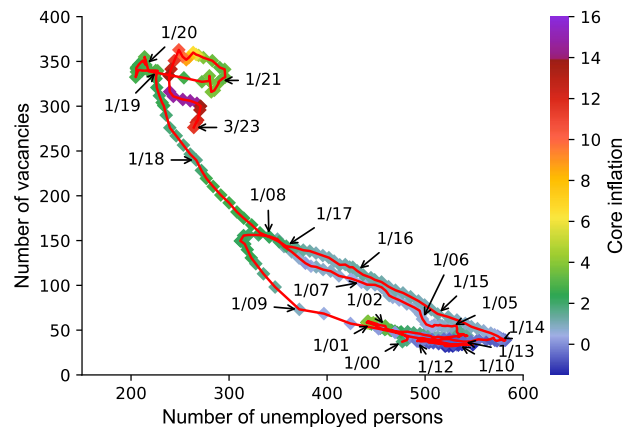


Chart D.6 (MLSA, CZSO)
Beveridge curve

numbers in thousands; seas. adjusted; core inflation: year on year in %



D — The labour market

Chart D.7
Average nominal wage

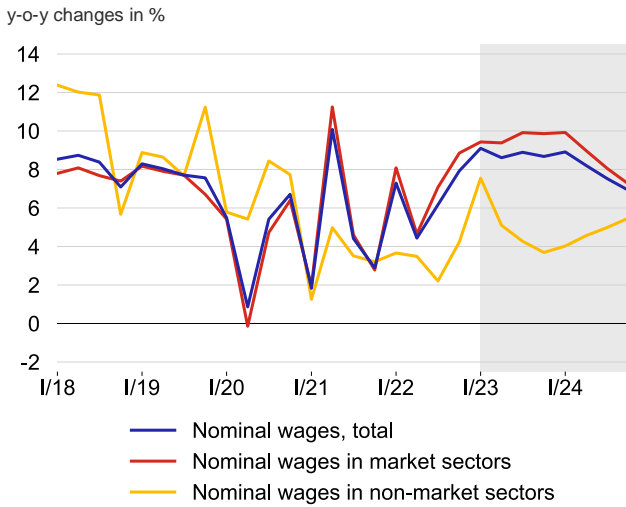


Chart D.8
Average wage and whole-economy productivity

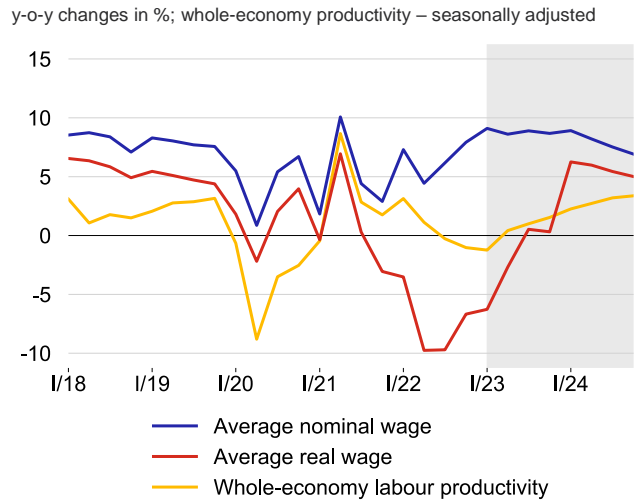


Chart D.9
Wage bill

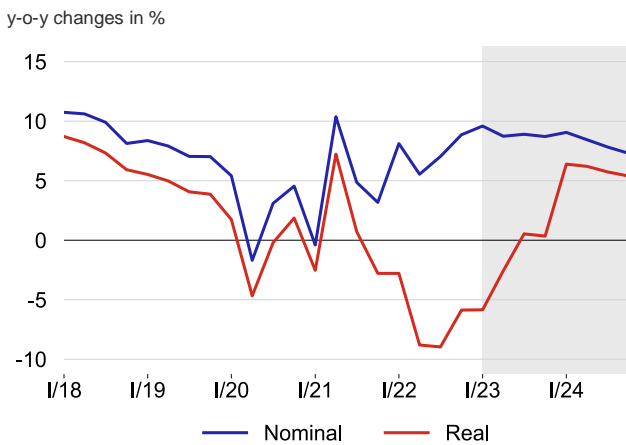


Chart D.10
Labour productivity in sectors

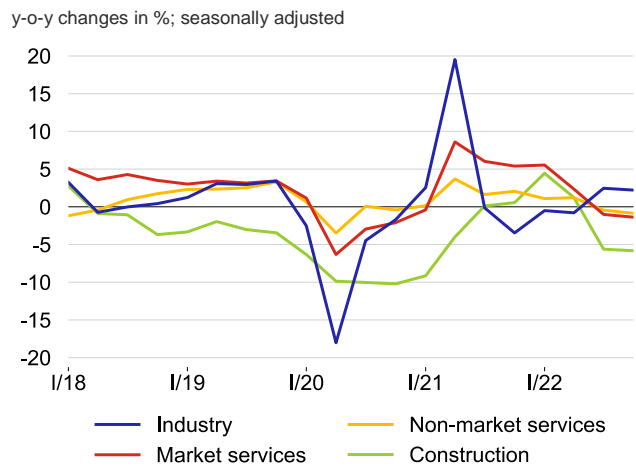


Chart D.11
Nominal unit labour costs

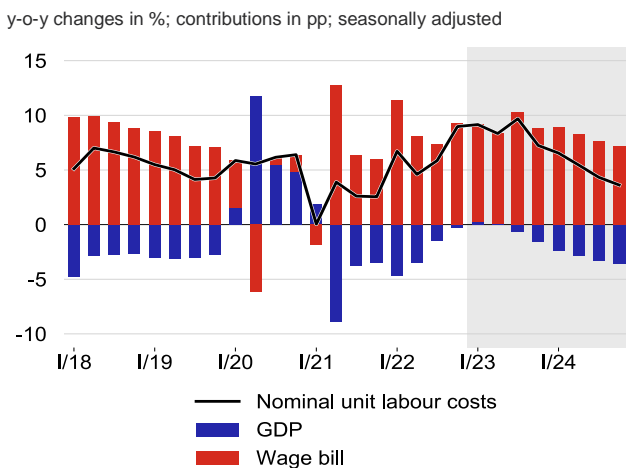
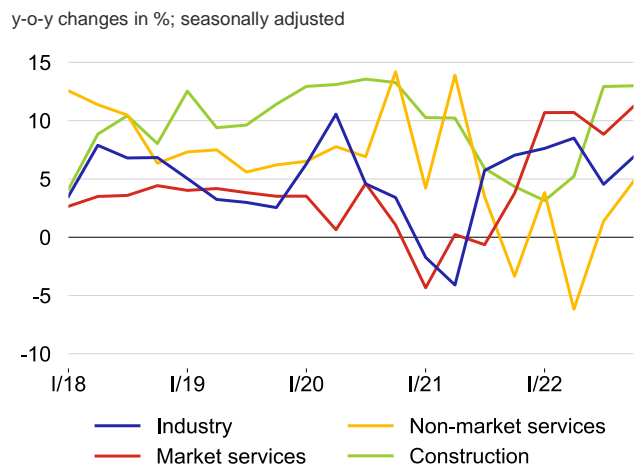


Chart D.12
Nominal unit labour costs in sectors



E — Inflation and other price areas

		2022	2023	2024	
Consumer prices	y-o-y changes in % pp	15.1 (0.0)	11.2 (0.4)	2.1 (0.0)	The upward revision of the inflation forecast this year is due mainly to higher food price inflation and, to a lesser extent, core inflation.
Administered prices	y-o-y changes in % pp	20.9 (0.0)	27.6 (-2.3)	1.3 (-4.0)	The administered price outlook for this year and especially next year is lower due to a drop in household energy prices below the government price caps, which has already begun.
Core inflation	% pp	13.2 (0.0)	8.2 (0.5)	3.5 (0.7)	The upward revision of the core inflation forecast is due to a slower-than-expected decline in foreign industrial producer prices and greater inflation pressures from the labour market.
Food prices (incl. alc. bev. and tobacco)	y-o-y changes in % pp	12.9 (0.0)	10.3 (2.0)	-0.2 (0.6)	The food price forecast for this year is higher due to higher observations at the start of this year amid increased margins of producers and retailers.
Fuel prices	y-o-y changes in % pp	33.6 (0.0)	-12.5 (2.4)	0.9 (2.5)	Fuel prices will decrease less than in the previous forecast this year due to the currently higher outlook for exchange prices of petrol.

Note: Changes compared to the previous forecast in brackets (a green label indicates an increase in value and a red label a decrease).

E — Inflation and other price areas

Chart E.1
Headline and monetary policy-relevant inflation

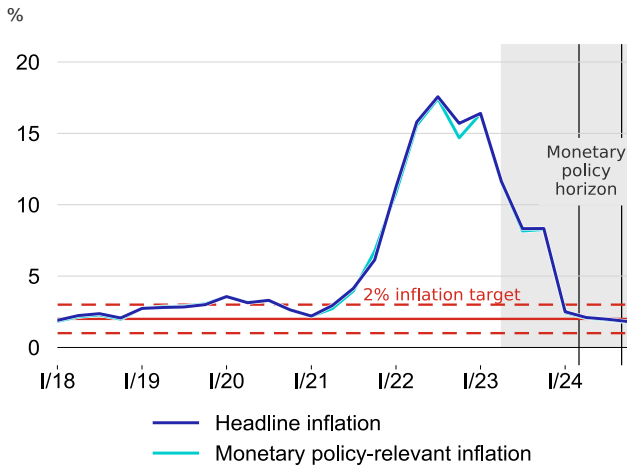


Chart E.2
Structure of inflation

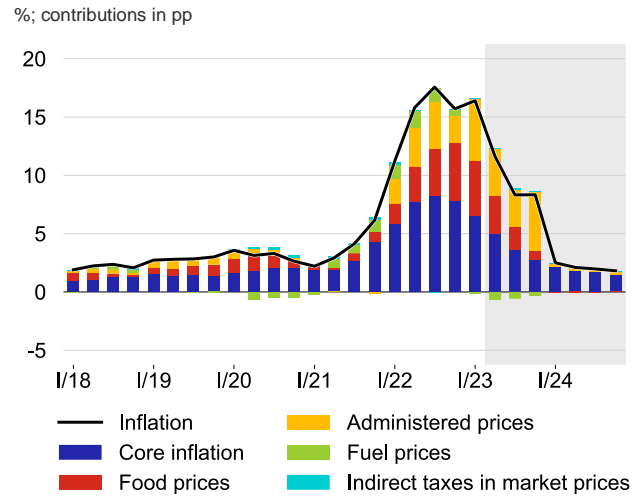


Chart E.3
Components of inflation

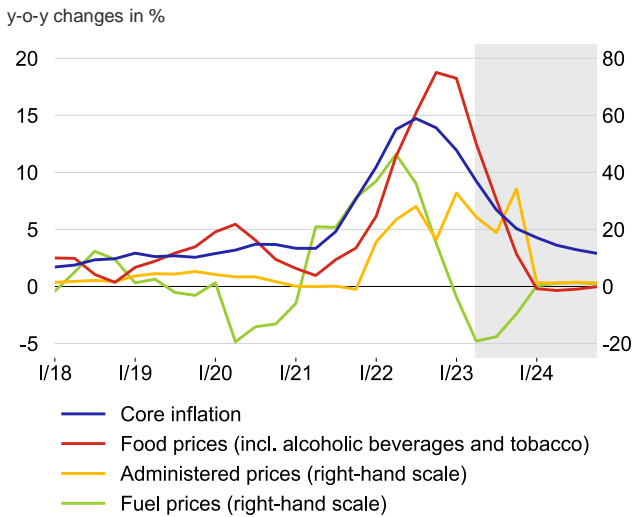


Chart E.4
Components of core inflation

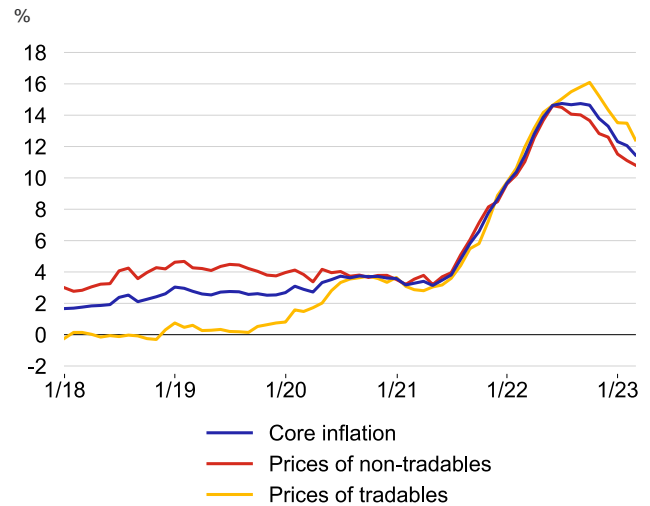


Chart E.5
Costs in consumer sector

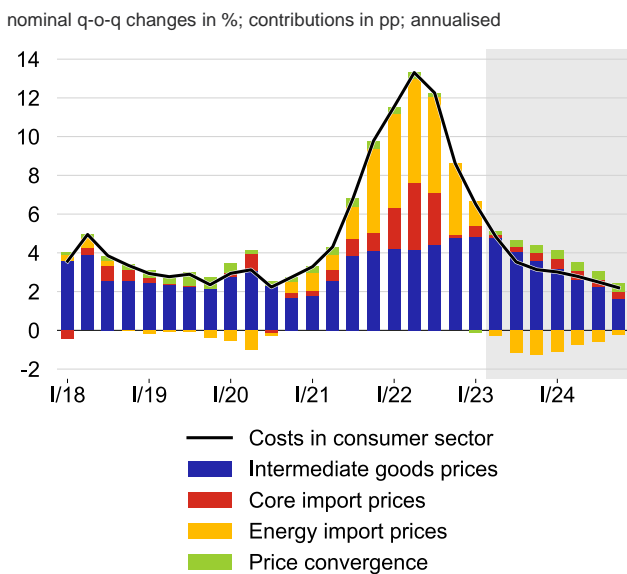
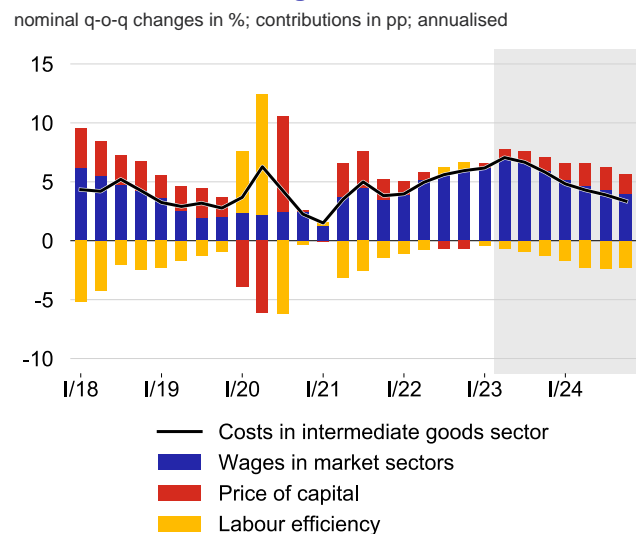


Chart E.6
Costs in intermediate goods sector



E — Inflation and other price areas

Table E.1

Forecast of administrative effects

average y-o-y changes in %; contributions to headline inflation in pp

	2021	2022	2023	2024
IMPACTS OF CHANGES TO INDIRECT TAXES	-0.05	0.44	0.08	0.05
ADMINISTERED PRICES ^{a)}	-0.2	-0.03	20.9	2.98
of which (main changes):				
electricity	-4.3	-0.16	15.1	0.60
natural gas	-4.7	-0.10	67.5	1.34
heat	0.2	0.00	19.7	0.28
water	4.4	0.03	5.3	0.04
health care	4.3	0.06	10.7	0.17
transport	2.4	0.03	9.9	0.11
			7.1	0.07
			4.0	0.03

a) including effects of indirect tax changes

Table E.2

Inflation in the next few months

year on year in %

	4/23	5/23	6/23
Headline inflation	13.2	11.6	10.1
Administered prices	25.9	24.4	22.8
First-round impacts of changes to ind. taxes	0.0	0.0	0.2
Core inflation	10.2	9.1	8.3
Food prices	15.2	12.3	10.1
Fuel prices	-15.9	-17.9	-23.6
Monetary policy-relevant inflation	13.2	11.5	10.0

Chart E.7

Import prices

y-o-y changes in %; contributions in pp

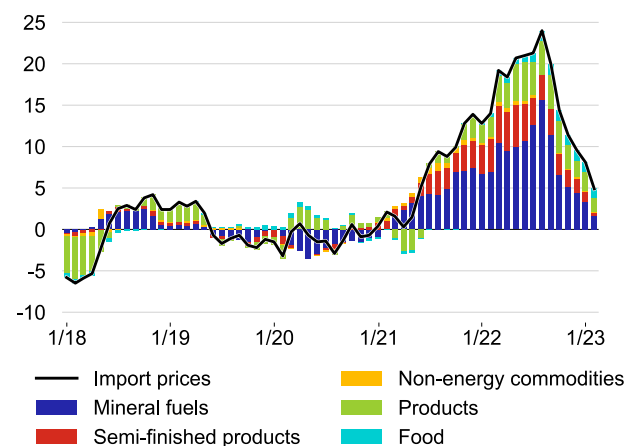


Chart E.8

Industrial producer prices

y-o-y changes in %; contributions in pp

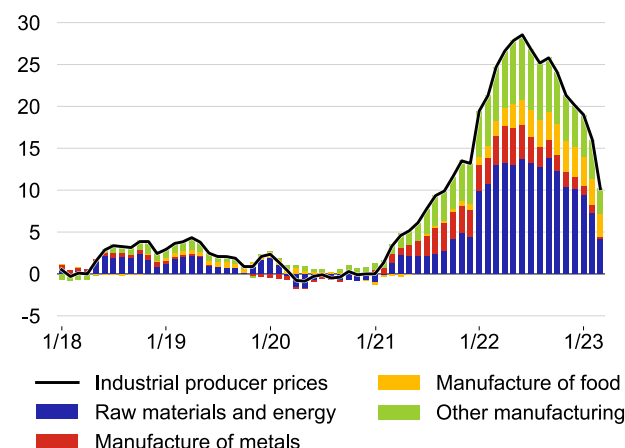


Chart E.9

Agricultural producer prices

y-o-y changes in %

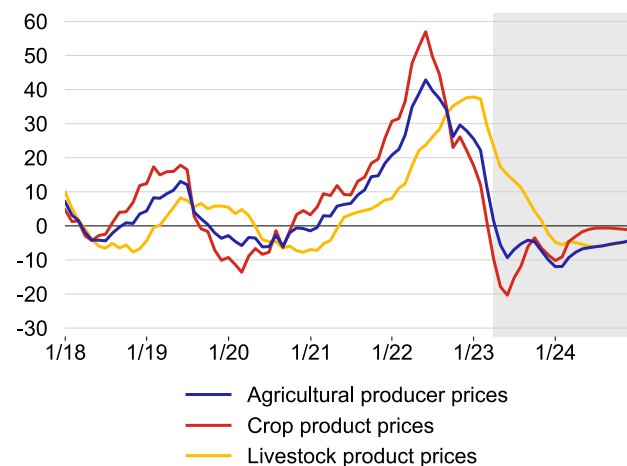
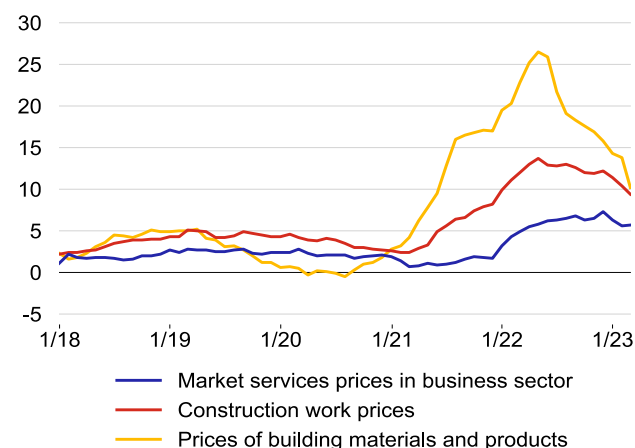


Chart E.10

Market services prices in the business sector and construction

y-o-y changes in %



E — Inflation and other price areas

Chart E.11

Inflation expectations at one-year horizon

sample of approximately 18 analysts and 150 corporations; %; 1Y horizon

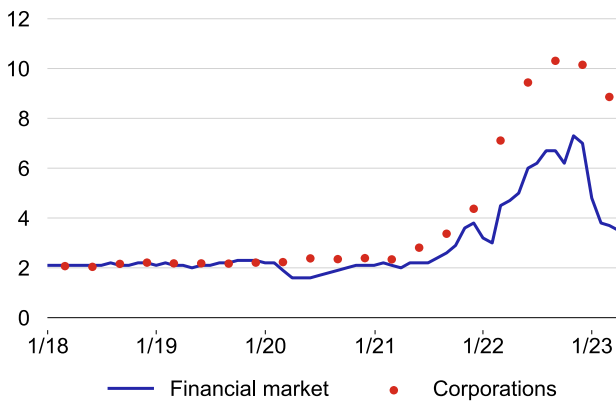


Chart E.12

Inflation expectations at three-year horizon

sample of approximately 18 analysts and 150 corporations; %; 3Y horizon

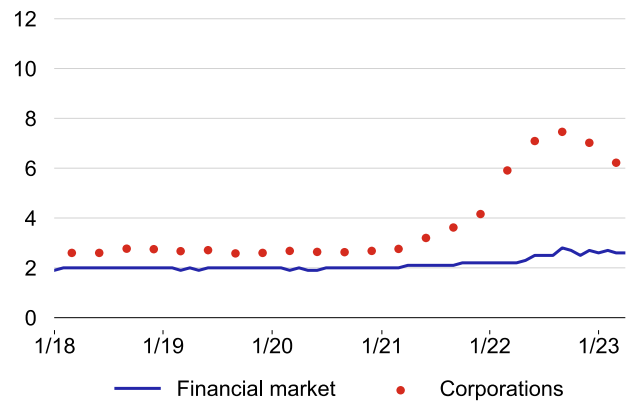


Chart E.13 (European Commission Business and Consumer Survey)

Inflation perceived by households

indicator of inflation perceived in last 12 months; sample of approximately 1,000 households; balance of answers; seasonally adjusted; expectations can take values from -100 to 100

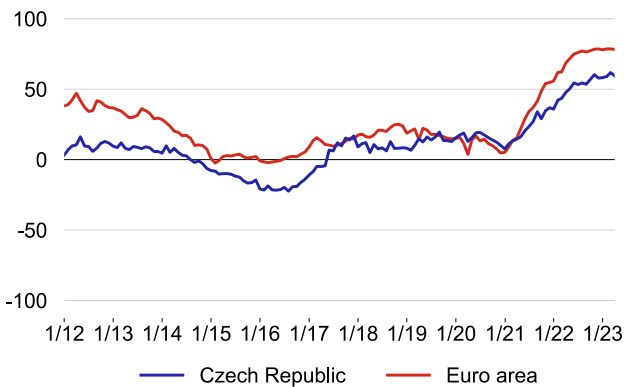


Chart E.14 (European Commission Business and Consumer Survey)

Inflation expected by households

indicator of expected inflation in next 12 months; sample of approximately 1,000 households; balance of answers; seasonally adjusted; expectations can take values from -100 to 100

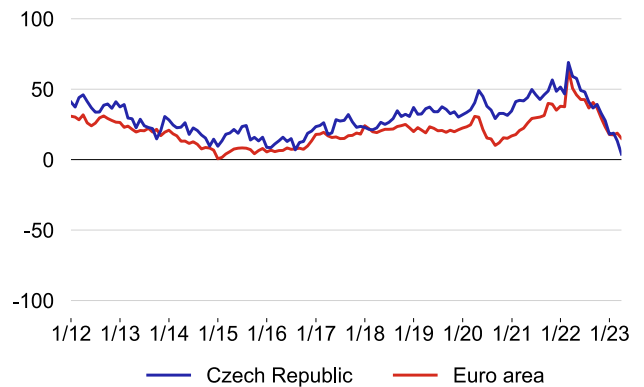
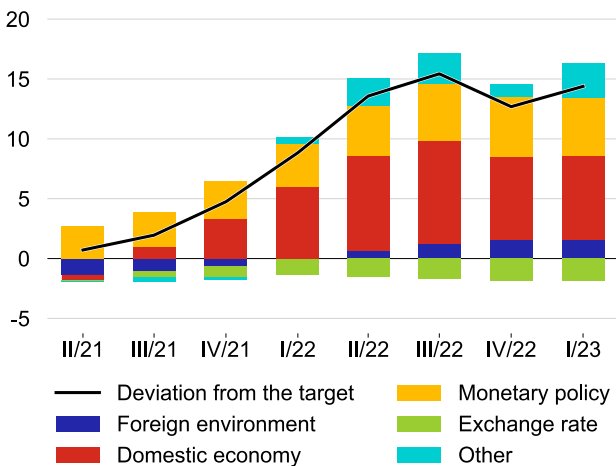


Chart E.15

Deviation of monetary policy-relevant inflation from CNB's 2% target

contributions in pp



F — Financial and monetary indicators

		2022	2023	2024	
Interest rate	3M PRIBOR in % pp	6.3 (0.0)	6.8 (-0.2)	4.6 (-0.2)	The market interest rate outlook is slightly lower compared with the winter forecast.
Exchange rate	CZK/EUR	24.6 (0.0)	23.7 (-0.8)	24.3 (-0.2)	The forecast expects the koruna to be stronger than in the previous projection.

Note: Changes compared to the previous forecast in brackets (a green label indicates an increase in value or a shift to a weaker koruna, while a red label indicates a decrease in value or a shift to a stronger koruna).

F — Financial and monetary indicators

Chart F.1
Interest rate forecast

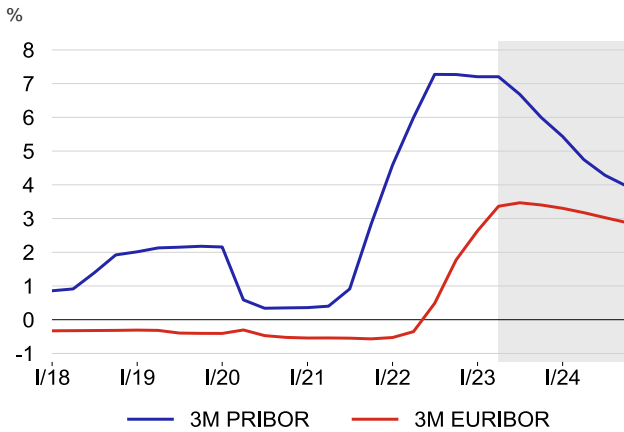


Chart F.2
Exchange rate forecast

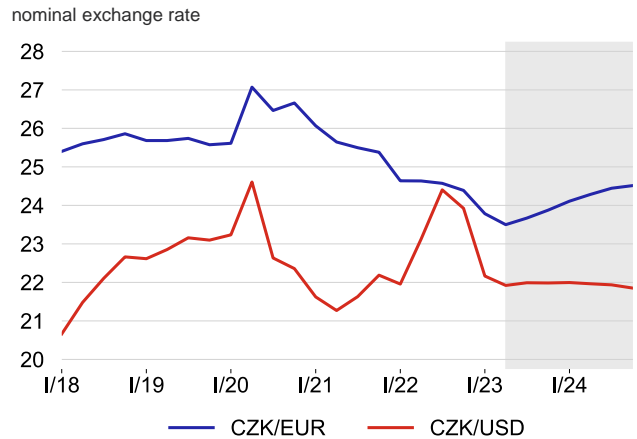


Chart F.3
Interest rates

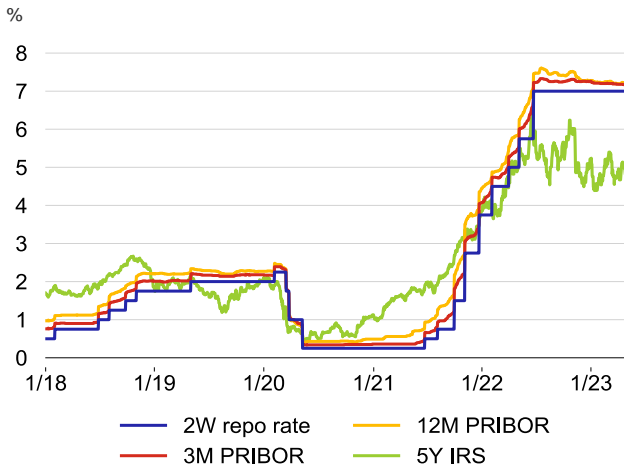


Chart F.4
Interest rate spread in Czech Republic

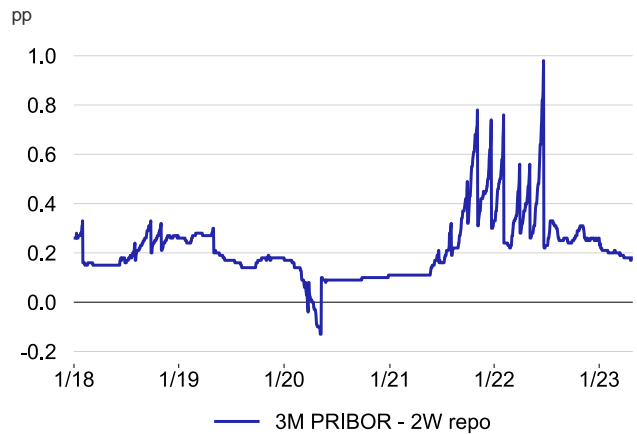


Chart F.5
Interest rate spread in Czech Republic

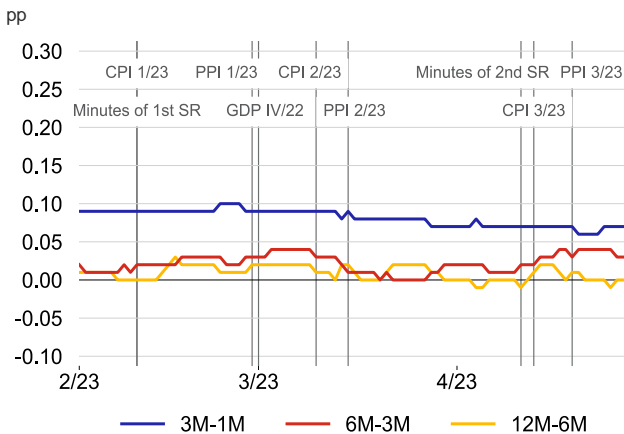
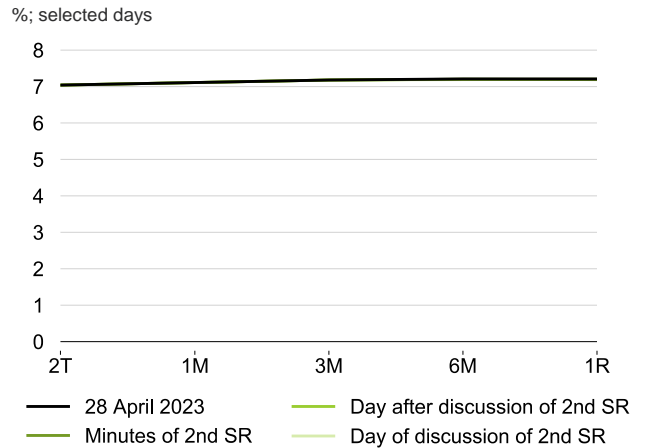


Chart F.6
PRIBOR yield curve



F — Financial and monetary indicators

Chart F.7
3M PRIBOR, FRA

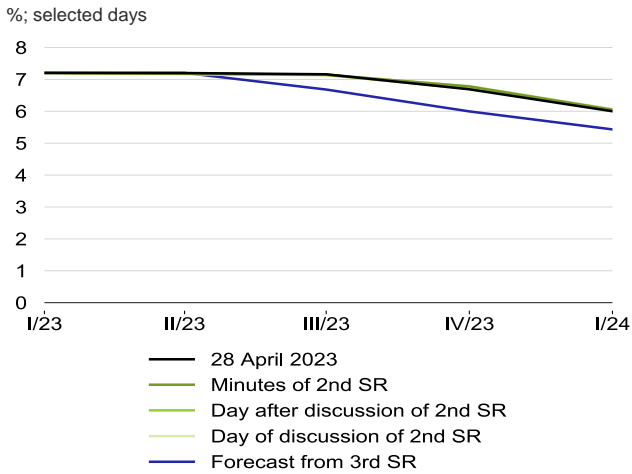


Chart F.8
IRS yield curve

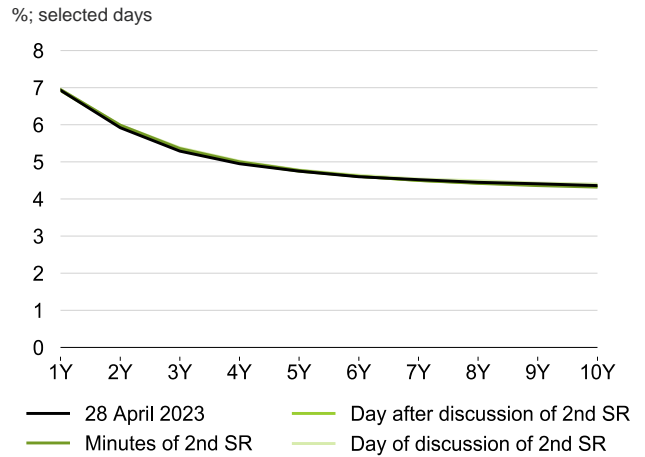


Chart F.9
Government bond yield curve

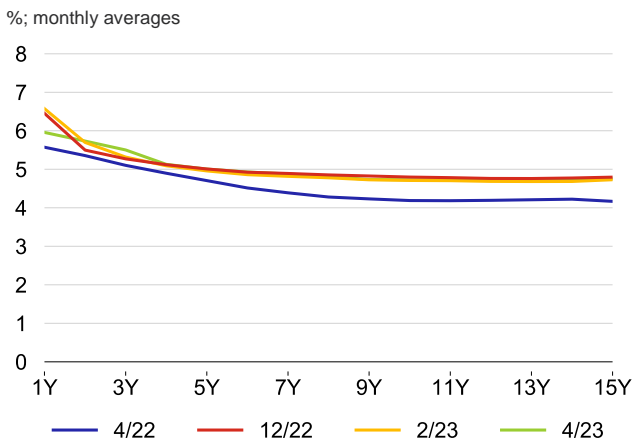


Chart F.10
Government bond yield curve

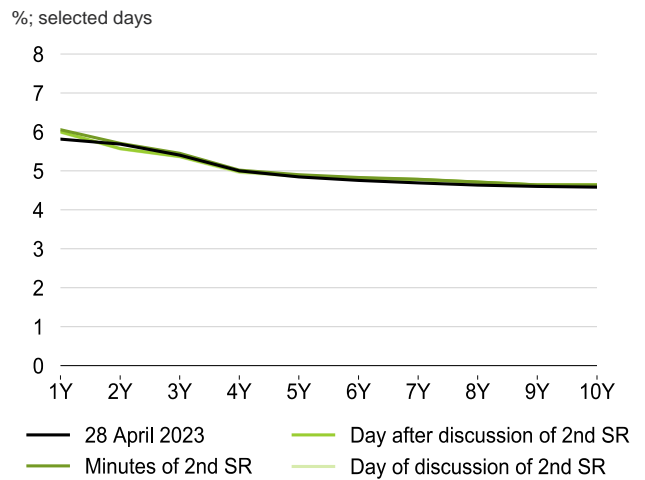


Chart F.11
Exchange rate

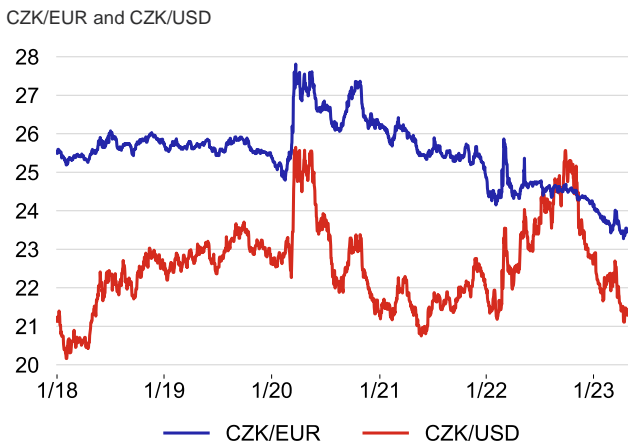
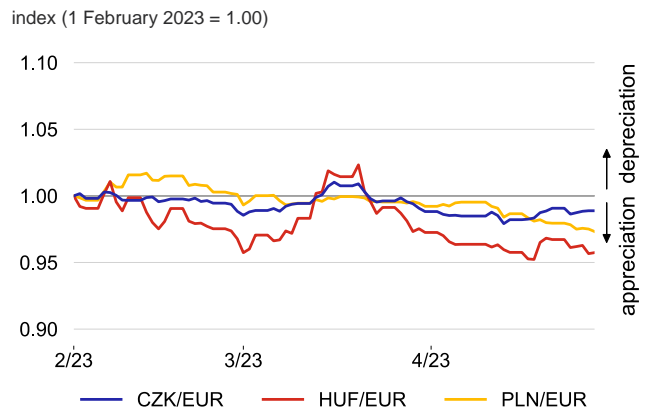


Chart F.12
Central European exchange rates



F — Financial and monetary indicators

Chart F.13

Current development of koruna exchange rate

nominal CZK/EUR exchange rate



Chart F.14

Expected change in koruna exchange rate

nominal CZK/EUR exchange rate at 1Y horizon; %

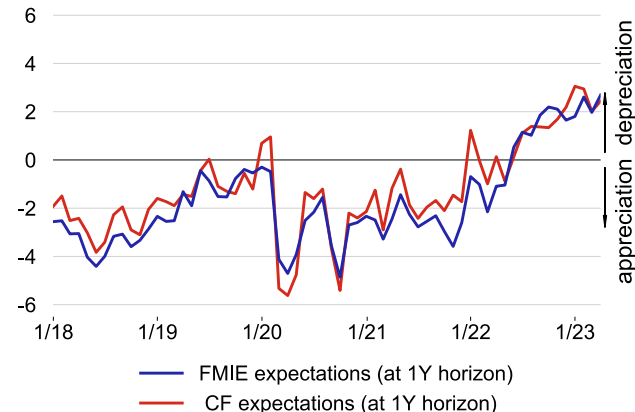


Chart F.15 (MF CR, CNB)

Volume of koruna assets of non-residents

CZK billions

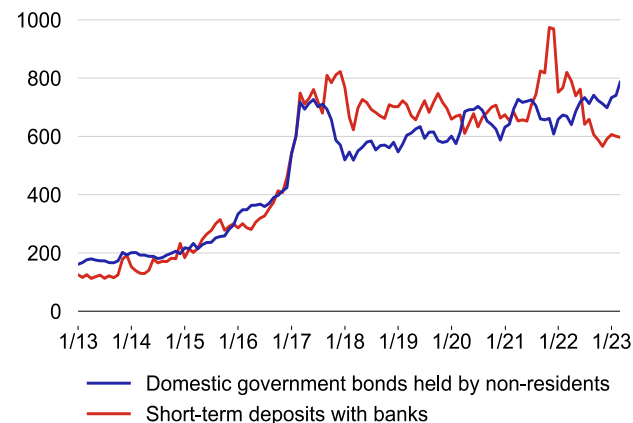


Chart F.16 (Statistical survey of CNB and Confederation of Industry of CR)

Hedging of exports against exchange rate risks

weighted mean in %

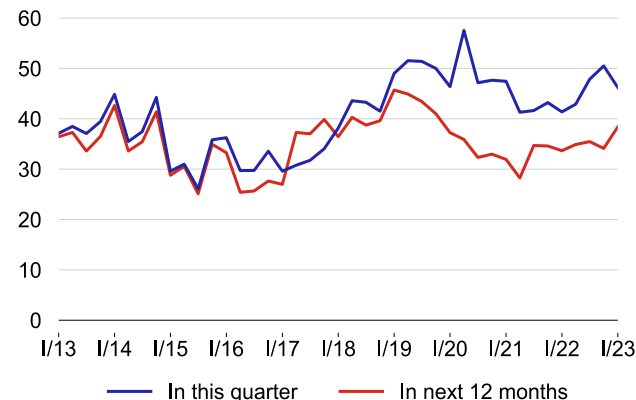


Chart F.17

Interest rate differentials

pp

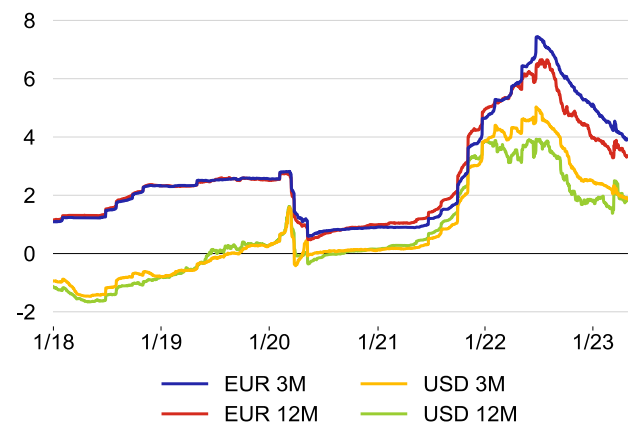
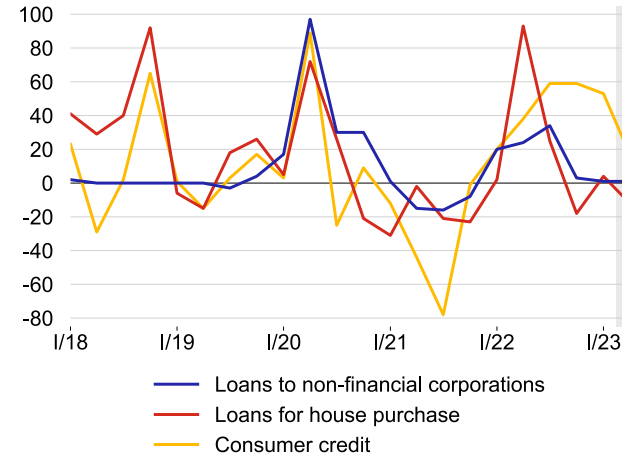


Chart F.18 (Bank Lending Survey, CNB)

Credit standards of banks

q-o-q changes; net market shares of banking market in %



The differential between interest rates on the Czech money market and rates in EUR and USD.

Positive (negative) values indicate a tightening (relaxing) of credit standards. Banks' expectations for the next quarter are shown in the grey area.

F — Financial and monetary indicators

Table F.1

Client interest rates on loans and deposits

new business unless otherwise indicated; %; changes in pp

	Interest rate		Change since		
	3/23	12/22	9/22	6/22	6/21
HOUSEHOLDS					
Mortgages	5.0	0.3	0.4	0.7	2.9
Mortgages with rate fixation 1–5 years	5.4	0.3	0.4	0.9	3.2
Mortgages with rate fixation 5–10 years	3.6	-0.2	-0.3	-0.4	1.5
Genuinely new mortgages	5.9	-0.1	0.0	0.9	3.8
Consumer credit	9.5	-0.2	-0.2	0.6	2.2
Deposits (outstanding amounts, total)	2.1	0.3	0.6	1.0	1.9
Overnight deposits	1.5	0.2	0.5	0.8	1.5
New deposits with agreed maturity	6.0	0.0	0.0	0.7	5.5
NON-FINANCIAL CORPORATIONS					
Total loans	8.9	-0.1	0.5	1.0	7.6
Small loans (up to CZK 30 million)	8.2	0.4	0.6	1.5	5.5
Large loans (over CZK 30 million)	9.1	-0.1	0.5	0.9	7.9
Genuinely new loans	9.1	0.0	0.5	1.0	7.8
Total outstanding loans	7.4	0.0	0.1	0.4	4.7
Deposits (outstanding amounts, total)	3.4	1.2	0.6	1.2	3.3
Overnight deposits	1.8	0.7	0.3	0.7	1.7
New deposits with agreed maturity	6.5	0.7	0.0	0.7	6.3

Chart F.19

Client interest rates in CZ and euro area

total credit costs as expressed by cost of borrowing; %

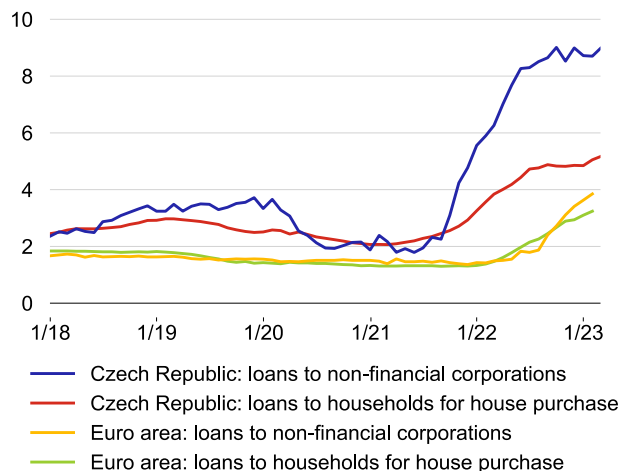


Chart F.20

Interest rates on bank loans

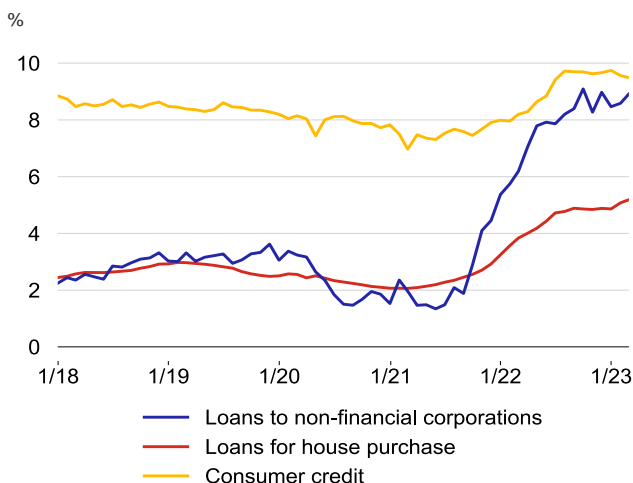


Chart F.21

Interest rates on bank deposits

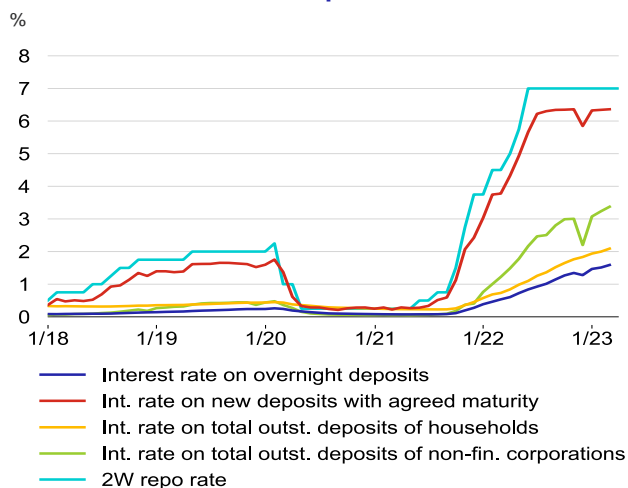


Chart F.22

Loans to private sector

annual rates of growth in %

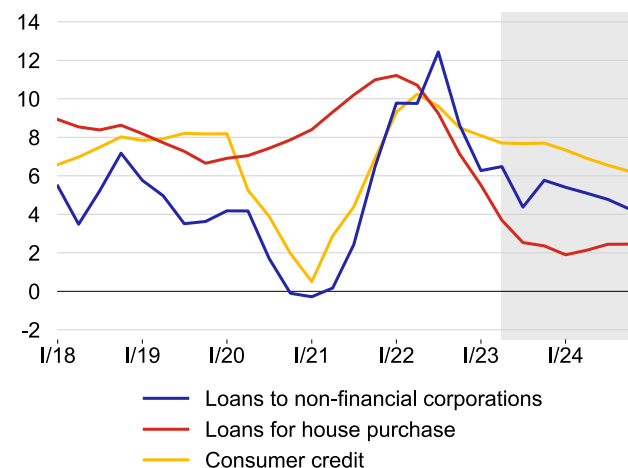
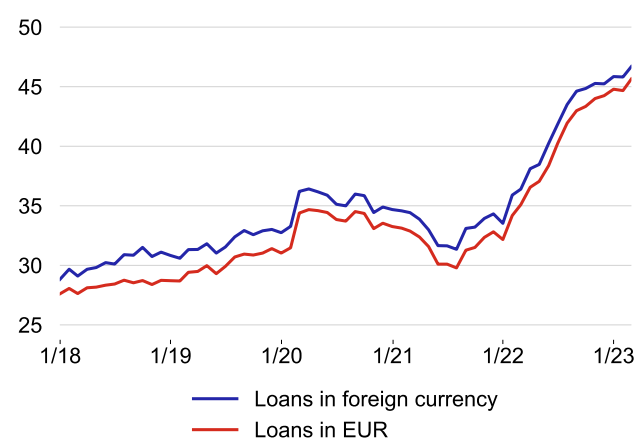


Chart F.23

Share of foreign currency loans in total loans

non-financial corporations; %

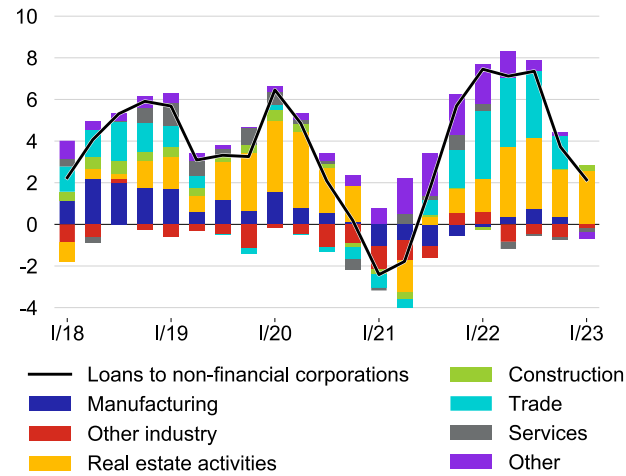


F — Financial and monetary indicators

Chart F.24

Loans to non-financial corporations

y-o-y changes in %; contributions in pp; end-of-quarter data



Other comprises agriculture and transport.

Chart F.25

Loans to households

annual rates of growth in %; contributions in pp; end-of-quarter data

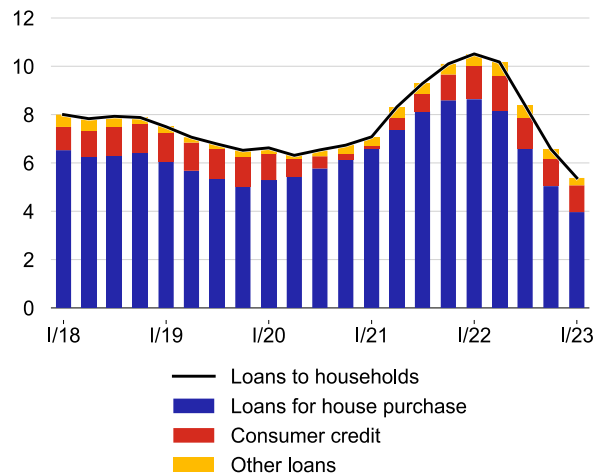


Chart F.26

New mortgages to households

genuinely new mortgages including increases; volumes in CZK billions; y-o-y changes in %

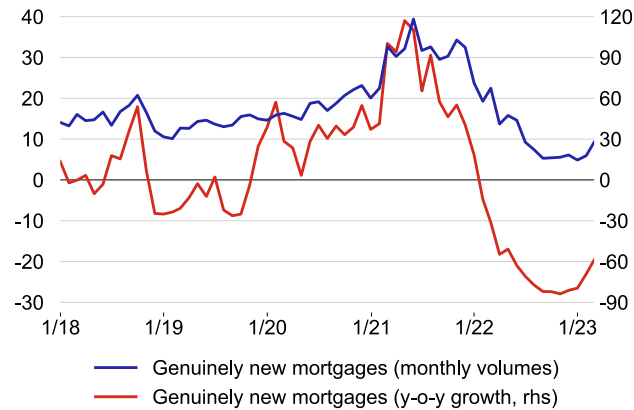


Chart F.27

Debt of NFCs and households

ratios to annualised nominal GDP in %

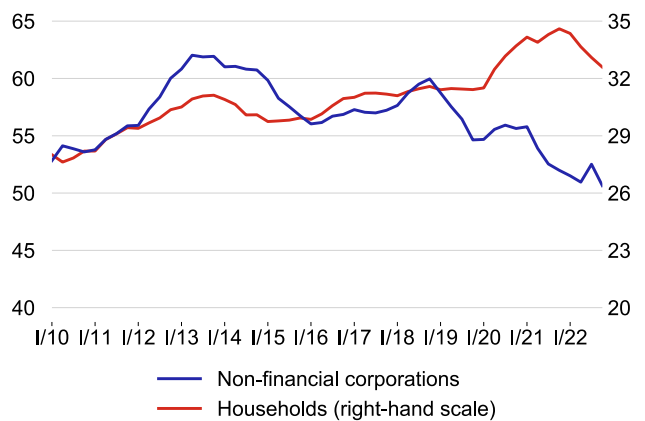


Chart F.28

Loans and monetary aggregates

annual rates of growth in %

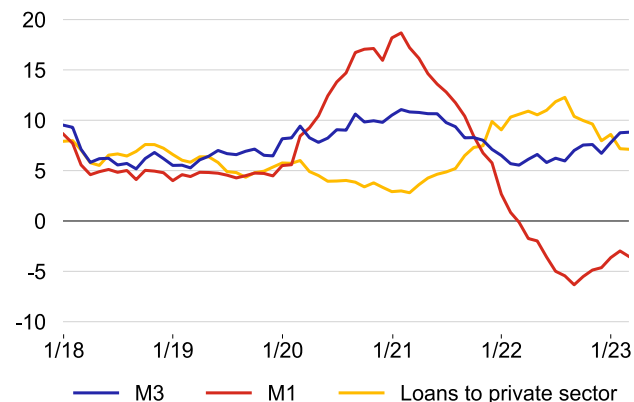
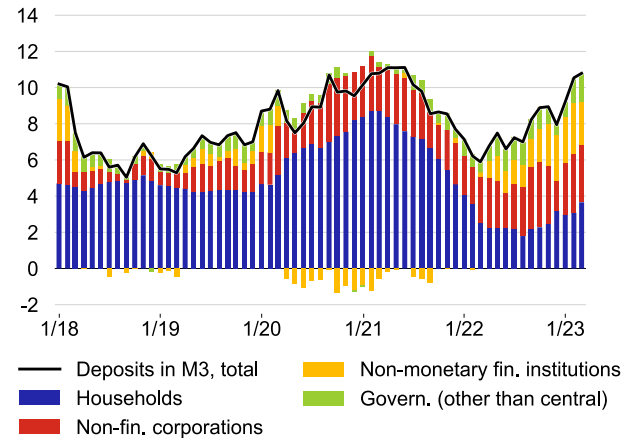


Chart F.29

Deposits included in M3

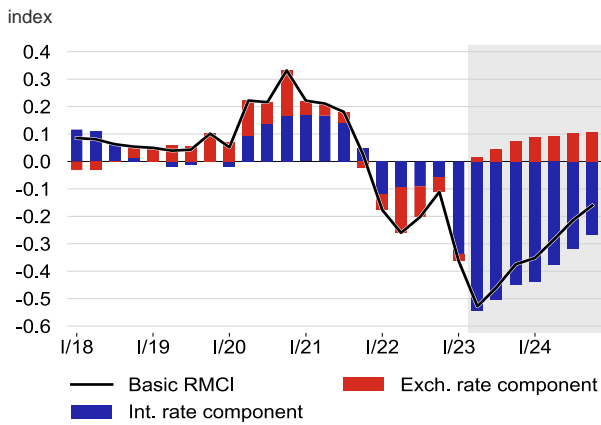
annual rates of growth in %; contributions in pp



F — Financial and monetary indicators

Chart F.30

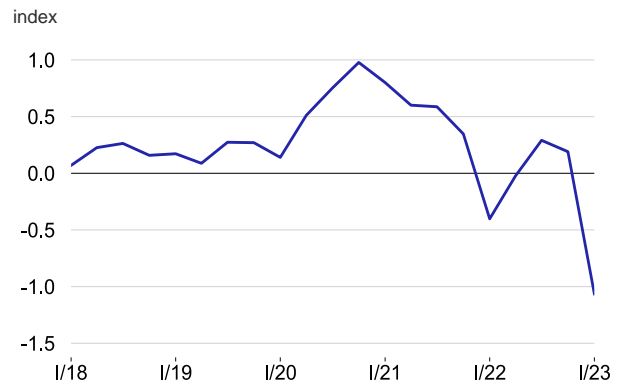
Real monetary conditions



Positive values correspond to easy monetary conditions and vice versa. The methodology for the RMCI index is given in the box [Index of monetary conditions for the Czech Republic](#) from the Inflation Report II/2015.

Chart F.31

Alternative index of real monetary conditions



An upward shift in value corresponds to the easing of monetary conditions and vice versa.

G — Fiscal developments

		2022	2023	2024	
Government budget balance	% of GDP pp	-3.6 (0.3)	-3.9 (0.6)	-2.5 (0.3)	The government budget balance is better due mainly to higher tax revenue as a result of the revised economic outlook and lower pension expenditure.
Government debt	% of GDP pp	44.1 (1.1)	44.0 (0.0)	44.2 (-0.6)	The nominal debt as a percentage of GDP is unchanged for this year and will be lower next year owing to a more favourable government deficit forecast.
Fiscal impulse	contr. to GDP growth pp	-0.3 (0.0)	0.0 (-0.1)	-0.4 (-0.1)	The fiscal impulse has been revised in the restrictive direction, mainly as a result of a smaller extraordinary increase in pensions in June.

Note: Changes compared to the previous forecast in brackets (a green label indicates an increase in value and a red label a decrease).

G — Fiscal developments

Table G.1

Fiscal forecast

% of nominal GDP

	2021	2022	2023	2024
Government revenue	41.4	41.0	40.5	40.3
Government expenditure	46.5	44.6	44.4	42.8
GOVERN. BUDGET BALANCE	-5.1	-3.6	-3.9	-2.5
of which: primary balance ^{a)}	-4.3	-2.5	-2.5	-1.1
ADJUSTED BUDGET BALANCE ^{b)}	-5.4	-3.7	-3.9	-2.7
Cyclical component ^{c)}	0.3	0.2	-0.1	0.0
Structural balance ^{c)}	-5.7	-3.9	-3.7	-2.7
Fiscal stance in pp ^{d)}	0.4	1.8	0.2	1.0
GOVERNMENT DEBT	42.0	44.1	44.0	44.2

a) government budget balance minus interest payments

b) CNB estimate, balance adjusted for extraordinary one-off operations (revenues from the sale of emission permits, expenditures on the (new) Green Savings Programme, realised guarantees and revenues from the sale of frequency bands to mobile operators, etc.).

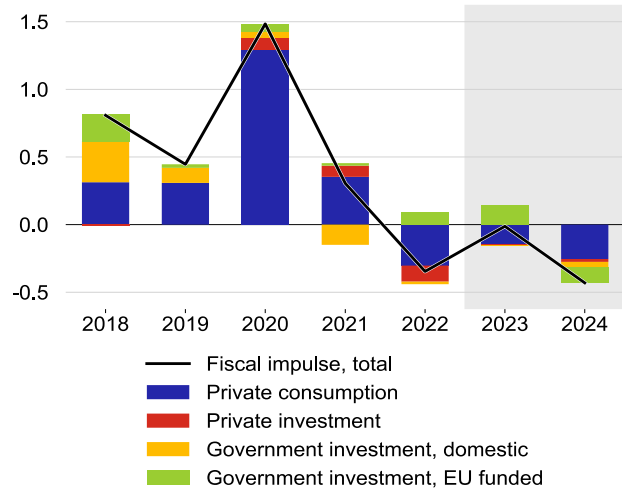
c) CNB estimate based on an aggregate method that defines the position of the cycle based on the output gap

d) year-on-year change in structural balance

Chart G.1

Fiscal impulse

contributions to GDP growth in pp



H — The balance of payments

		2022	2023	2024	
Current account	% of GDP pp	-6.1 (-0.4)	0.1 (0.6)	1.1 (0.6)	The current account balance is substantially better because of a considerably larger goods and services surplus, which will be partially offset by higher dividend outflows.
Capital account	% of GDP pp	0.1 (-0.3)	0.7 (-0.7)	0.6 (-0.1)	The capital account surplus is lower primarily this year as a result of expected smaller absorption of EU funds due to the deferral of payments beyond the forecast horizon.
Goods and services balance	CZK billions	-9 (18)	324 (98)	443 (108)	The revision is due to a higher goods surplus linked primarily with lower imports this year due to subdued domestic demand, lower energy prices and a stronger CZK/USD exchange rate.

Note: Changes compared to the previous forecast in brackets (a green label indicates an increase in value and a red label a decrease).

This section presents an update of the main balance of payments variables monitored when creating a forecast. More detailed information can be found once a year in the [Balance of Payments Report](#).

H — The balance of payments

Chart H.1

Ratios of balance of payments accounts to GDP

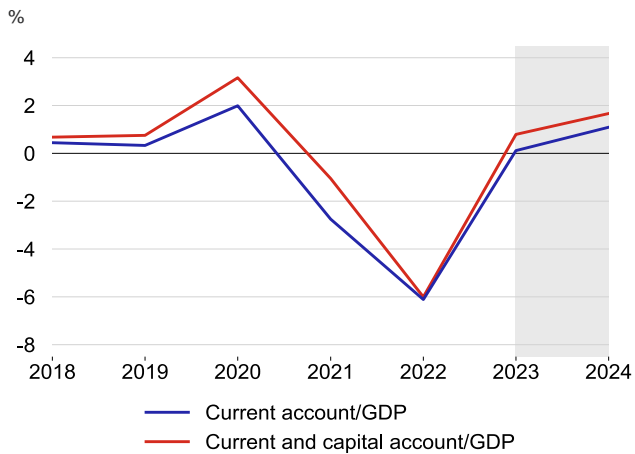


Table H.1

Balance of payments forecast

CZK billions

	2021	2022	2023	2024
A. CURRENT ACCOUNT	-168.0	-415.3	8.5	85.1
Goods	69.0	-99.3	214.8	318.5
Services	105.0	89.9	109.6	124.2
Primary income	-312.0	-374.8	-275.8	-317.6
Secondary income	-30.0	-31.1	-40.0	-40.0
B. CAPITAL ACCOUNT	103.8	7.4	50.0	45.0
C. FINANCIAL ACCOUNT^{a)}	-40.0	-415.1	-200.0	-120.0
Direct investment	-28.5	-172.4	-140.0	-140.0
Portfolio investment	75.2	331.3	-40.0	40.0
Financial derivatives	-58.2	-37.7		
Other investment	-324.5	-229.2	-20.0	-20.0
Reserve assets	296.1	-307.1		

a) forecast excluding operations of banking sector, CNB and financial derivatives

Chart H.2

Direct investment structure

CZK billions

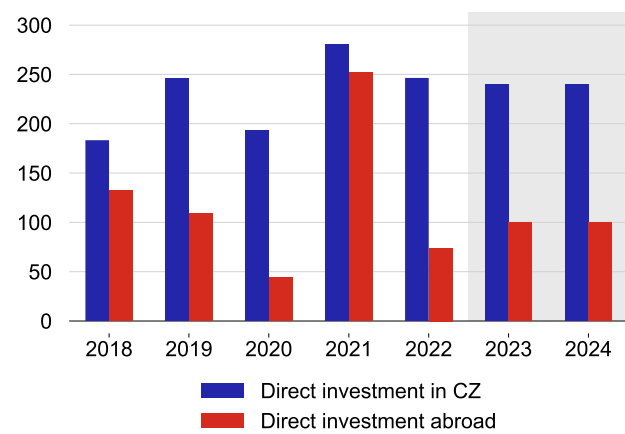
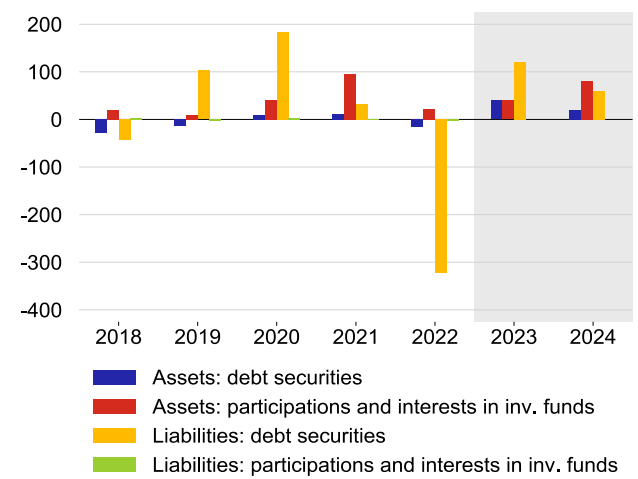


Chart H.3

Portfolio investment structure

CZK billions



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