

# Quarterly Report

July-September 2023

November 29, 2023



BANCO DE MÉXICO®

During the period analyzed by this Report, Banco de México continued facing a complex and uncertain environment when conducting monetary policy.

Externally

- **Inflation** continued **decreasing**; nevertheless, it remains at **elevated levels**.
- **Economic activity expanded** with a marked **heterogeneity**.
- Tighter **financial conditions**.

Domestically

- **Disinflation continued** in Mexico.
- **Risks to inflation** remain **biased to the upside**.
- **Robust economic activity**.

Monetary policy

- The Governing Board considered it necessary to **keep** the **reference rate unchanged at 11.25%**.
- In its last policy decision, it deemed that it will be necessary to **continue maintaining the reference rate at its current level for some time** in order to attain an orderly and sustained convergence of inflation to the 3% target.

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## **1 External conditions**

## **2 Current situation of the Mexican economy**

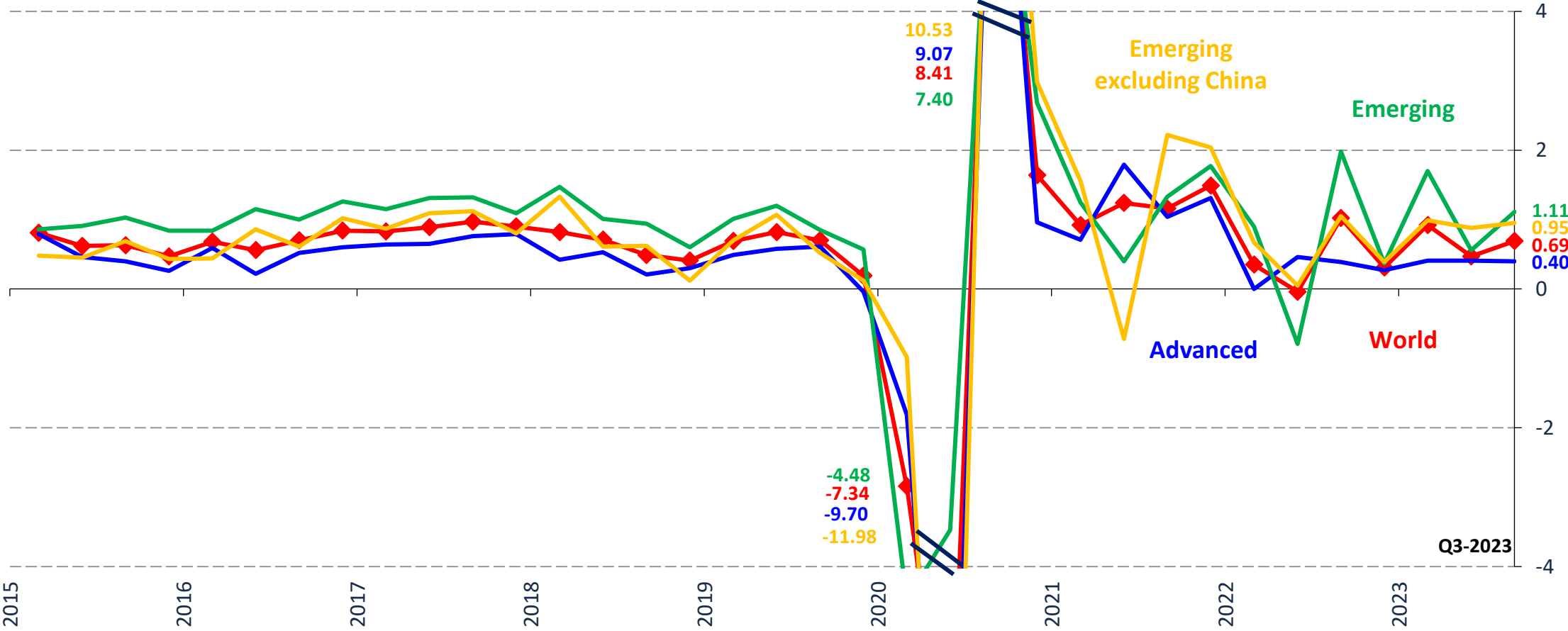
## **3 Inflation**

## **4 Monetary policy**

## **5 Forecasts and final remarks**

In Q3-2023, world economic activity expanded at a higher rate than in the previous quarter, with a marked heterogeneity across countries.

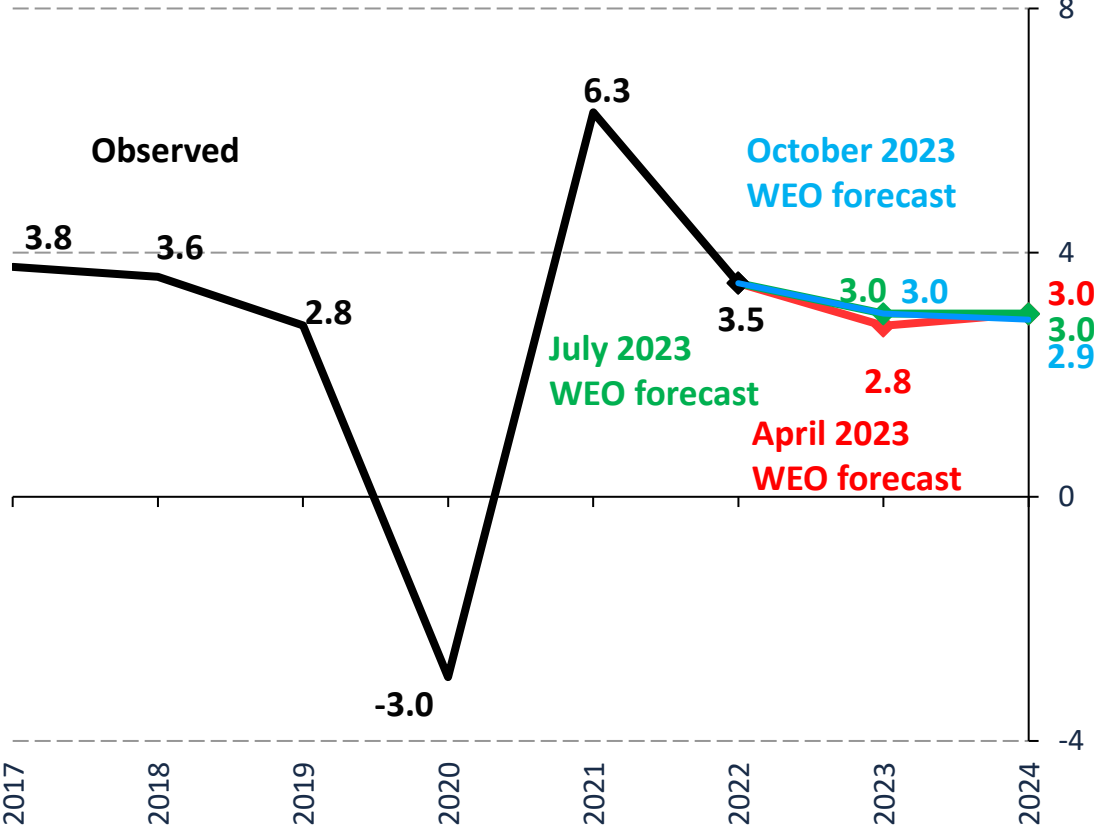
### Real GDP growth Quarterly % change, s. a.



s. a. / Seasonally adjusted figures.  
 Note: The sample of countries used for the calculation represents 85.4% of world GDP adjusted for purchasing power parity. Forecasts are used for some countries in the sample for Q3-2023. The range of the chart was reduced to facilitate its reading. Figures correspond to the minimum and maximum levels of the indicators that are not displayed in the chart.  
 Source: Prepared by Banco de México with information from Haver Analytics and J.P. Morgan.

For 2023 as a whole, forecasts from international organizations continue pointing to a slower rate of growth in global economic activity in relation to 2022. Growth in 2024 is expected to be similar to 2023.

**World GDP growth forecast**  
Annual % change



**GDP growth forecast**

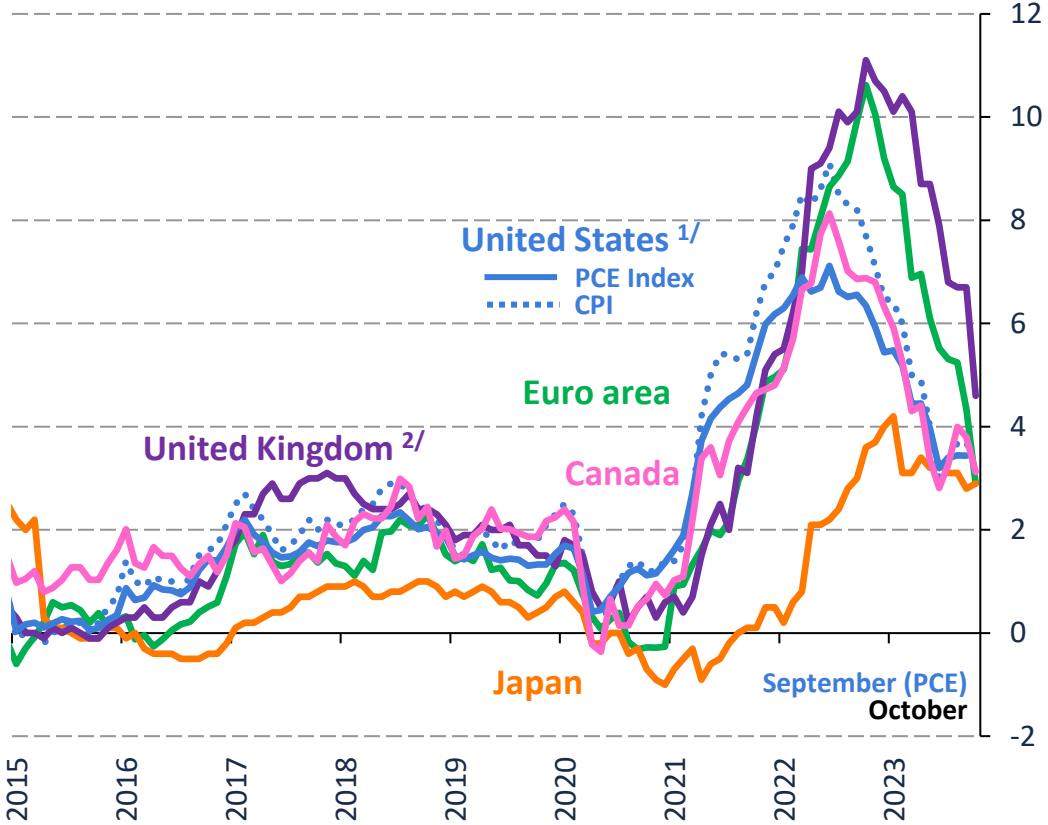
	WEO October 2023 Annual % change			Change from WEO July 2023 percentage points	
	2022	2023	2024	2023	2024
<b>World</b>	3.5	3.0	2.9	0.0	-0.1
<b>Advanced</b>	2.6	1.5	1.4	0.0	0.0
United States	2.1	2.1	1.5	0.3	0.5
Euro area	3.3	0.7	1.2	-0.2	-0.3
Japan	1.0	2.0	1.0	0.6	0.0
United Kingdom	4.1	0.5	0.6	0.1	-0.4
<b>Emerging</b>	4.1	4.0	4.0	0.0	-0.1
Excl. China	4.6	3.5	3.9	0.1	0.0
Mexico	3.9	3.2	2.1	0.6	0.6
China	3.0	5.0	4.2	5.0	4.2
India	7.2	6.3	6.3	0.2	0.0
Brazil	2.9	3.1	1.5	1.0	0.3

Note: Data for 2022 correspond to estimates from the International Monetary Fund in the World Economic Outlook October 2023.  
Source: International Monetary Fund (IMF), World Economic Outlook April, July and October 2023.

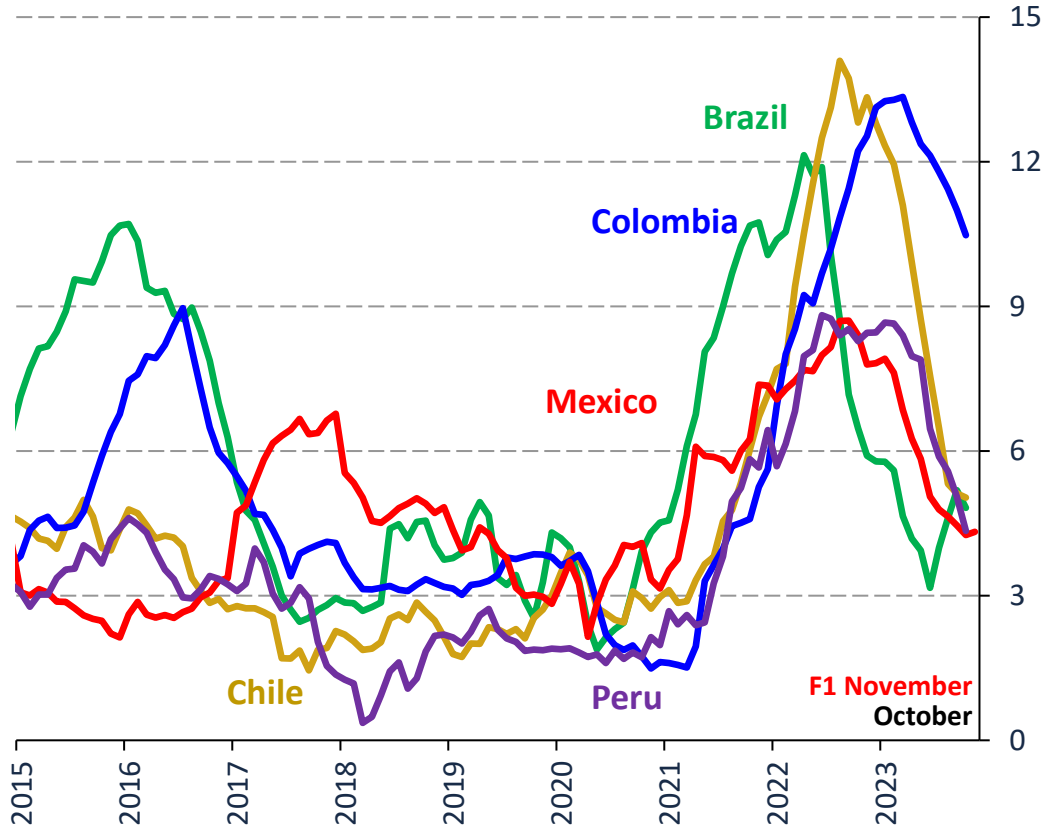
Although headline inflation decreased in most major economies, it remained above their respective central banks' targets.

### Headline price index Annual % change

#### Advanced economies



#### Emerging economies in Latin America



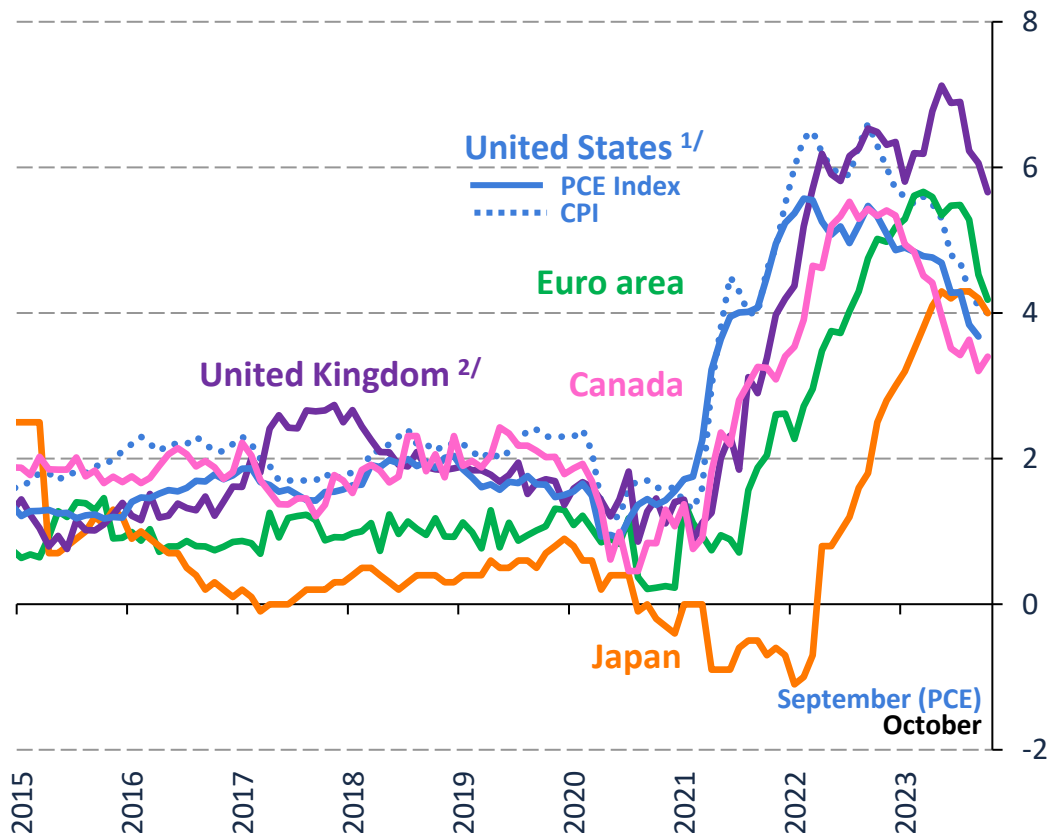
1/ The solid line refers to the Personal Consumption Expenditure Price Index (PCE) and the dotted line shows the Consumer Price Index (CPI). 2/ The harmonized index is used.  
Source: Bureau of Economic Analysis, Bureau of Labor Statistics, Eurostat, Bank of Japan, Office for National Statistics of the UK and Statistics Canada.

Source: INEGI and corresponding national statistics offices.

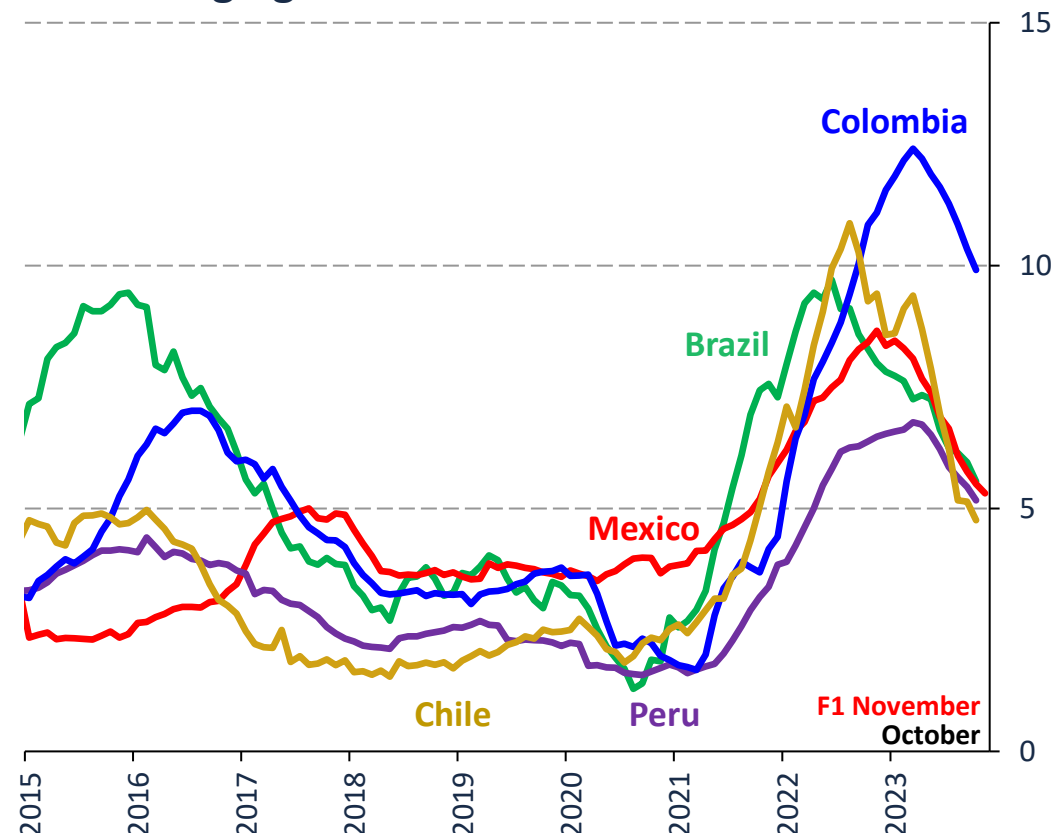
Core inflation continued decreasing during the reported period. However, it has decreased less than headline inflation.

### Core Price Index Annual % change

#### Advanced economies



#### Emerging economies in Latin America

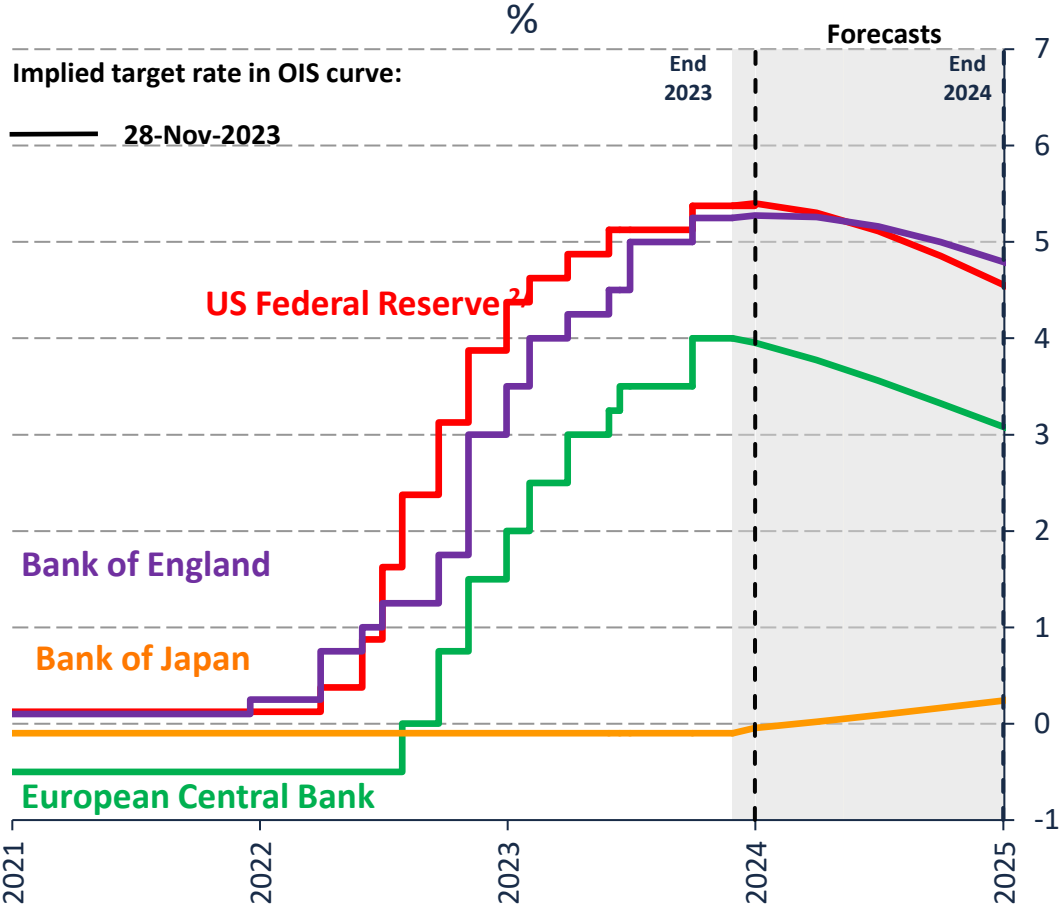


1/ The solid line refers to the Personal Consumption Expenditure Price Index (PCE) and the dotted line shows the Consumer Price Index (CPI). 2/ The harmonized index is used.  
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Source: INEGI and corresponding national statistics offices.

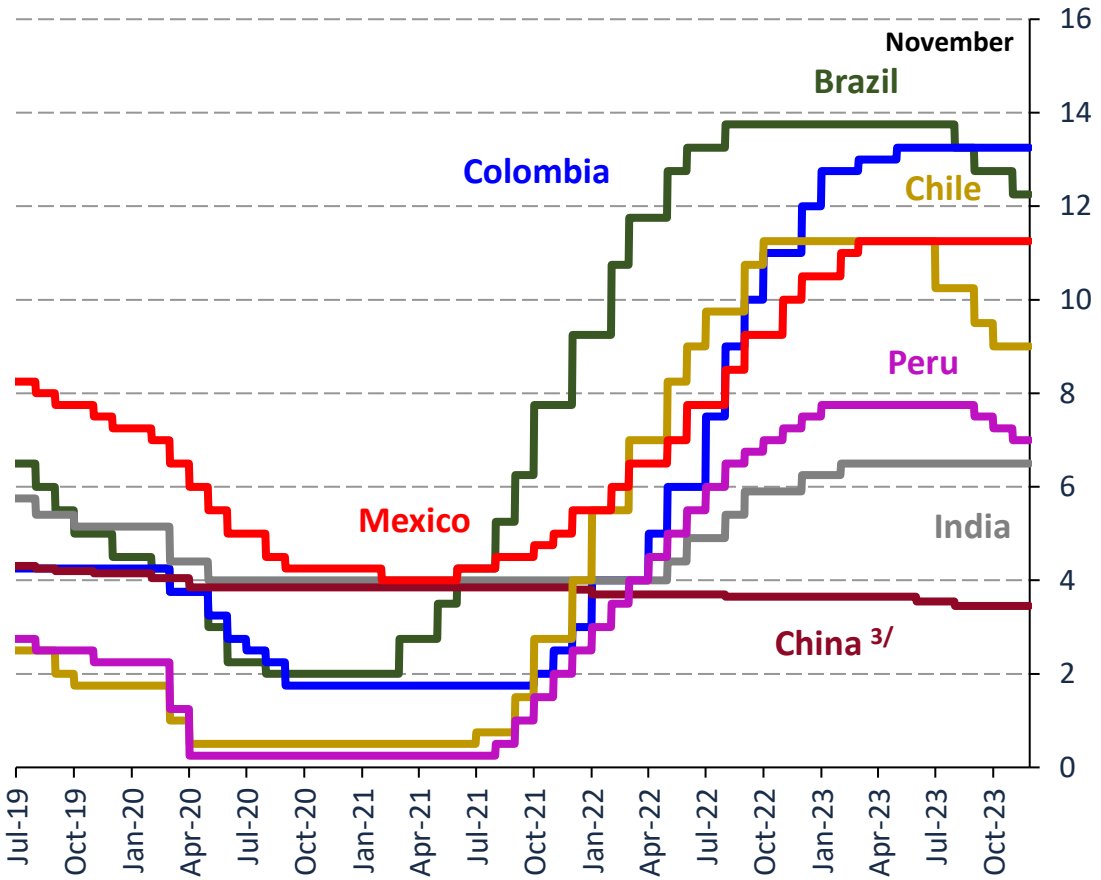
During the reported period, central banks adjusted their monetary policy rates in a heterogeneous manner. Given the complexity of the inflationary outlook, they expect these rates to remain at high levels for an extended period.

Reference rates and implied trajectories in OIS curves in advanced economies <sup>1/</sup>



1/ OIS: Fixed-for-floating swap where the fixed interest rate is the overnight effective reference rate. 2/ Data for the observed federal funds rate corresponds to the average between the lower and upper bounds of the target range. Source: Prepared by Banco de México with data from Bloomberg.

Reference rates in emerging economies %



3/ For China, the 1-year Loan Prime Rate (LPR) is used. Source: Haver Analytics.



In financial markets, from August until the end of October, the US dollar appreciated, financial conditions tightened, and long-term interest rates increased. Later, in November, these movements partially reversed.

US dollar index DXY <sup>1/</sup>  
Index



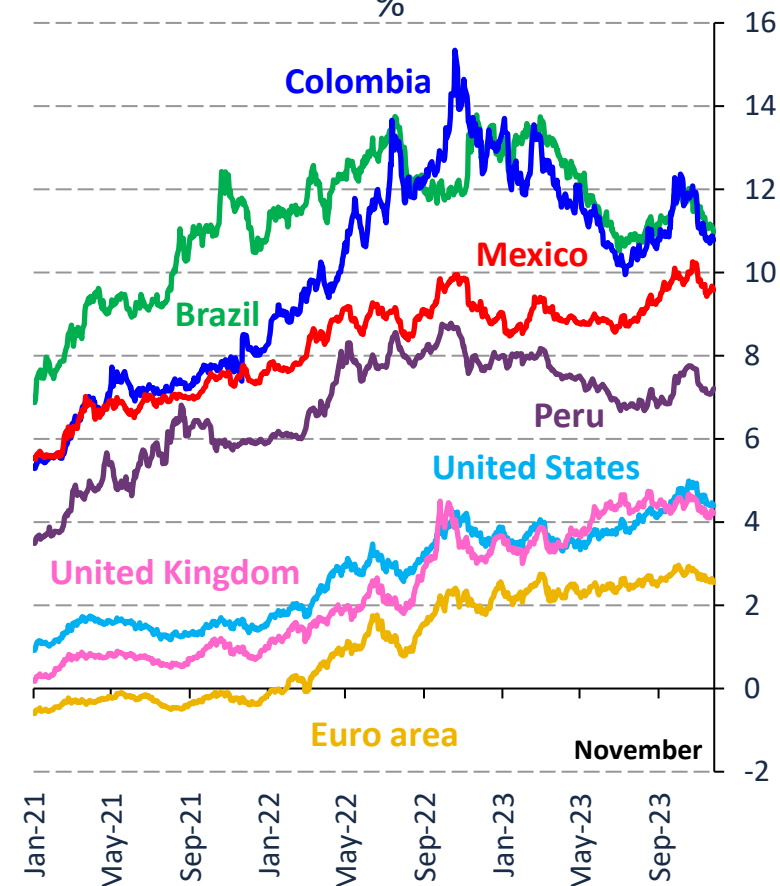
<sup>1/</sup> DXY: Refers to the US dollar index calculated by the Intercontinental Exchange (ICE) as a weighted average of the nominal exchange rate of six currencies: euro, Japanese yen, British pound, Canadian dollar, Swedish krona, and Swiss franc.  
Source: Bloomberg.

Global financial conditions index  
Index



Source: Goldman Sachs.

10-year government bond nominal  
interest rates  
%



Source: Prepared by Banco de México with data from Bloomberg and Proveedor Integral de Precios (PiP).

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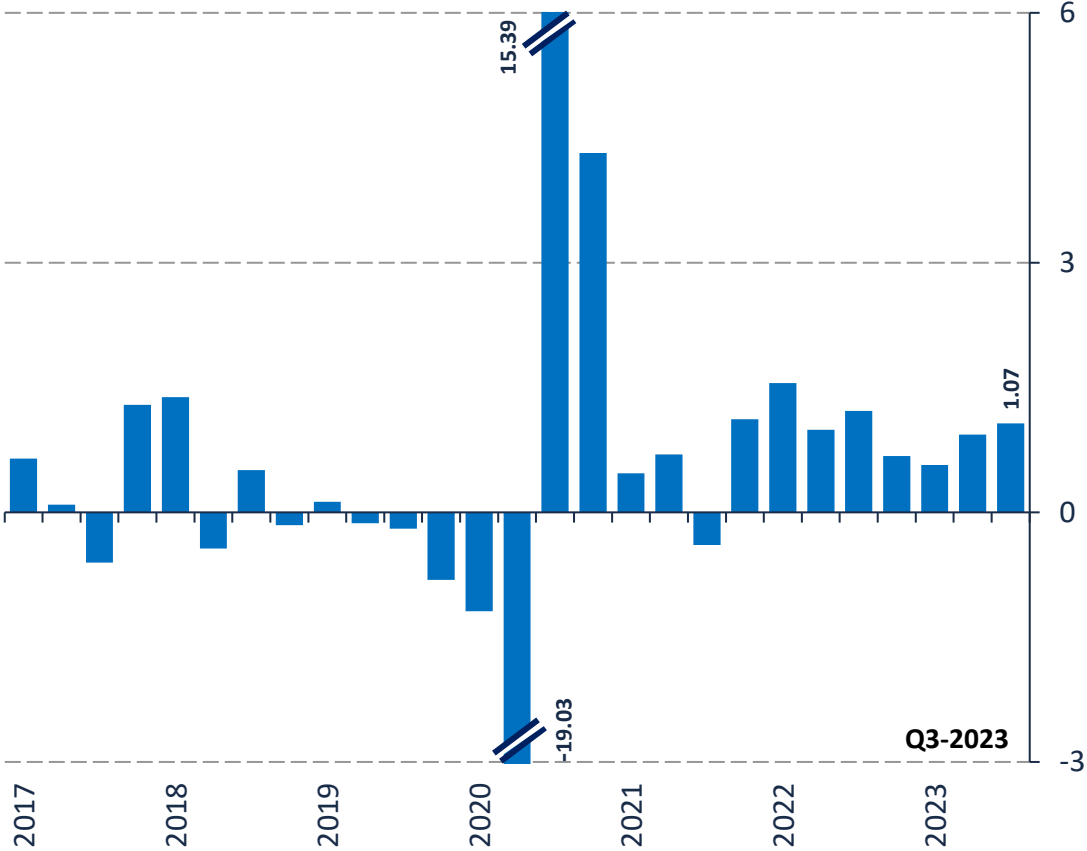
**3 Inflation**

**4 Monetary policy**

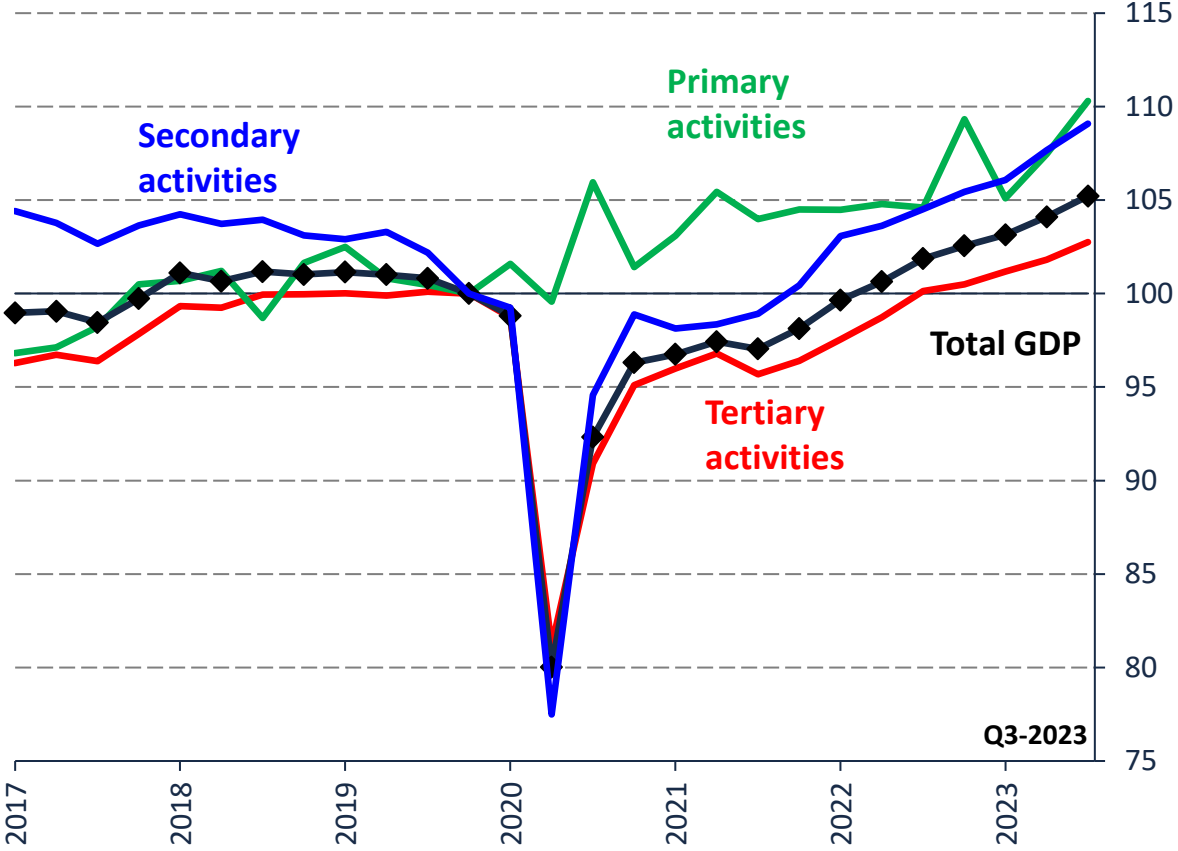
**5 Forecasts and final remarks**

In Q3-2023, economic activity in Mexico continued expanding and exhibited robust growth supported by the positive performance of the three main sectors of the economy.

**Gross Domestic Product <sup>1/</sup>**  
Quarterly % change, s. a.



**Gross Domestic Product by economic activity**  
Q4-2019=100, s.a.

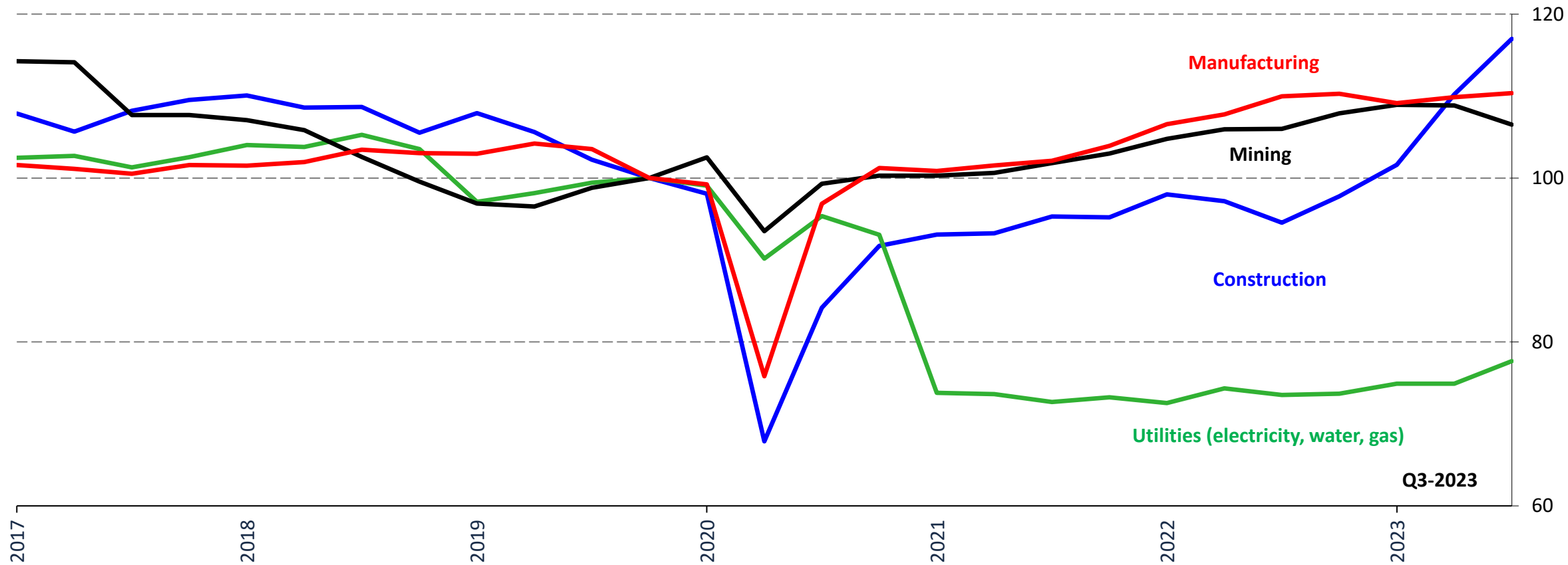


s. a. / Seasonally adjusted figures.  
1/ The range of the chart has been reduced to facilitate its reading.  
Source: Mexico's National Accounts System (SCNM, for its acronym in Spanish), INEGI.

s. a. / Seasonally adjusted figures.  
Source: Mexico's National Accounts System (SCNM, for its acronym in Spanish), INEGI.

In Q3-2023, the upward trend of industrial production was mainly driven by the significant expansion of the construction sector. Meanwhile, the manufacturing sector continued exhibiting a lackluster performance.

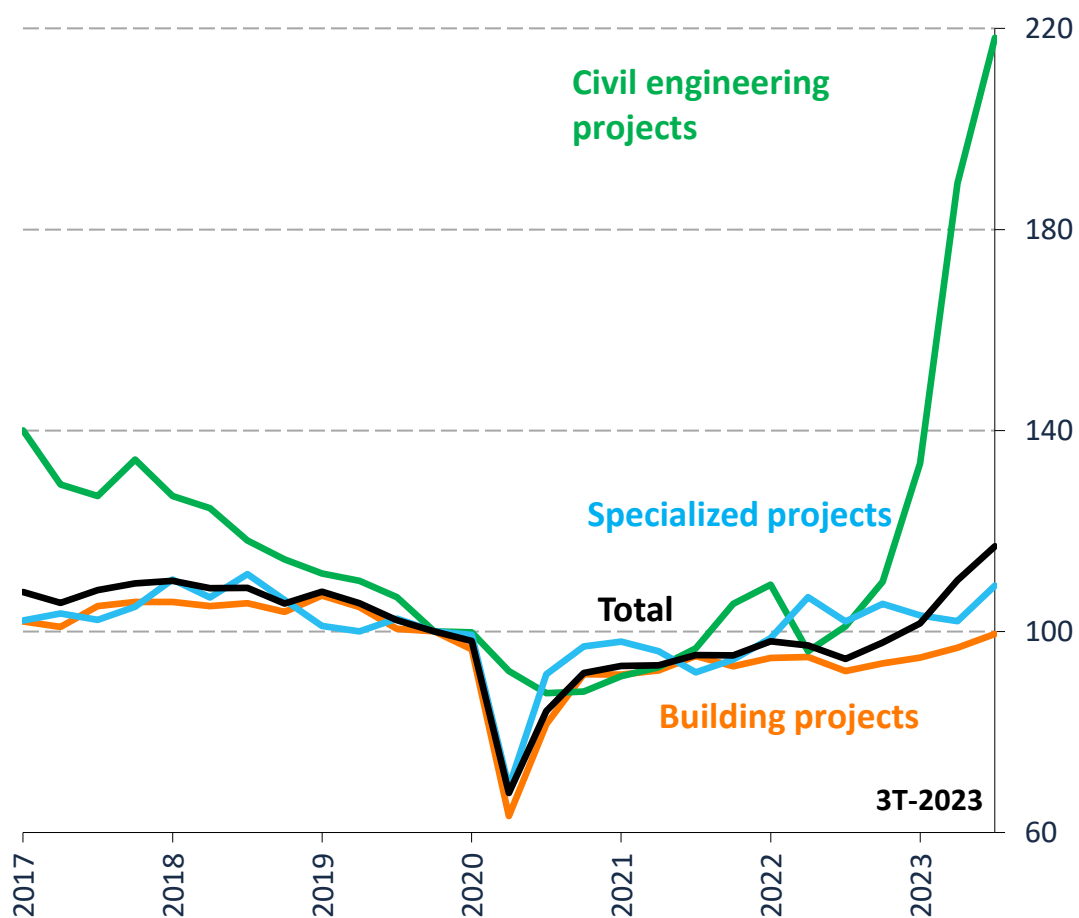
**Industrial activity**  
Index 2019=100, s. a.



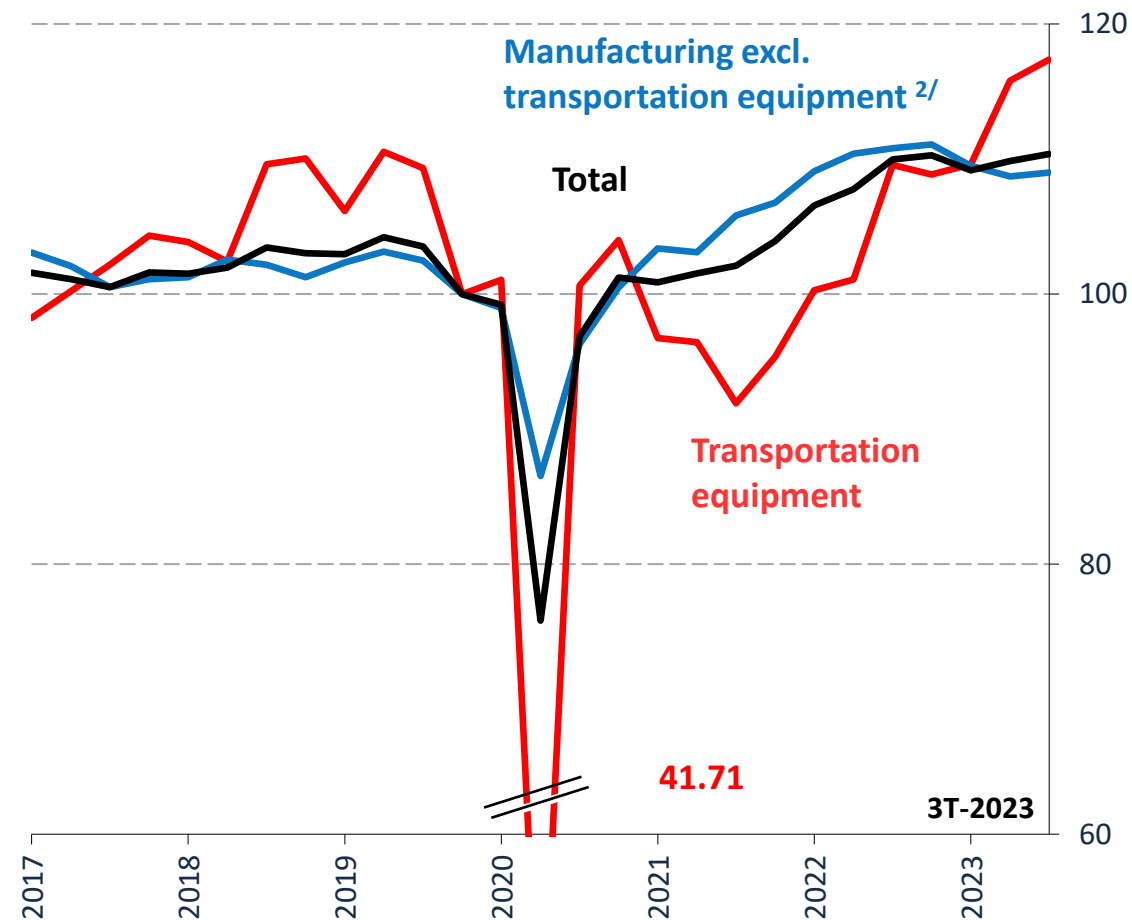
s. a. / Seasonally adjusted figures.  
Source: Mexico's National Accounts System (SCNM, for its acronym in Spanish), INEGI..

Within construction, the civil engineering projects component continued showing a remarkable dynamism. As for manufacturing, the dynamism of the transportation equipment component was offset by the lackluster performance of the remaining sectors.

**Construction production**  
Index Q4-2019=100, s. a.



**Manufacturing production <sup>1/</sup>**  
Index Q4-2019=100, s. a.



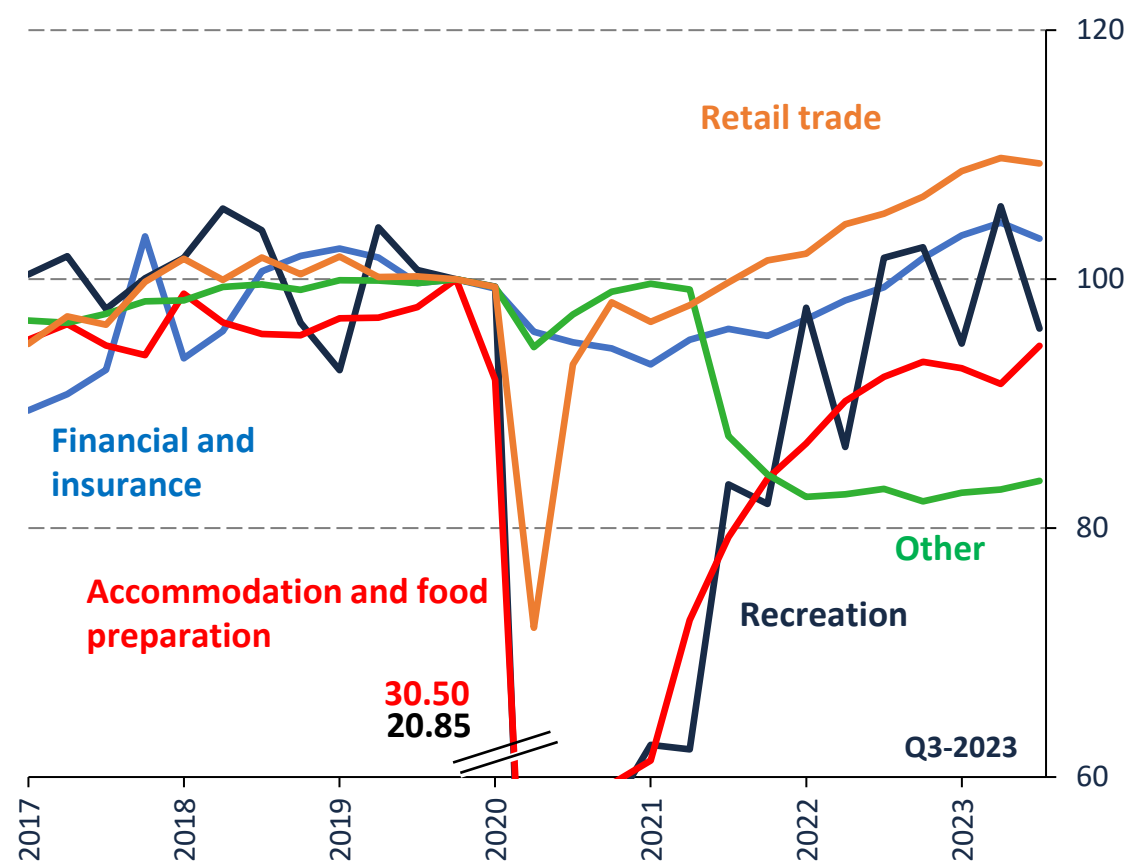
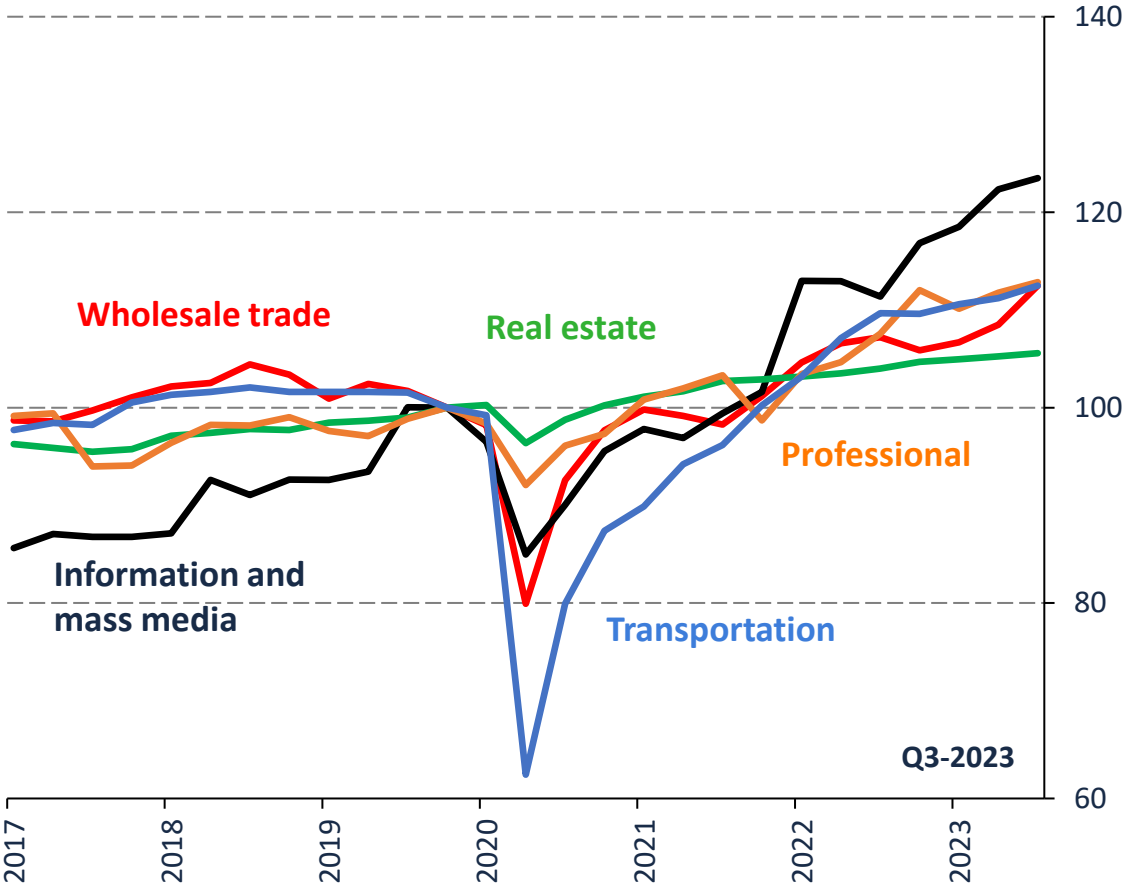
s. a. / Seasonally adjusted figures by INEGI.

1/ The range of the chart has been reduced to facilitate its reading. 2/ Prepared and seasonally adjusted by Banco de México with INEGI data.

Source: Monthly Industrial Activity Indicator, National Accounts System (SCNM, for its acronym in Spanish), INEGI.

In the July-September quarter of 2023, services grew at a faster rate. However, there was a differentiated behavior among its components.

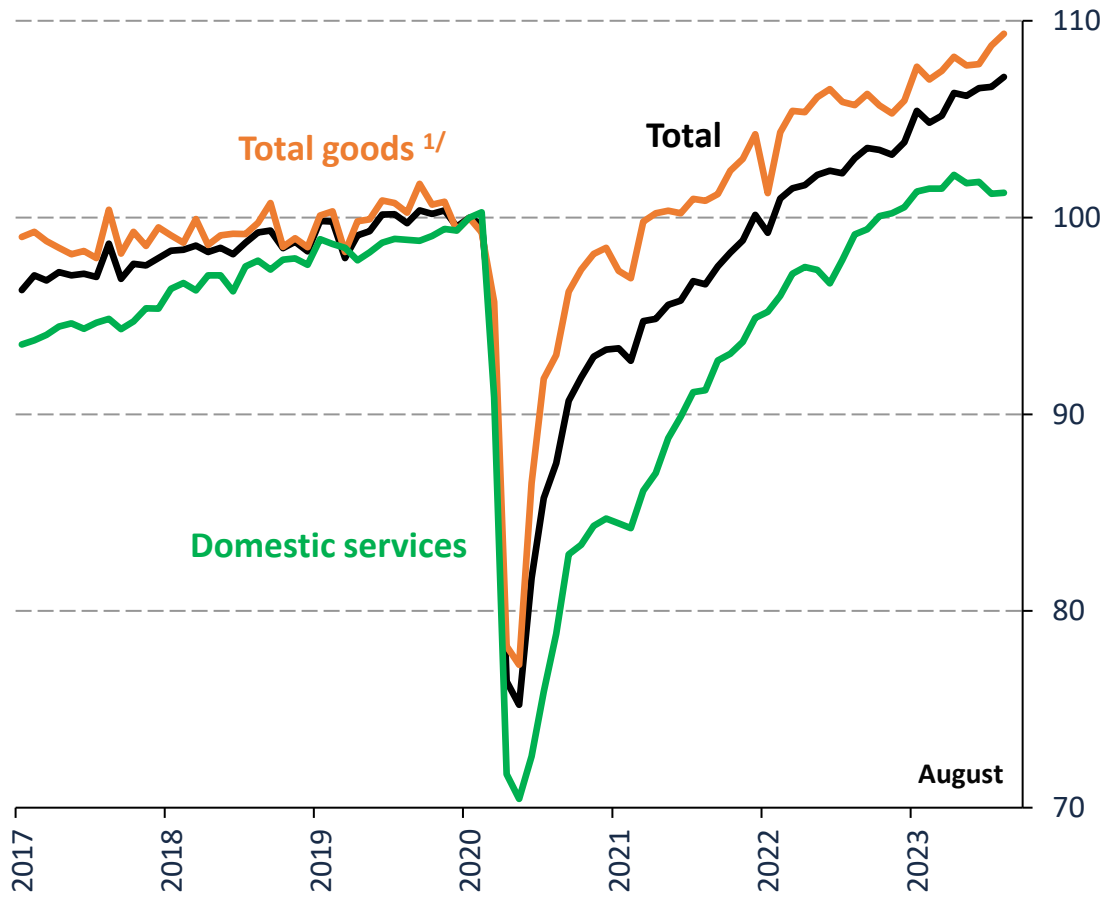
**IGAE services <sup>1/</sup>**  
 Index Q4-2019=100, s. a.



s. a. / Seasonally adjusted figures.  
 1/ The vertical range of the chart on the right side has been reduced to facilitate its reading  
 Source: Mexico's National Accounts System (SCNM, for its acronym in Spanish), INEGI.

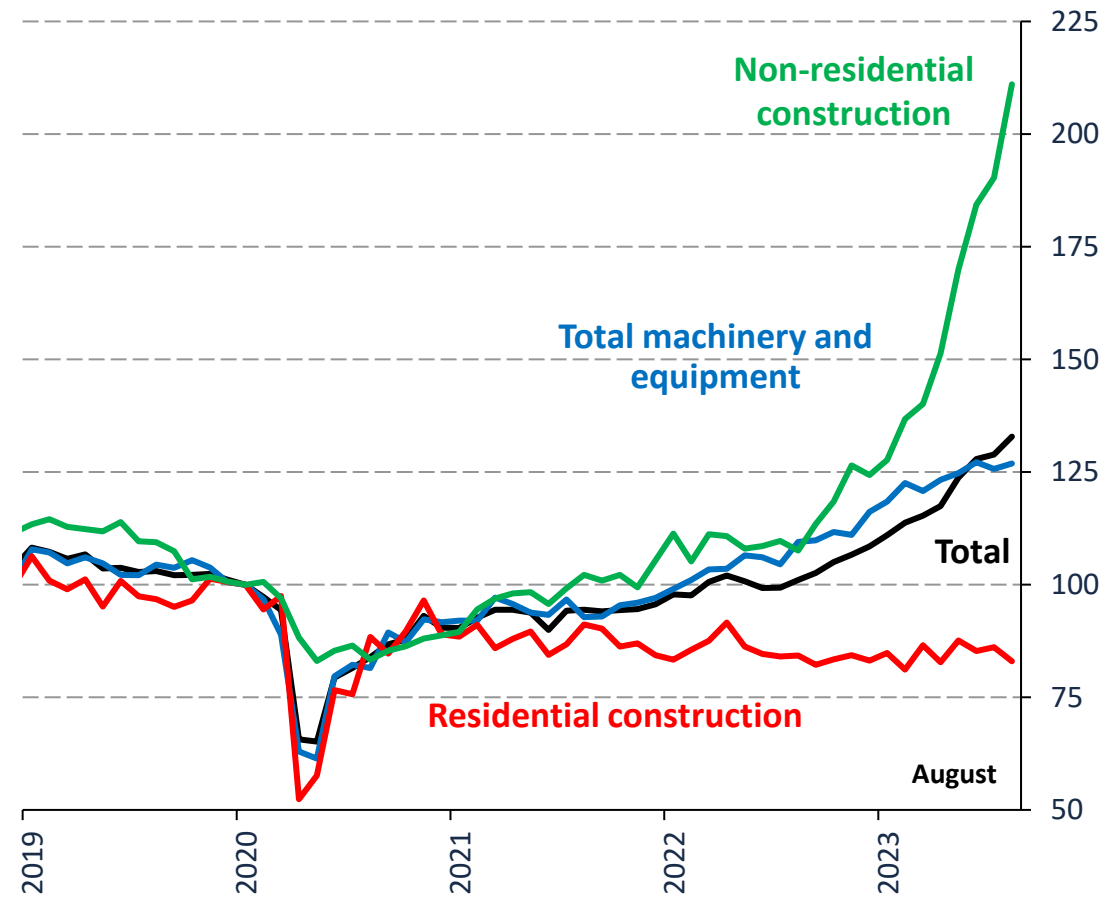
During the July-August period, private consumption remained on an upward trajectory. Investment continued exhibiting a marked dynamism, mainly as a result of spending on non-residential construction.

**Total private consumption**  
Index Jan 2020=100, s. a.



s. a. / Seasonally adjusted figures.  
1/ Includes both national and imported goods. Prepared and seasonally adjusted by Banco de México.  
Source: Mexico's National Accounts System (SCNM, for its acronym in Spanish), INEGI.

**Investment**  
Index Jan-2020=100, s. a.



s. a. / Seasonally adjusted figures.  
Source: Mexico's National Accounts System (SCNM, for its acronym in Spanish), INEGI.

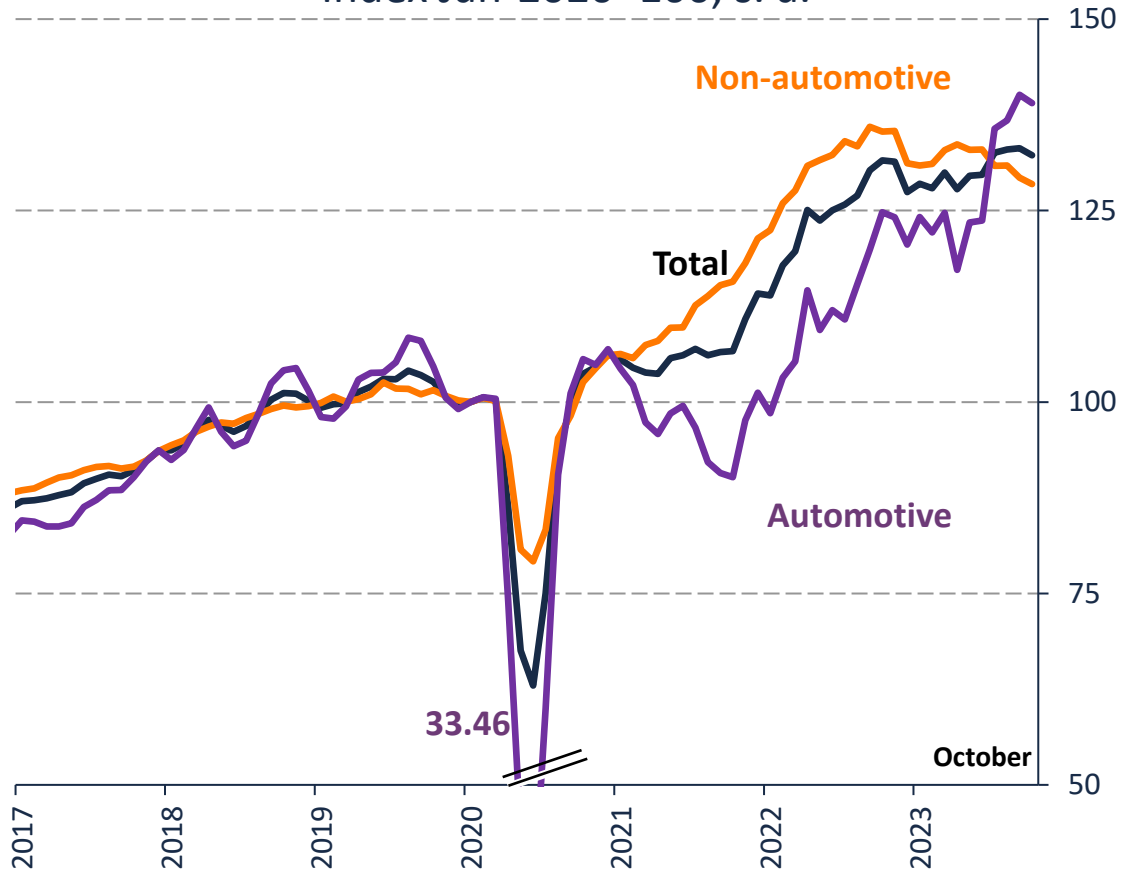
In Q3-2023, the total value in US dollars of manufacturing exports increased with respect to the previous quarter. This was due to the significant expansion in automotive exports.

### Manufacturing exports <sup>1/</sup>

Three-month moving average

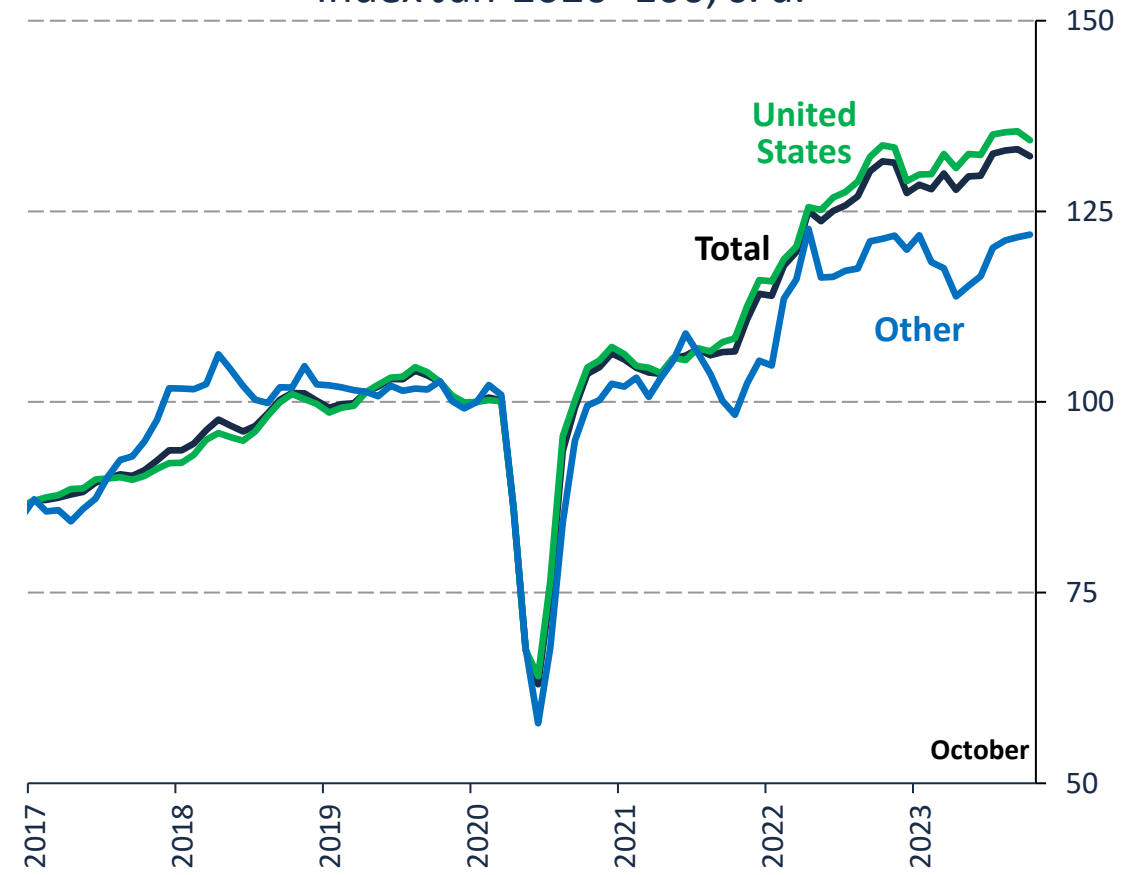
### Automotive and non-automotive manufacturing exports <sup>2/</sup>

Index Jan-2020=100, s. a.



### By destination

Index Jan-2020=100, s. a.



s. a. / Seasonally adjusted figures.

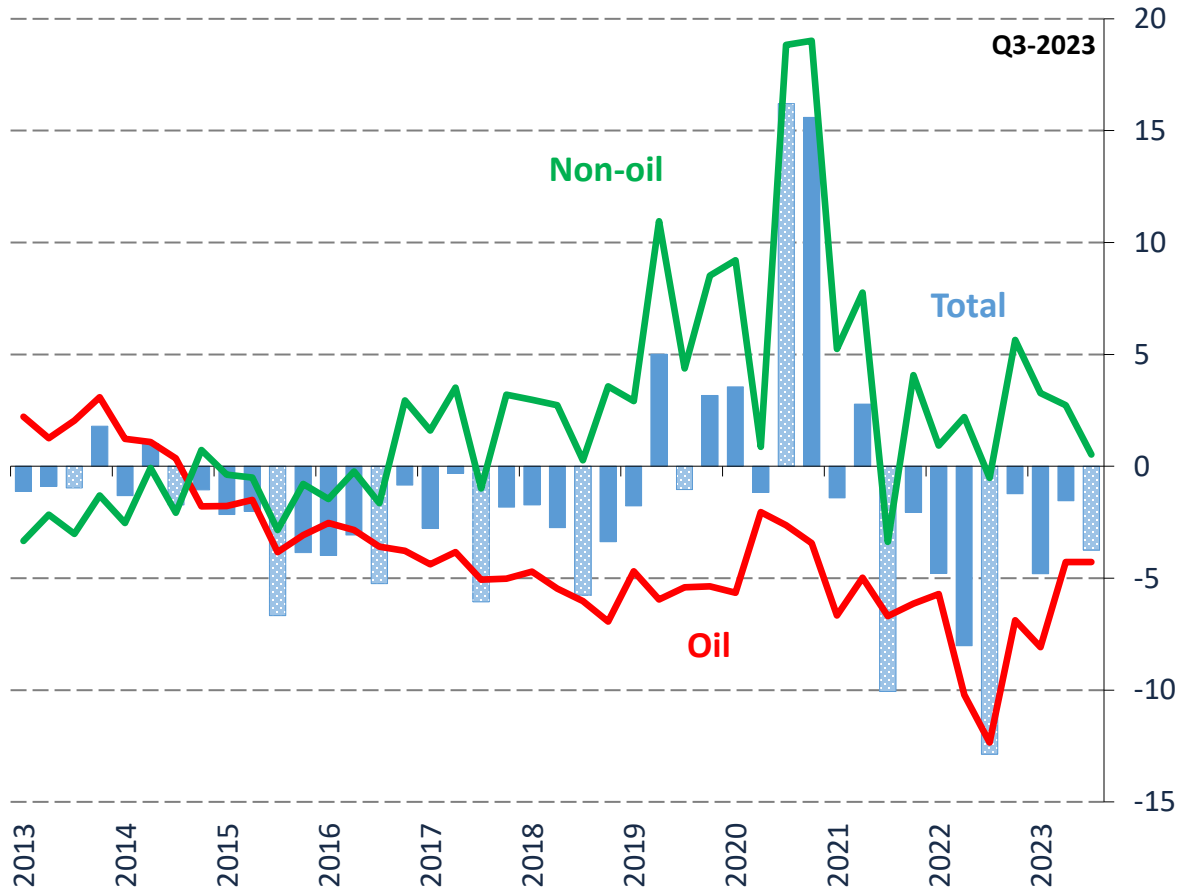
1/ Based on current US dollars. 2/ The range of the chart has been reduced to facilitate its reading.

Source: Prepared by Banco de México with data from PMI Comercio Internacional, S.A. de C.V., SAT, SE, Banco de México and INEGI. Mexico's Merchandise Trade Balance. SNIEG. Information of National Interest.



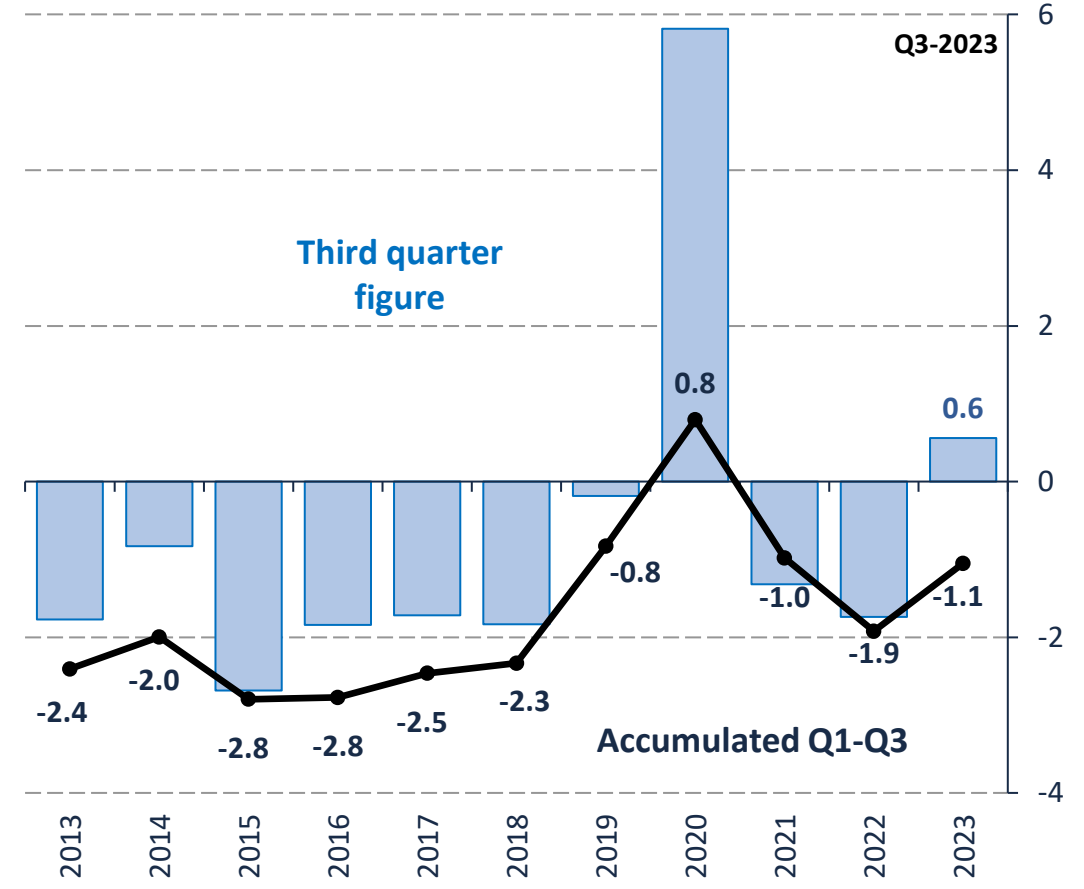
In Q3-2023, the current account registered a moderate surplus. In the year to date figure, the deficit remained at low levels.

**Trade balance**  
Billion USD



Source: SAT, SE, Banco de México, INEGI. Mexico's Merchandise Trade Balance. SNIEG. Information of national interest.

**Current account**  
% of GDP



Source: Banco de México and INEGI.

# The labor market continued exhibiting strength during Q3-2023.

### National unemployment rate

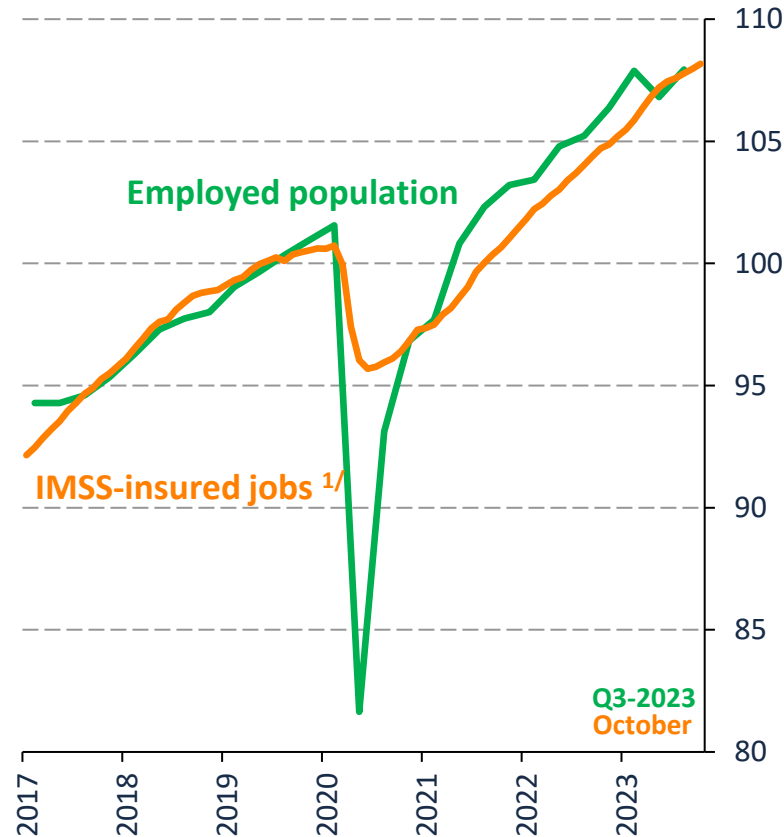
%, s. a.



s. a. / Seasonally adjusted figures.  
Source: Prepared by Banco de México with data from INEGI (ENOE).

### IMSS-insured jobs and employed population

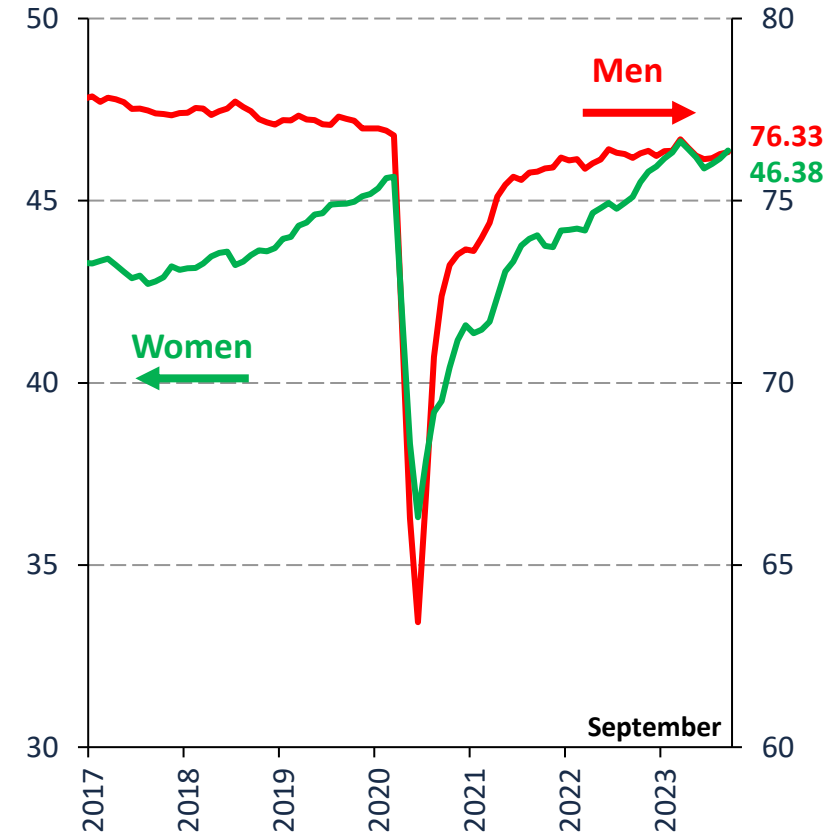
Index 2019=100, s. a.



s. a. / Seasonally adjusted figures.  
1/ Refers to permanent and temporary urban workers. Seasonal adjustment by Banco de México.  
Source: Prepared by Banco de México with data from IMSS and INEGI (ENOE).

### National labor participation rates <sup>2/</sup>

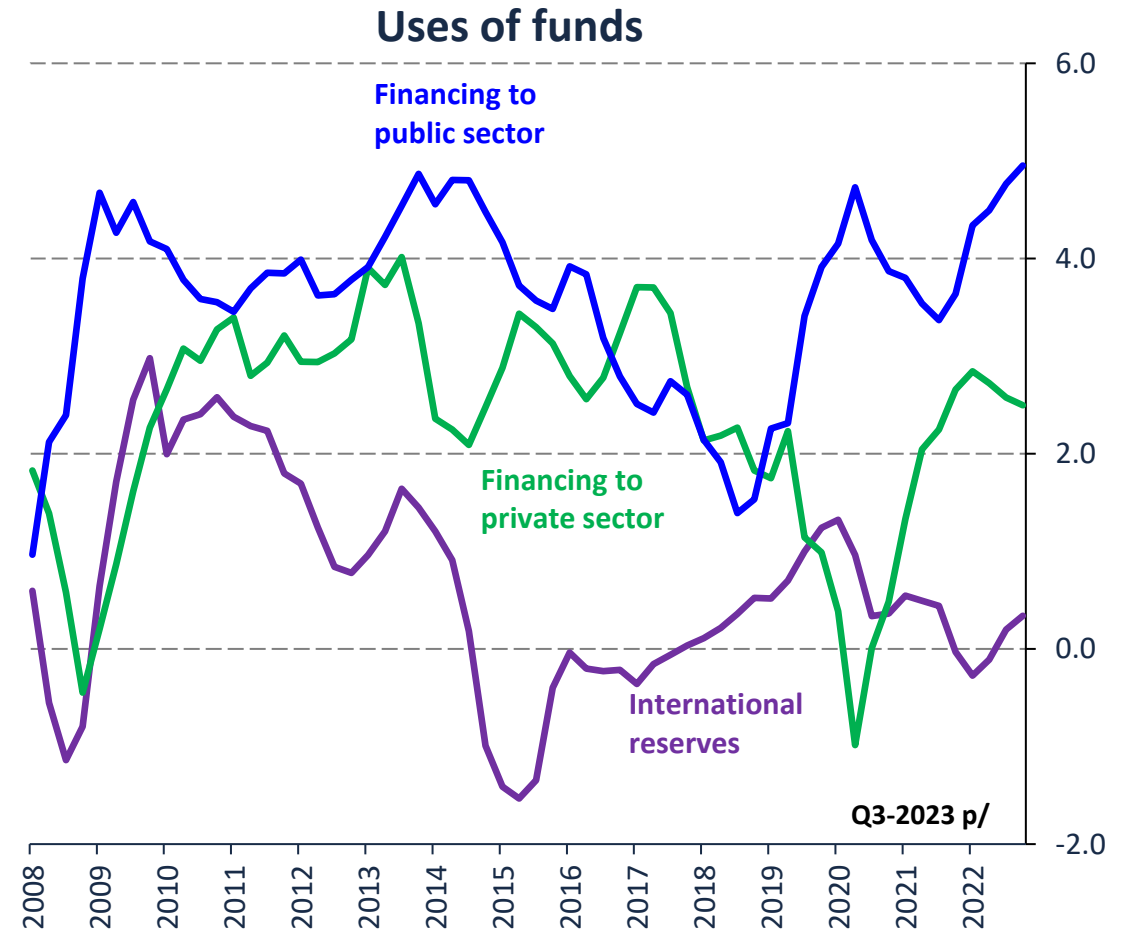
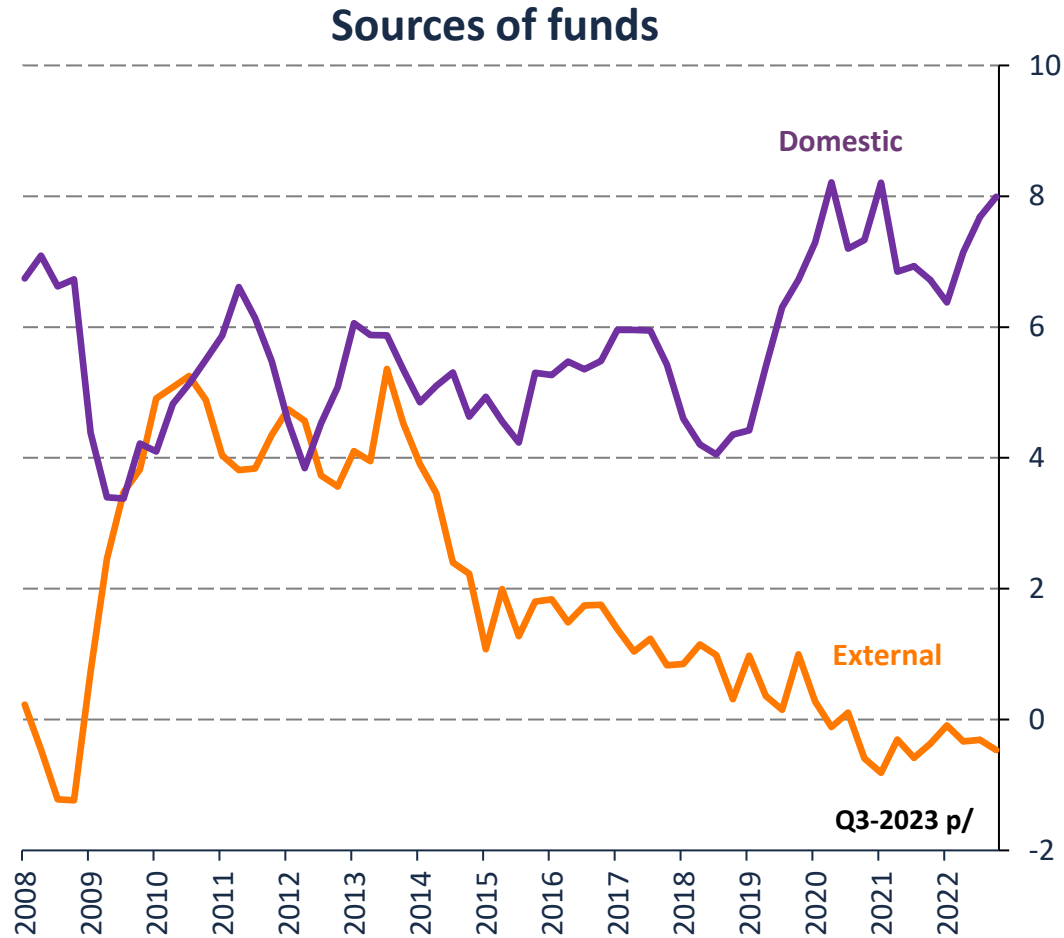
Three-month moving average, %, s. a.



s. a. / Seasonally adjusted figures.  
2/ Percentage of the economically active population (EAP) with respect to the population 15 years and older.  
Source: Prepared by Banco de México with data from INEGI (ENOE).

The absorption of financial resources by both public and private sectors in Mexico expanded at a high level in Q3-2023. These funds came from domestic sources, as the external ones contracted.

### Sources and uses of funds in the economy Annual flows as a percentage of GDP



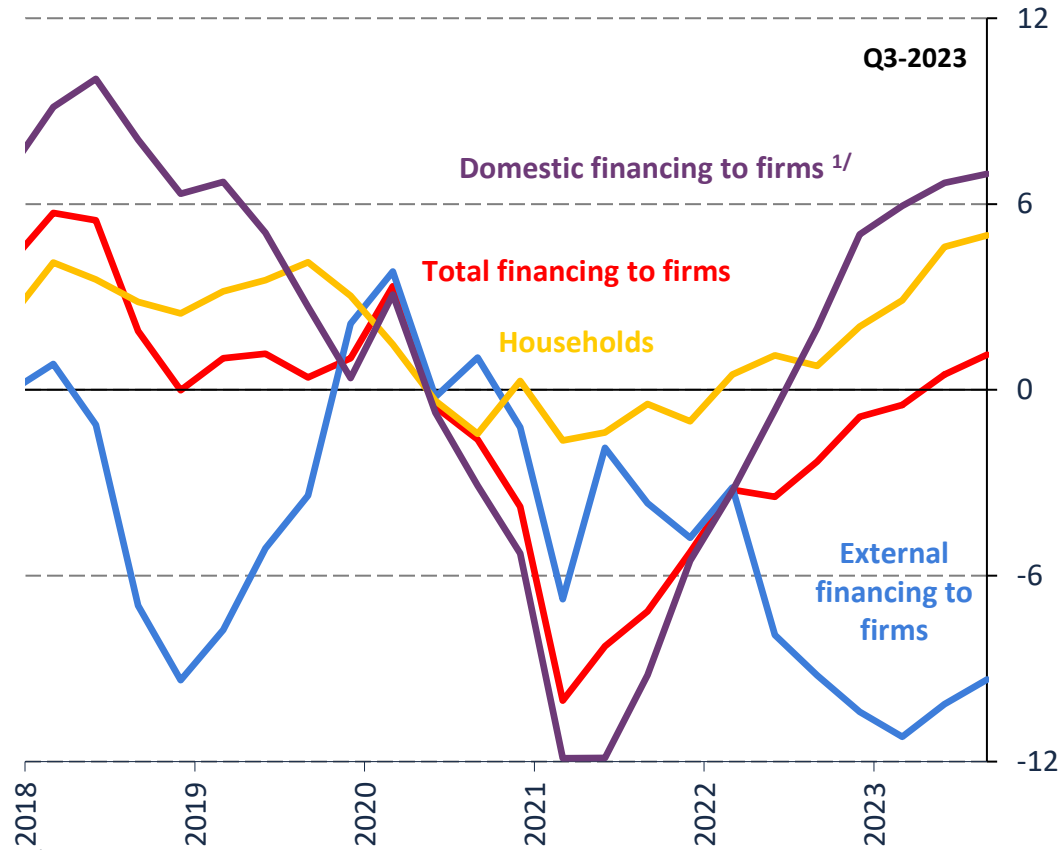
p/ Preliminary figures.

Note: See Table 5 of this Quarterly Report (Sources and Uses of Funds in the Economy) for a description of the concepts.

Source: Banco de México

Domestic financing to households and firms continued expanding, driven by an increased demand for credit. According to the survey conducted among banks, the nearshoring has begun to contribute to an increase in credit demand by firms, and is expected to continue doing so in the future.

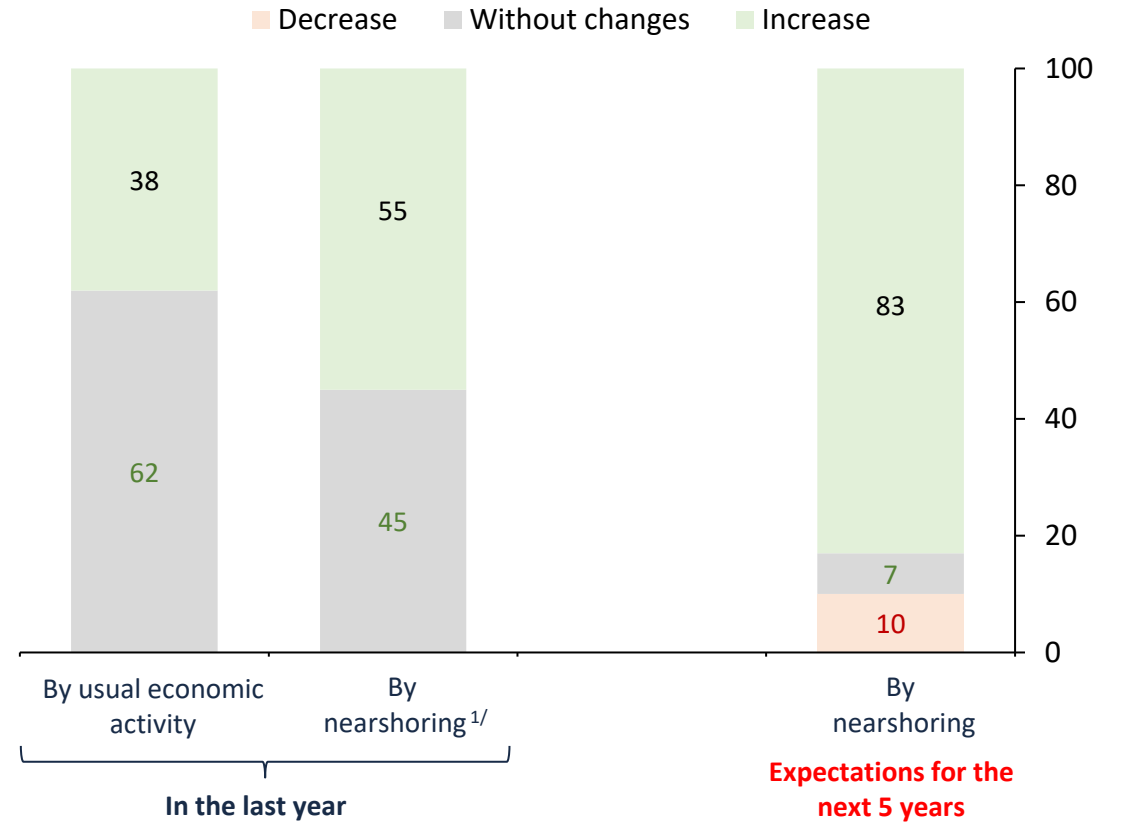
**Total financing to the non-financial private sector**  
Real annual change in percent



<sup>1/</sup> Figures are adjusted for the incorporation and exit of some financial intermediaries into the credit statistics. Includes credit from commercial banks, development banks, and other non-bank financial intermediaries.

Source: Banco de Mexico.

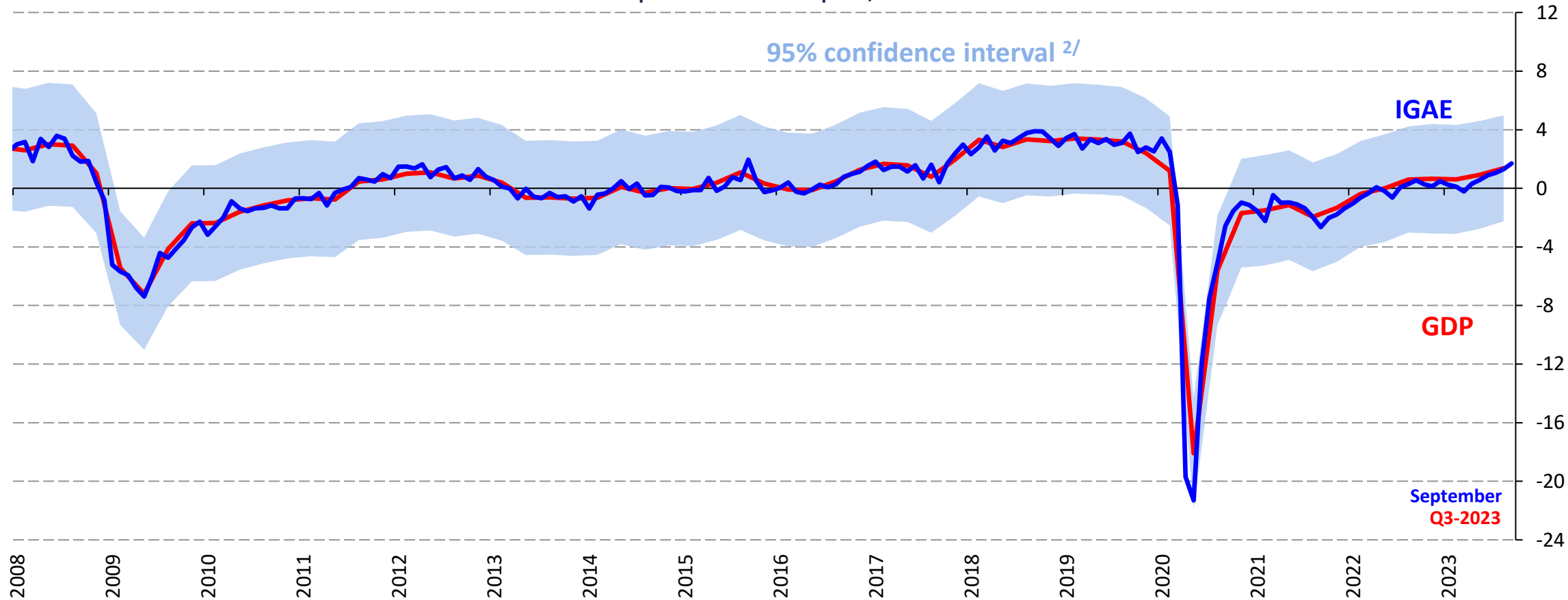
**Banks' opinion on the evolution of credit demand by large firms**  
Percentage of responses



Source: Survey on general conditions and standards in the bank credit market (EnBan) during the July-September 2023 quarter.

In Q3-2023, the point estimate of the output gap, which was already in positive territory, widened, albeit without being statistically different from zero.

### Output gap point estimate <sup>1/</sup> % of potential output, s. a.



s. a. / Prepared with seasonally adjusted data.

1/Output gap estimated with a tail-corrected Hodrick-Prescott filter; see "Inflation Report April – June 2009", Banco de México, p.74.

2/Output gap confidence interval calculated with a method of unobserved components.

Source: Prepared by Banco de México with data from INEGI and Banco de México.

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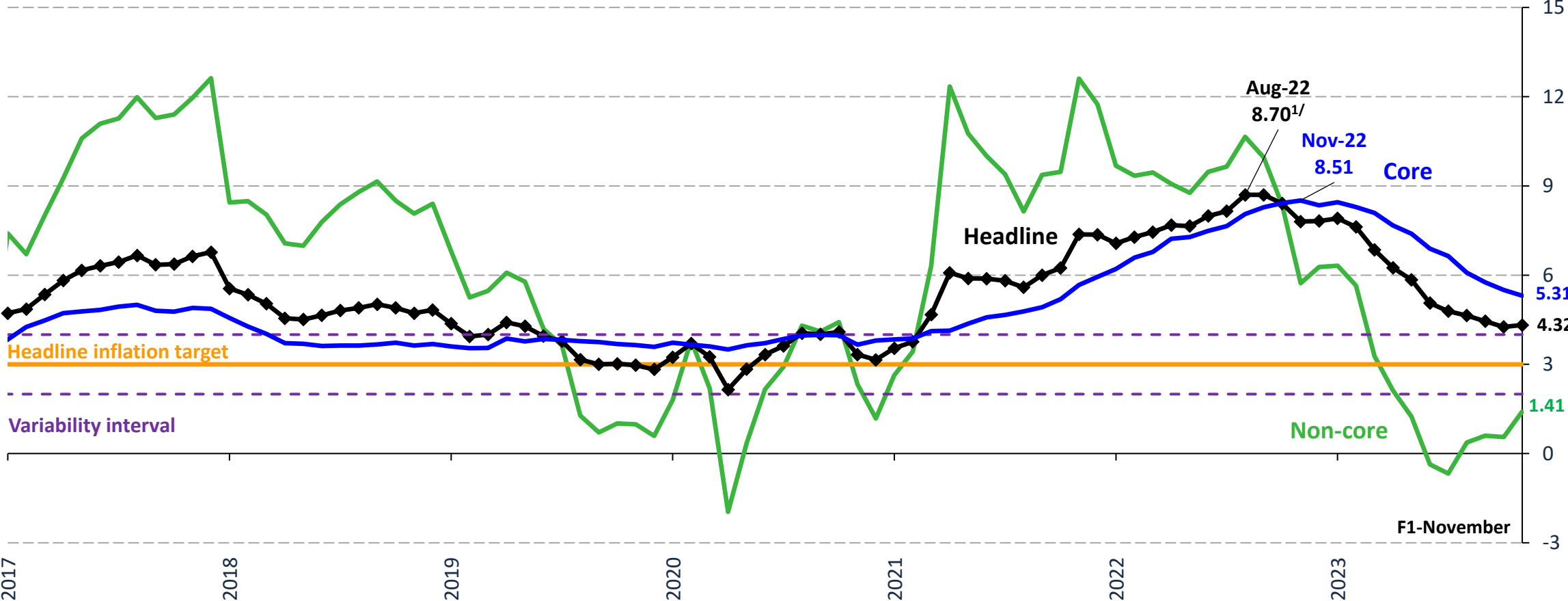
**3 Inflation**

**4 Monetary policy**

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Disinflation has advanced significantly in Mexico. Both core and non-core components have contributed to the decline in headline inflation.

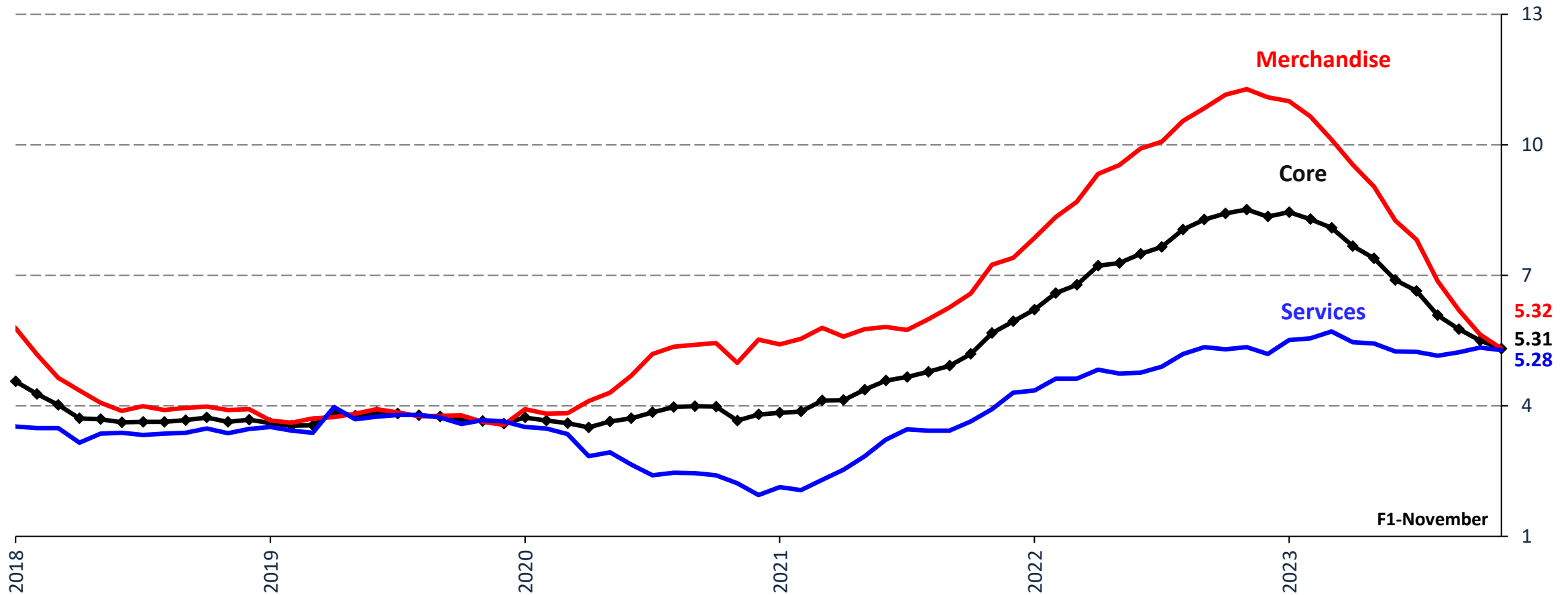
### National Consumer Price Index Annual % change



1/ Headline inflation was 8.70% in August and September 2022.  
Source: Banco de México and INEGI.

Within core inflation, merchandise inflation continued decreasing, while services inflation does not yet show a clear change to the downside. Both remained at high levels.

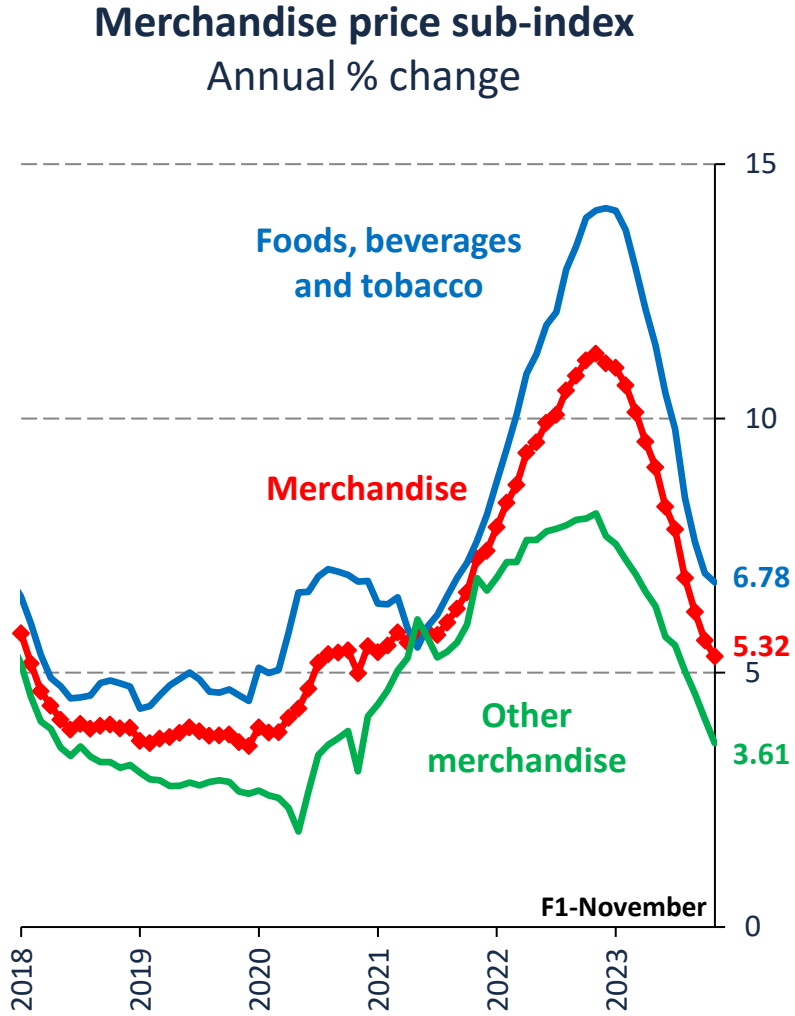
Core price sub-index  
Annual % change



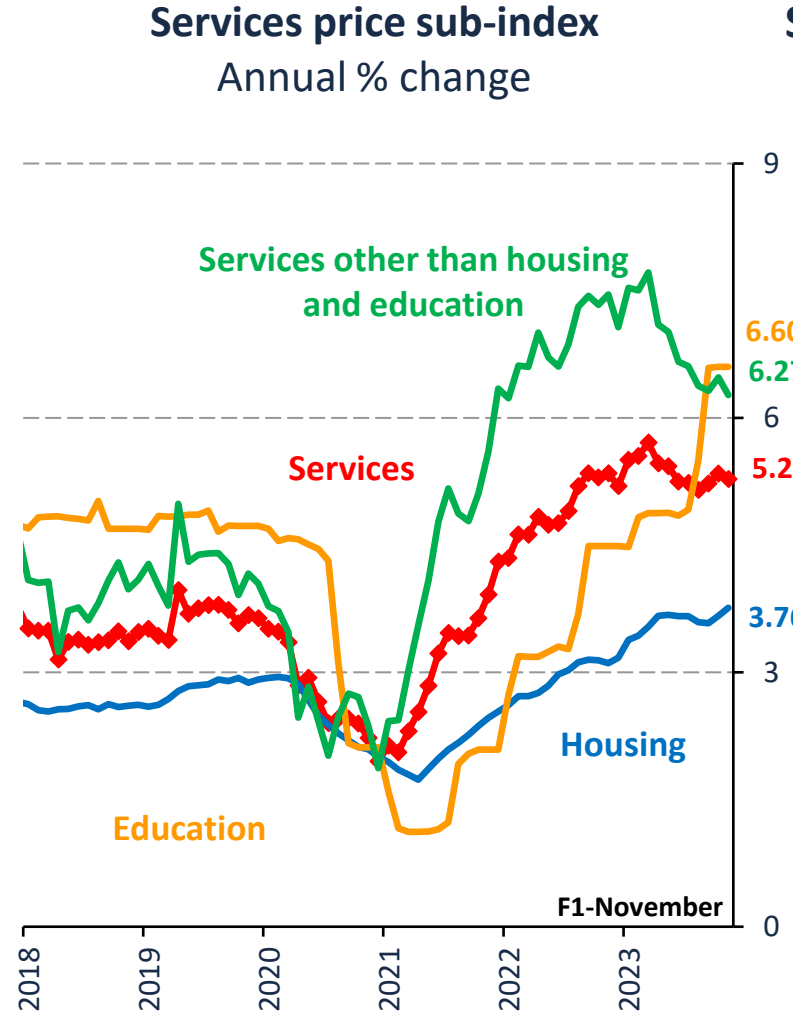
Source: INEGI.



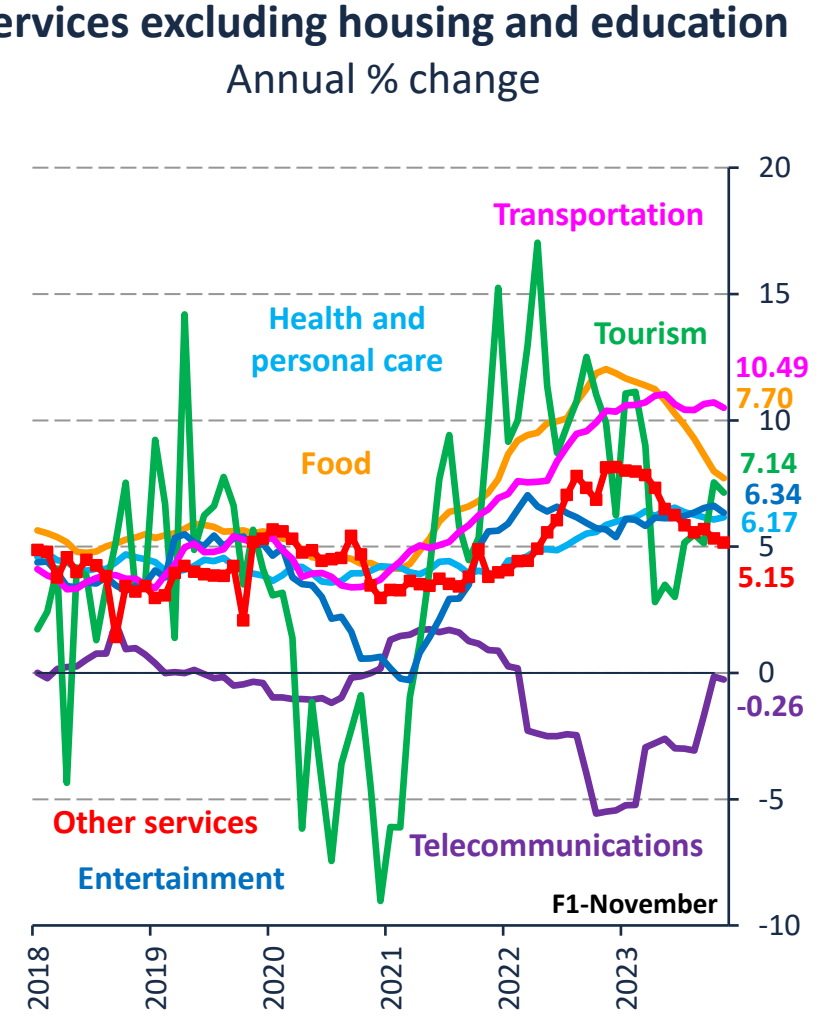
Food and non-food merchandise inflation continued decreasing in Q3-2023 and so far in Q4-2023, while that of various services showed a resistance to decline from high levels.



Source: INEGI.



Source: INEGI.

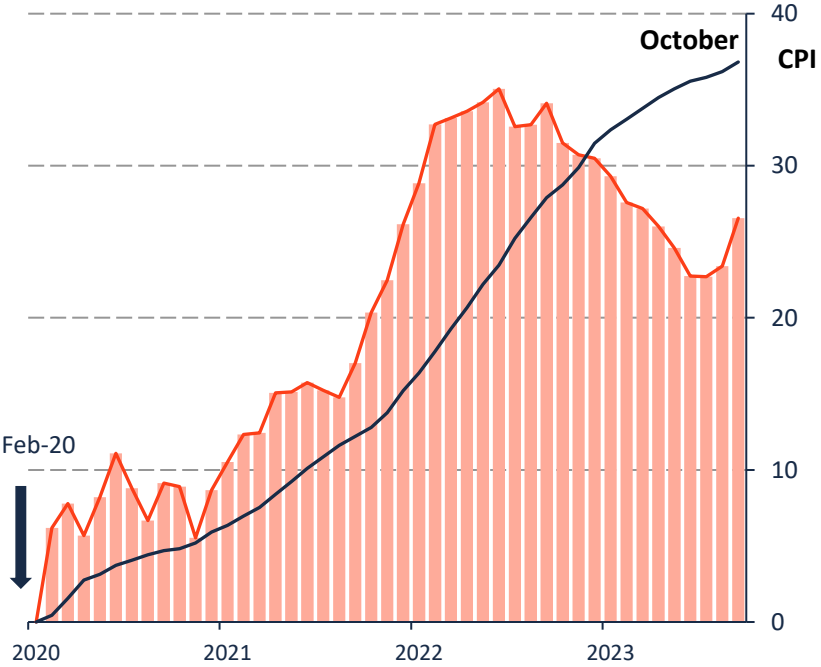


Source: INEGI.

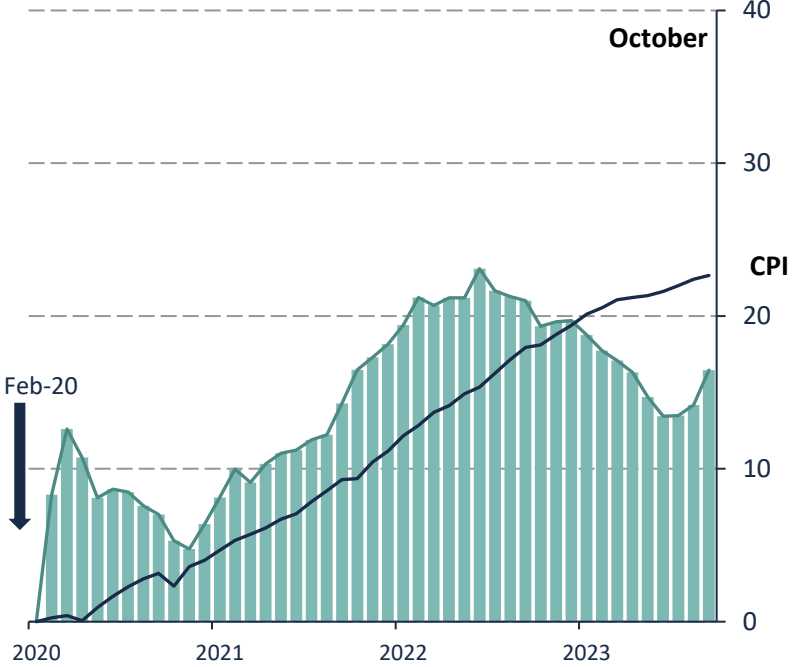
The pandemic and the military conflict led to a generalized and severe increase in production costs, which has exerted pressure on consumer prices. However, these increased at a slower pace, particularly in the case of services, which could help explain core inflation's persistence.

### Cumulative change in CPI and in the cost index since February 2020 %

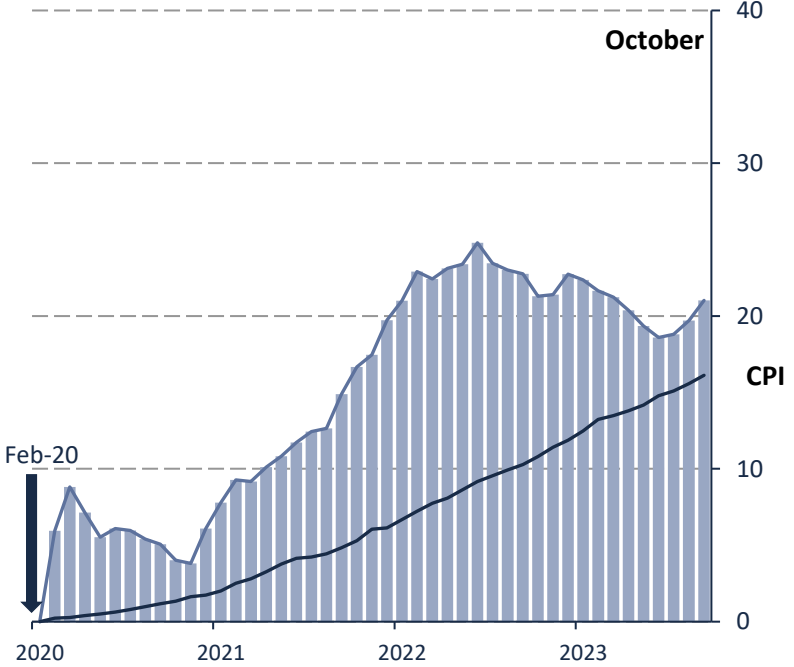
a) Food



b) Non-food merchandise

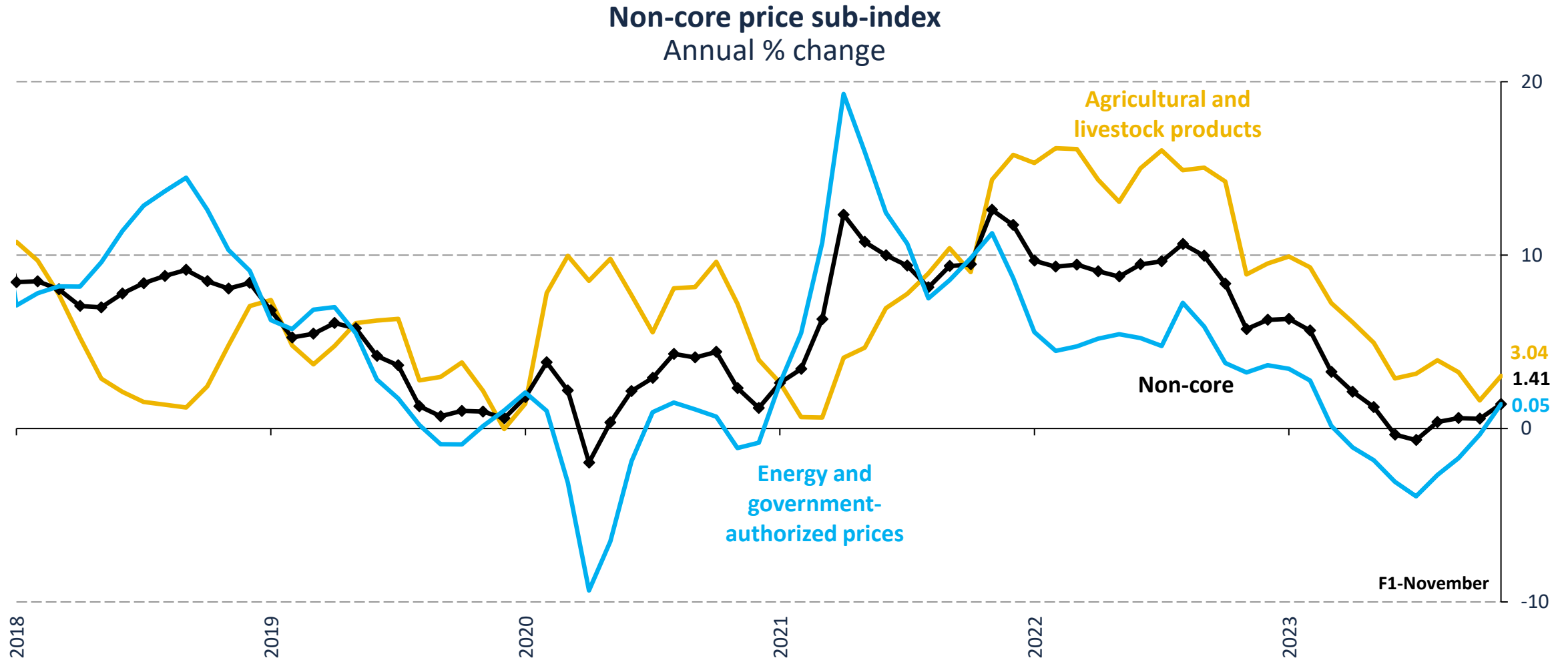


c) Services



Note: See Box 6 “Estimation of production cost indices for goods and services of the core price index basket” of the July-September 2023 Quarterly Report for details on the construction of the indexes.  
Source: Banco de México with data from Banco de México, INEGI, IMSS, IMF, Bureau of Labor Statistics and US Census.

Non-core inflation decreased in Q3-2023 with respect to the previous quarter. However, since August it has been increasing, although remaining at atypically low levels.



Source: INEGI.

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**3 Inflation**

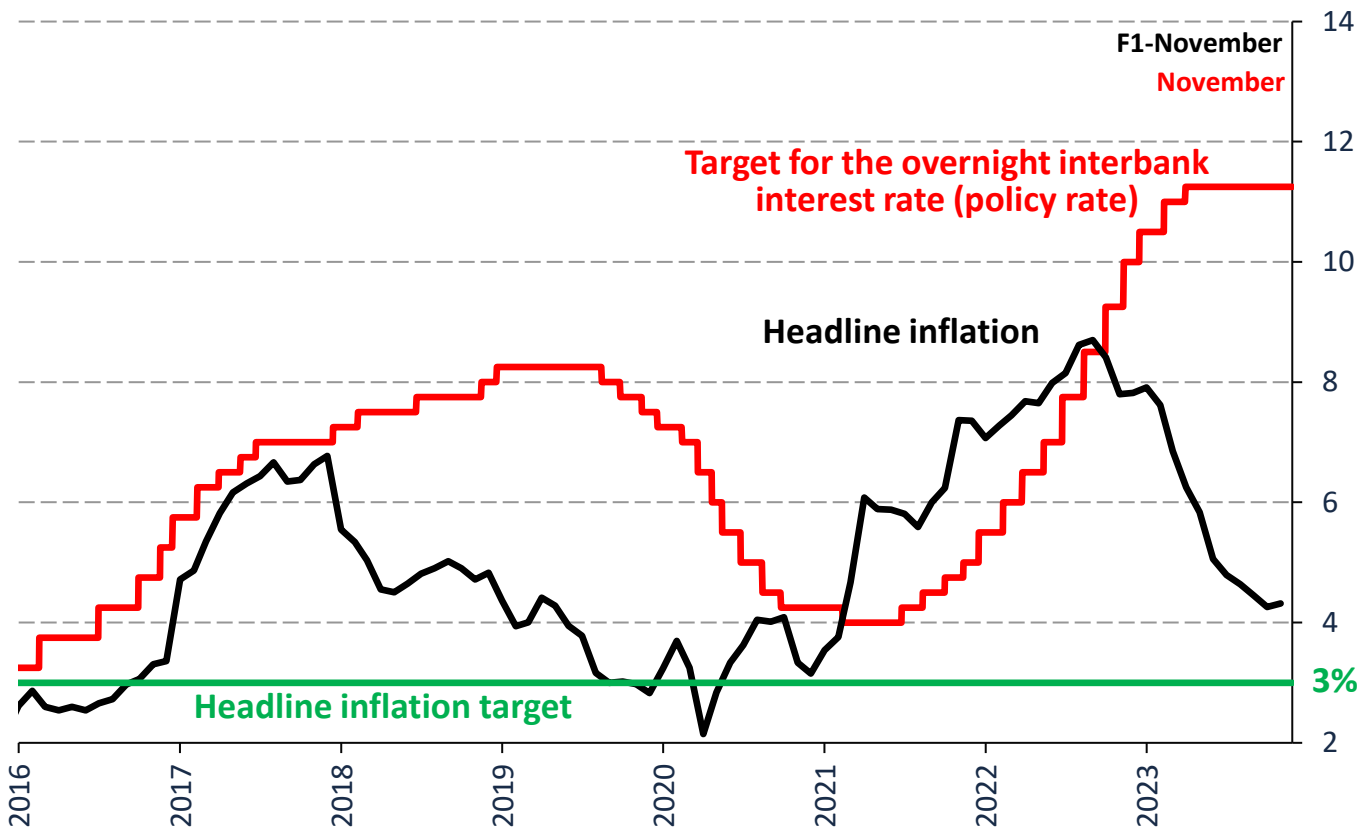
**4 Monetary policy**

**5 Forecasts and final remarks**

In the monetary policy meetings of the reported period, the Governing Board decided unanimously to keep the reference rate unchanged at 11.25%.

### Target for the overnight interbank interest rate and headline inflation

Annual %



Source: Banco de México and INEGI.

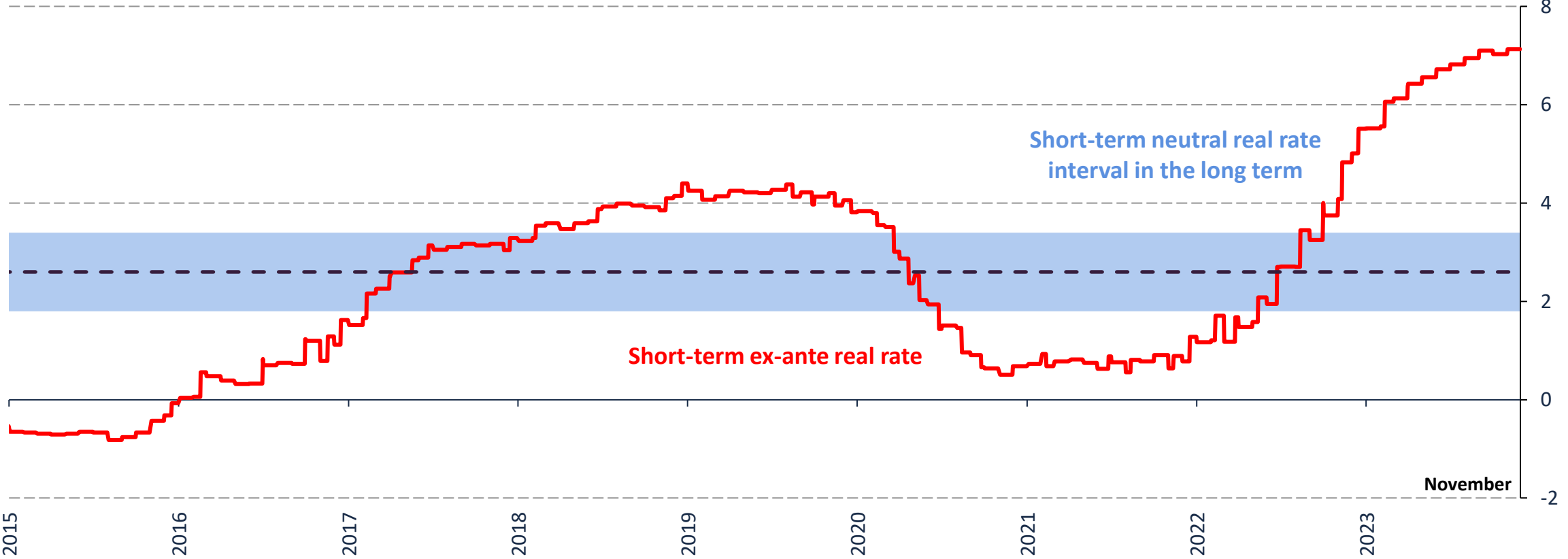
### Recent evolution of Banco de México's monetary policy decisions

	Changes in the policy rate (bp)	Interest rate (%)
May-21	0	4.00
Jun-21	+25	4.25
Aug-21	+25	4.50
Sep-21	+25	4.75
Nov-21	+25	5.00
Dec-21	+50	5.50
Feb-22	+50	6.00
Mar-22	+50	6.50
May-22	+50	7.00
Jun-22	+75	7.75
Aug-22	+75	8.50
Sep-22	+75	9.25
Nov-22	+75	10.00
Dec-22	+50	10.50
Feb-23	+50	11.00
Mar-23	+25	11.25
May-23	0	11.25
Jun-23	0	11.25
Aug-23	0	11.25
Sep-23	0	11.25
Nov-23	0	11.25

Source: Banco de México.

Considering that the reference rate was left unchanged and that inflationary expectations adjusted downwards, the ex-ante real interest rate continued increasing in the reported period, laying above the upper bound of the estimated range for the neutral real rate.

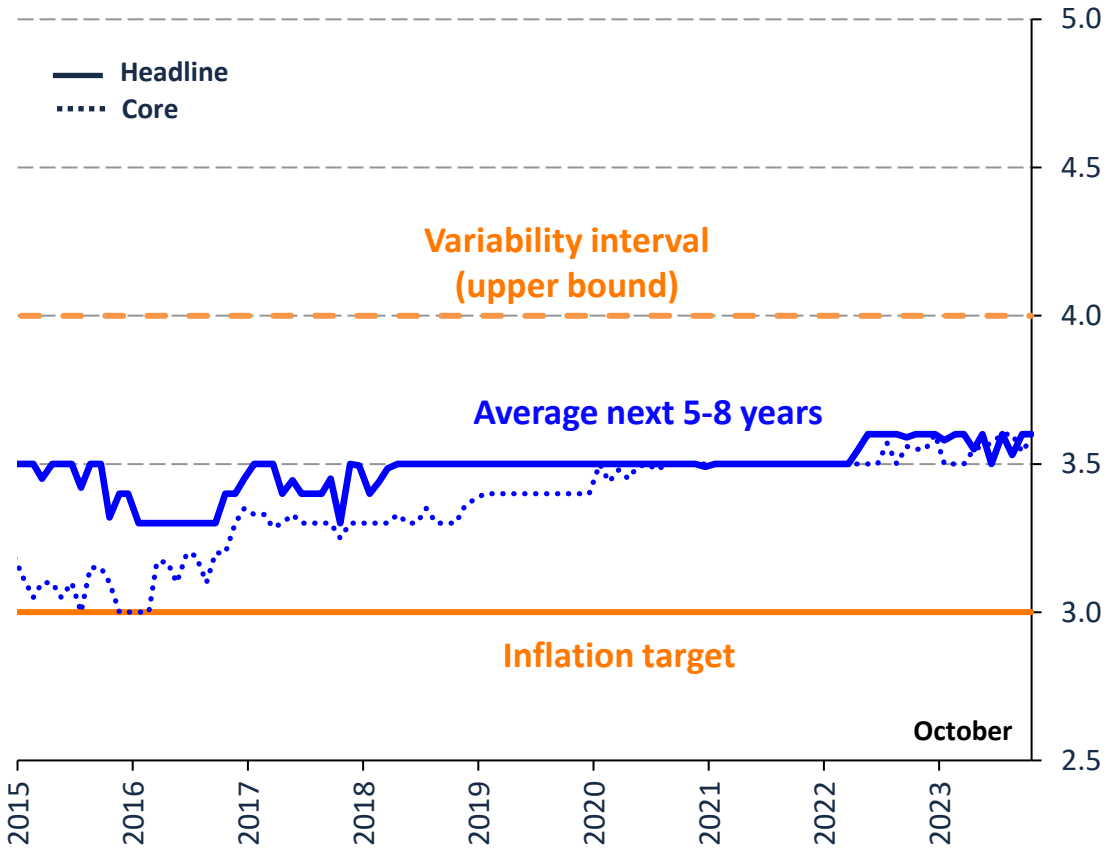
Short-term ex-ante real rate and estimated interval for the short-term neutral real rate in the long term <sup>1/</sup>  
Annual %



1/ The short-term ex ante real rate is constructed using the target for the overnight Interbank interest rate and the mean of 12-month inflation expectations drawn from Banco de México's Survey of Private Sector Forecasters. The dotted line corresponds to the midpoint of the interval for the short-term neutral real rate in the long term, which is now between 1.8 and 3.4%. The shaded area corresponds to the estimated interval for the short-term neutral rate in the long term. Source: Banco de México.

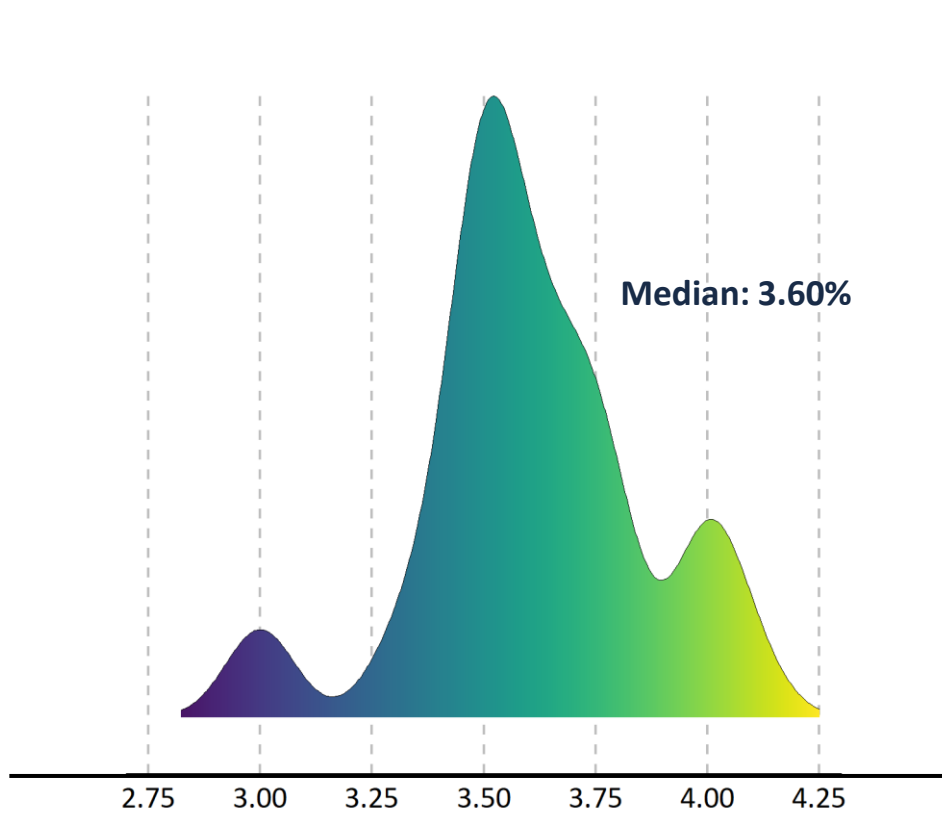
The strengthening of the monetary policy stance during this inflationary episode has contributed to maintain longer-term inflation expectations anchored.

Median of long-term inflation expectations  
%



Source: Banco de México's Survey of Private Sector Forecasters.

Distribution of average headline inflation expectations  
for the next 5-8 years in October 2023

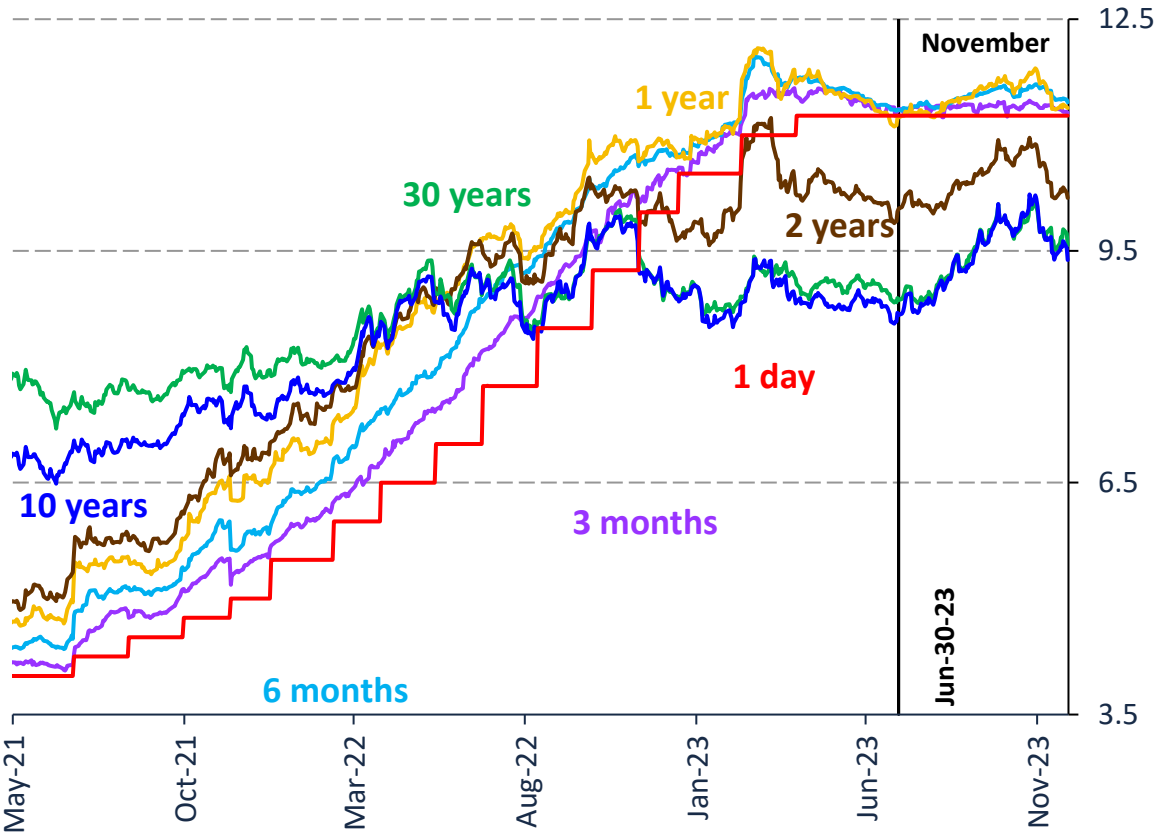


Source: Banco de México's Survey of Private Sector Forecasters. The reported figures correspond to the survey published on November 1, 2023.

During the reported period, interest rates on short-term government securities fluctuated within a narrow range. Medium- and long-term interest rates increased significantly between August and the end of October, but reversed somewhat in November.

Target for the overnight interbank interest rate and interest rates on government securities

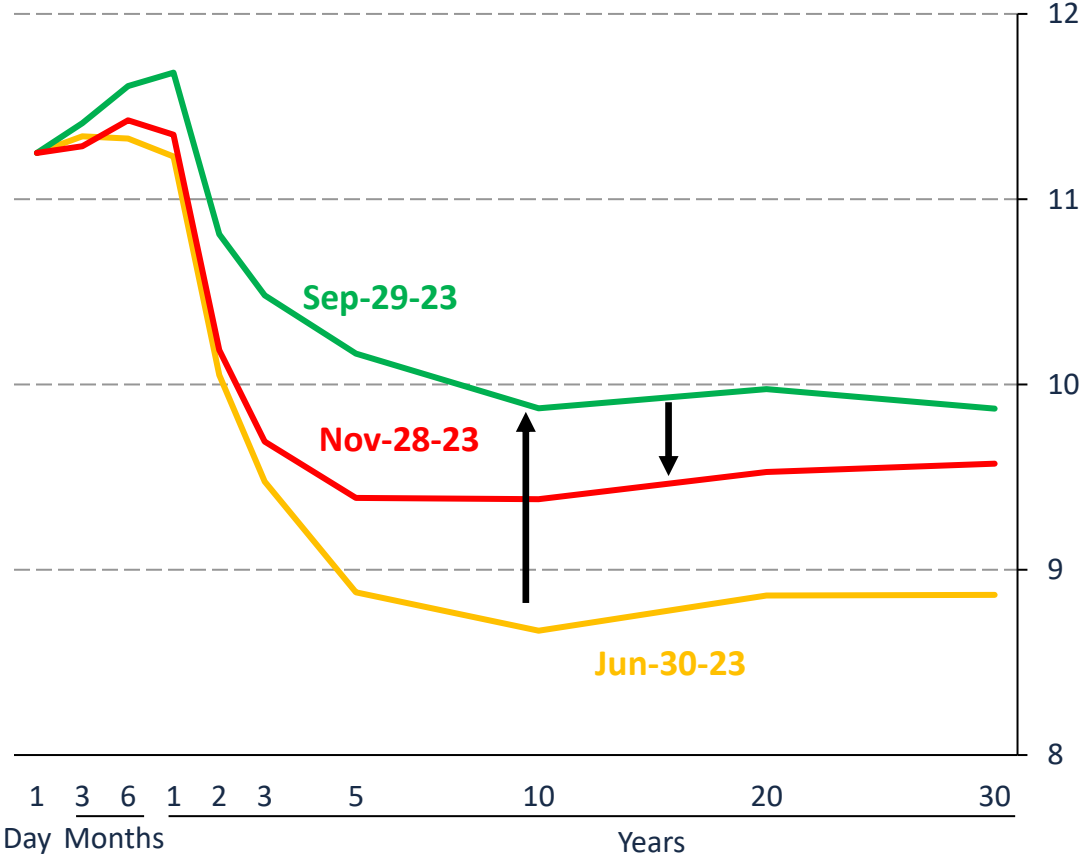
%



Note: The vertical lines corresponds to June 30, 2023.  
Source: Proveedor Integral de Precios (PiP).

Yield curve of Mexican government bonds

%



Source: Proveedor Integral de Precios (PiP).



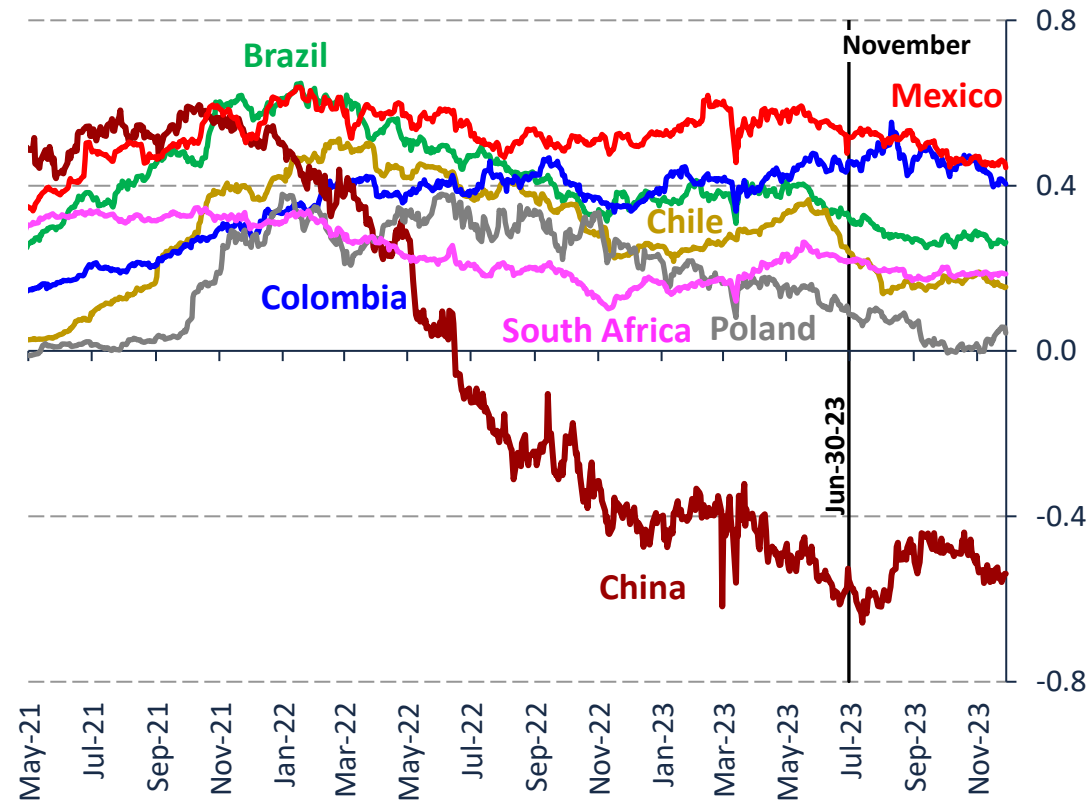
During the period covered by this Report, the Mexican peso exhibited higher volatility and depreciated, although part of these adjustments have reversed recently.

Nominal exchange rate and DXY <sup>1/</sup>  
Pesos per USD, no units



1/ The observed rate is the daily FIX exchange rate. For the DXY Index, an increase represents an appreciation of the US dollar. The vertical line corresponds to June 30, 2023. Source: Banco de México and Bloomberg.

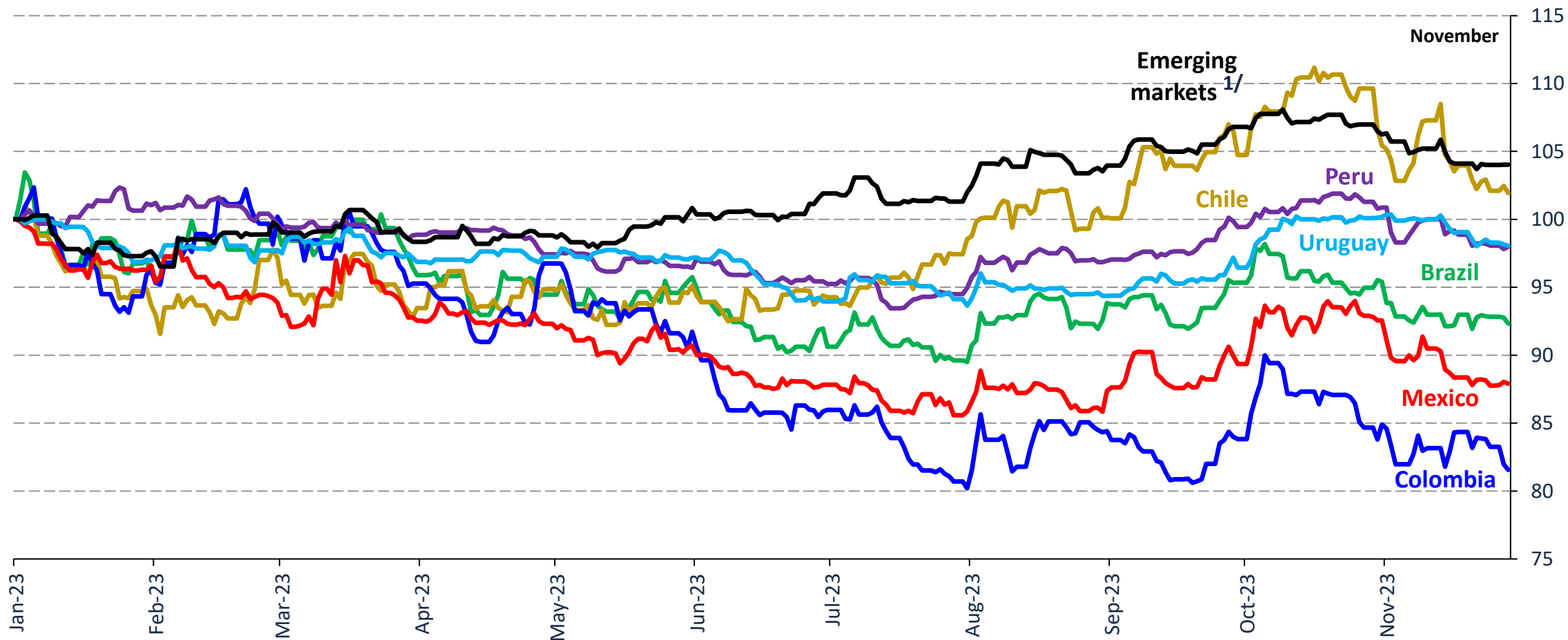
Volatility-adjusted spreads between emerging markets  
1-year interest rates and those of the U.S. <sup>2/</sup>  
No units



2/ The spreads are calculated with the implied spread in 1-year foreign exchange forwards, adjusted by implied volatility of the same time span. The vertical line corresponds to June 30, 2023. Source: Banco de México with Bloomberg data.

Despite the depreciation of the Mexican peso during the period, it continued standing out as one of the most resilient among emerging market currencies so far this year.

Exchange rate against the US dollar  
Index Jan-01-2023=100



1/ Refers to the JP Morgan Emerging Market Currency Index (EMCI) Fixing.  
Source: Bloomberg.

# Contents

**1 External conditions**

**2 Current situation of the Mexican economy**

**3 Inflation**

**4 Monetary policy**

**5 Forecasts and final remarks**

# Economic activity outlook

## GDP growth <sup>1/</sup> Annual %

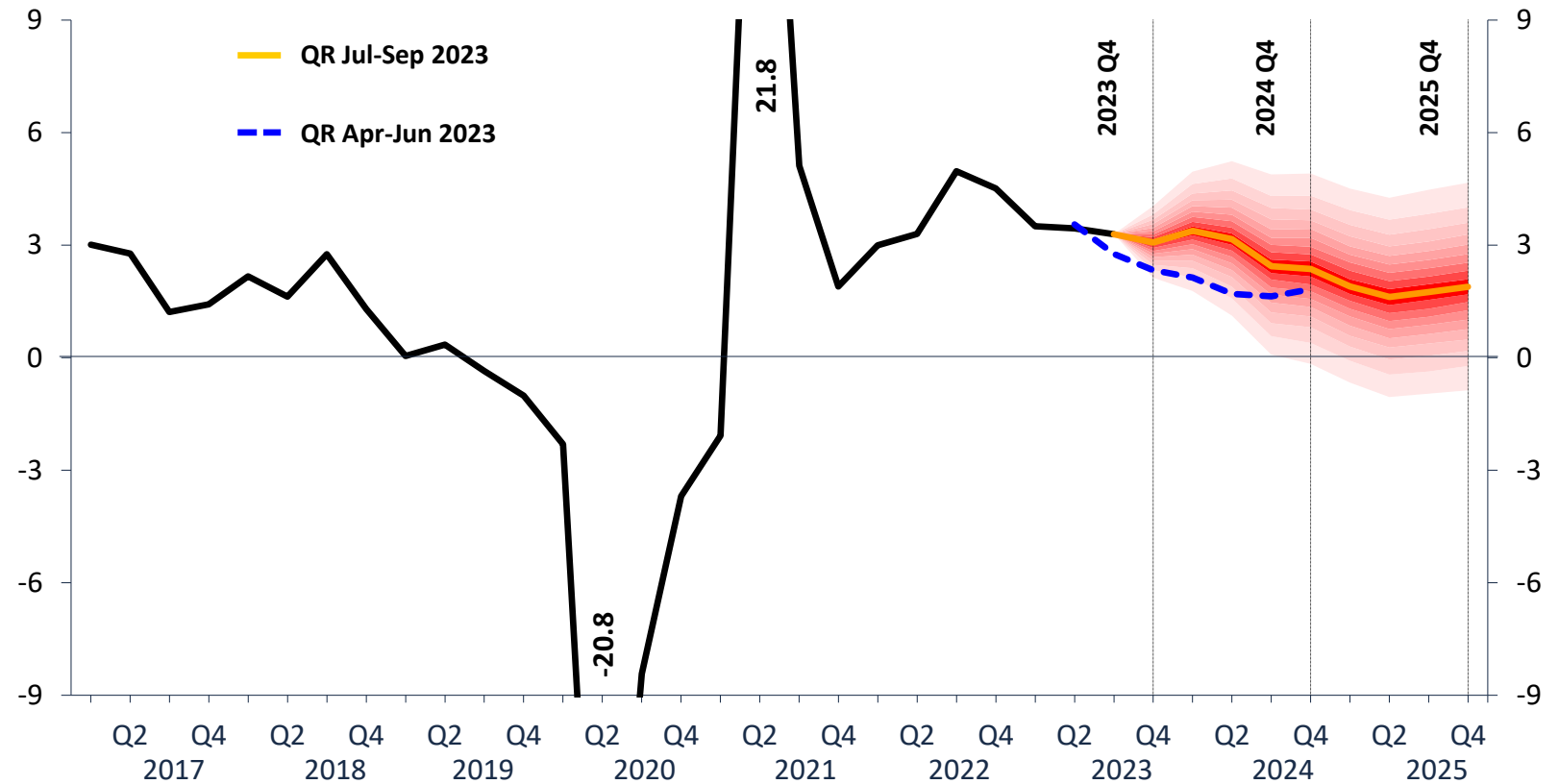
### QR July-September 2023

Year	Point	Interval
2023	3.3	3.1 a 3.5
2024	3.0	2.3 a 3.7
2025	1.5	0.7 a 2.3

### QR April-June 2023

Year	Point	Interval
2023	3.0	2.5 a 3.5
2024	2.1	1.3 a 2.9

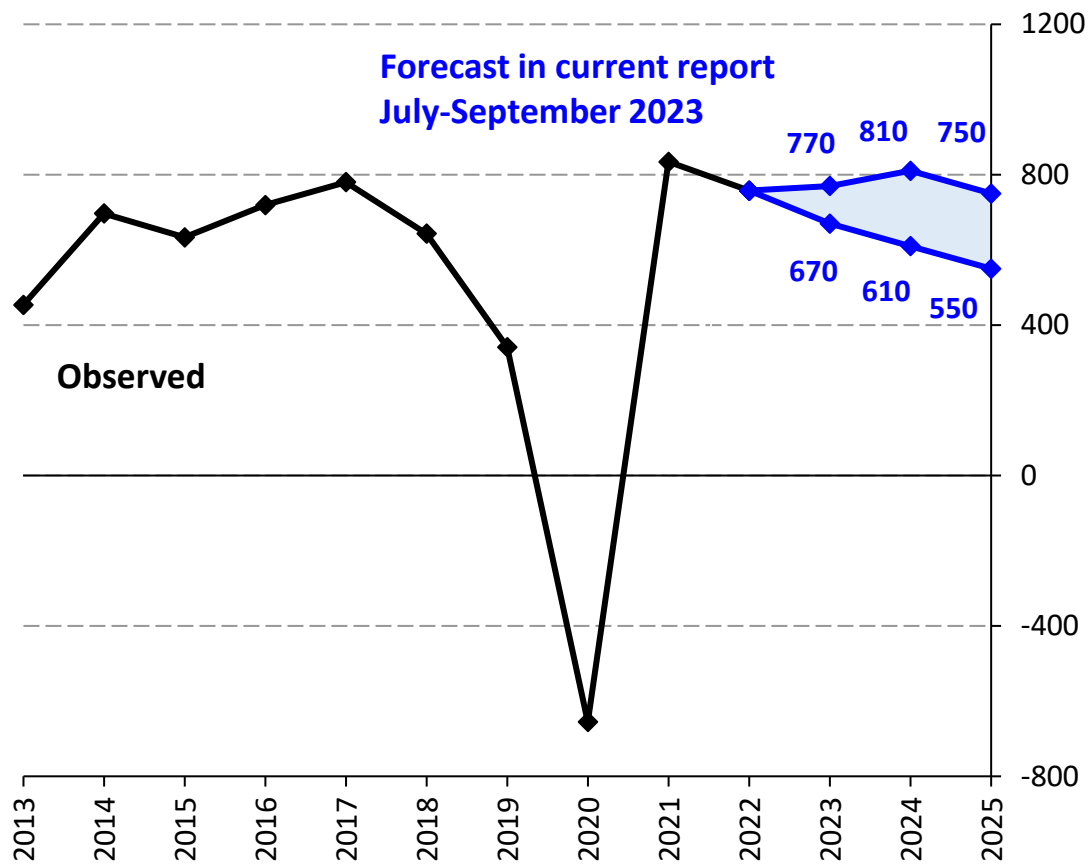
## GDP Annual %, s. a.



<sup>1/</sup> Forecasts with figures without seasonal adjustment. Mexico's GDP growth in 2022 was 3.9% with non-seasonally adjusted figures. Note: In the central scenario of the Quarterly Report July-September 2023, the forecast starts in Q4-2023. Source: INEGI and Banco de México.

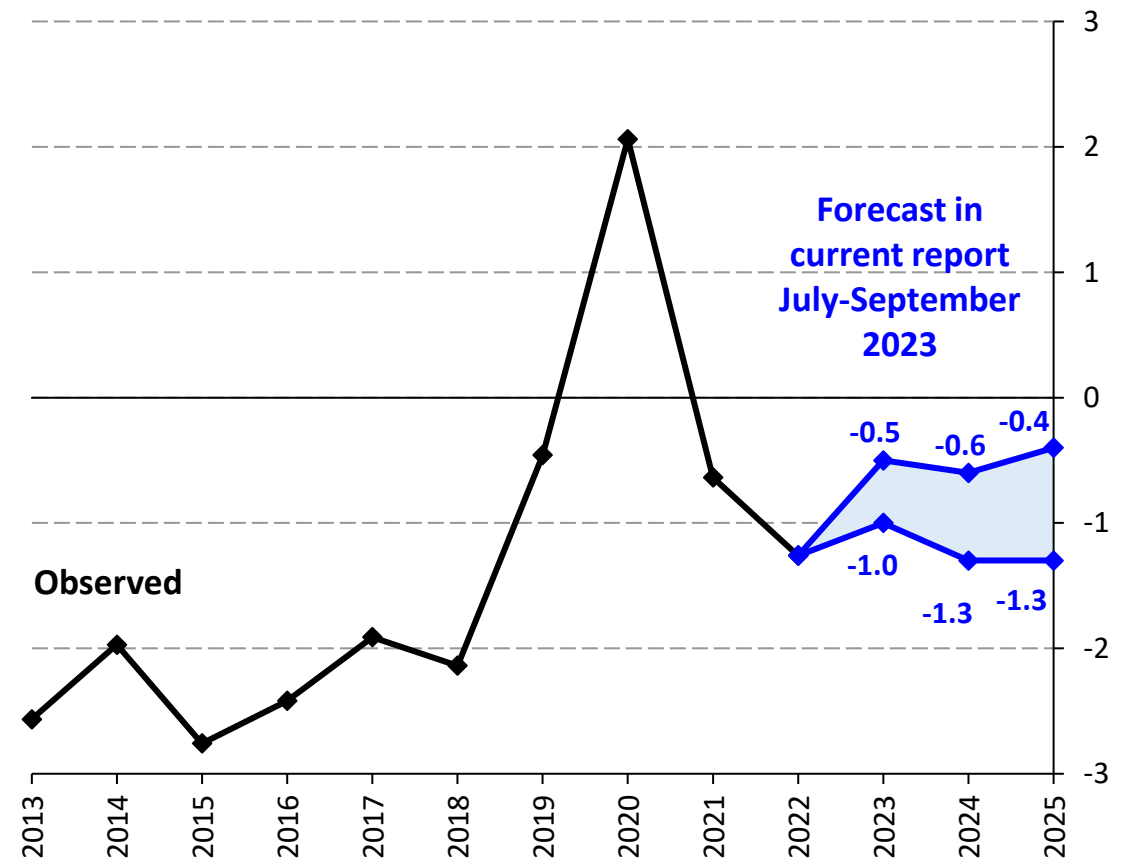
# Economic activity outlook

## Increase in number of IMSS-insured jobs Thousands



Source: IMSS and Banco de México.

## Current account % of GDP



Source : Banco de México.

# Risks to growth

Risks to growth of economic activity are balanced.

## To the downside

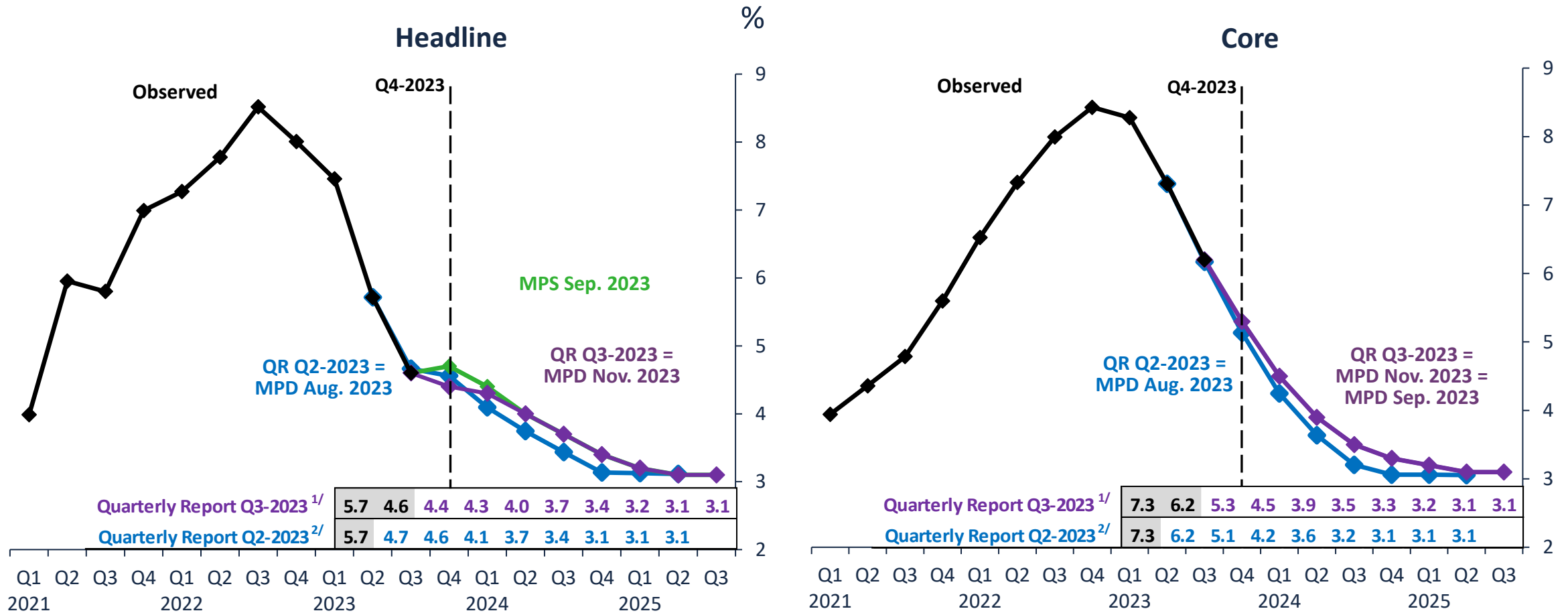
- I. A lower external demand, particularly in the United States**
- II. New negative impacts on international trade**
- III. Tighter financial conditions and/or episodes of volatility in financial markets**
- IV. Lower-than-expected recovery of investment spending, particularly in the long term**
- V. That public spending provides a lower-than-anticipated boost to economic activity**
- VI. That weather phenomena affect national economic activity adversely**

## To the upside

- I. That the slowdown in the US economy is smaller than expected**
- II. That the Mexican economy shows greater resilience than anticipated**
- III. That, within the USMCA framework, Mexico becomes an attractive investment destination**
- IV. That public spending results in a higher-than-anticipated boost to economic activity**

Both headline and core inflation are expected to continue decreasing in the forecast horizon, albeit more gradually than in the previous Report. Inflation is anticipated to reach levels close to 3% in Q2-2025.

### Annual inflation forecasts



Source: INEGI for annual variation observed data and Banco de México for forecasts. 1/ Forecast since November 2023. It corresponds to the forecast published in the Monetary Policy Statement of November 9, 2023. 2/ Forecast since August 2023. It corresponds to the forecast published in the Monetary Policy Statement of August 10, 2023.

# Risks to inflation within the forecast horizon

The balance of risks to the expected path of inflation over the forecast horizon remains biased to the upside.

## To the upside

- I. Persistence of core inflation at high levels
- II. Episodes of exchange rate depreciation
- III. Higher cost-related pressures that could be passed on to consumer prices
- IV. Greater-than-expected resilience of the economy
- V. Pressures on energy or agricultural and livestock products prices

## To the downside

- I. A greater-than-anticipated deceleration of the global economy
- II. A lower pass-through of some cost-related pressures
- III. That the lowest exchange rate levels since the beginning of the year contribute more than anticipated to mitigate certain pressures on inflation



# Final remarks

- **The Mexican economy has shown resilience and has grown continuously.** This performance has been supported by the sound macroeconomic framework, anchored on fiscal discipline and price stability, as well as a healthy financial system, a well-capitalized banking sector, sustainable external accounts, and a flexible exchange rate.
- **Going forward, maintaining and strengthening all these pillars will enable the country to face future challenges.** In this regard, Banco de México's Governing Board will continue setting its monetary policy stance with the strong commitment to foster an orderly adjustment of relative prices, of financial markets and the economy as a whole, in order to lead inflation to its 3% target and ensure the anchoring of inflation expectations.
- **Mexico must continue moving forward by taking actions that will allow it to achieve sustainable long-term growth.** An environment conducive to investment and productive activity needs to be fostered, while measures to promote a better allocation of resources must also be implemented. The above, to the benefit of Mexicans' wellbeing.

# Annex - Boxes

- 1** Labor market in the United States
- 2** Evolution of international fiscal and monetary policy stances in the context of the global economic recovery
- 3** Change of 2018 base year in the measurement of Mexico's National Accounts
- 4** Incidence of demand and supply factors on the price behavior of Mexico's non-oil merchandise exports and imports
- 5** Historical evolution of the sources and uses of financial resources and analysis of sectoral financing of depository institutions in Mexico
- 6** Estimation of production cost indices for goods and services in the core price index basket
- 7** Deviations of the relative prices of goods and services from their long-run equilibrium
- 8** Relationship between long-term interest rates in Mexico and the United States



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