



BANCO DE MÉXICO®

Executive Summary

Quarterly Report April - June 2023

Summary*

During the second quarter of 2023 and in the third one so far, the external environment has been characterized by a global inflation that is still at high levels, but which has continued declining; by prospects of a deceleration in world economic activity, although slightly less intense than previously anticipated, and by monetary conditions that continued being tight at the international level. Domestically, the Mexican economy continued showing resilience and the labor market remained strong. Given that diverse pressures have eased, the disinflationary process continued underway. Annual headline inflation continued declining. The core component decreased as well, although more gradually, and remains at high levels. Considering the above, as well as the significant adjustment of monetary policy throughout the hiking cycle, which began in June 2021, during the reported period the Governing Board left the reference rate unchanged. In an outlook that is perceived to be complex throughout the entire forecast horizon and with upward risks to inflation, the Governing Board considered that, in order to achieve an orderly and sustained convergence of inflation to its target, it will be necessary to maintain the reference rate at its current level for an extended period.

During the second quarter of 2023, world economic activity grew at a slower pace compared to the previous quarter, although slightly faster than anticipated at the beginning of this period. In most advanced economies, economic activity expanded during the quarter. For 2023 as a whole, forecasts of international organizations continue pointing to a lower dynamism of world economic activity as compared to the previous year. The growth rate in 2024 is expected to be similar to that of 2023. In this context, although headline inflation decreased in

most of the major economies, it remained at high levels, above central banks' targets. In addition, the core component has declined at a slower pace than headline inflation. Financial markets registered a decrease in volatility and a slight easing in international financial conditions' indices for most of the reported period. Among other factors, this was supported by lesser concerns over the banking systems' stability in the United States and Europe, as well as by the agreement to suspend the US debt ceiling. However, in August volatility increased and financial conditions tightened slightly due to a combination of different factors. These include the high sensitivity of financial markets to the release of economic figures due to their possible implications for further monetary tightening and concerns regarding the fiscal position in some advanced countries.

In this environment of still high levels of inflation, the monetary policy adjustments of the central banks of the major advanced and emerging economies have been somewhat heterogeneous. This was based on each central bank's assessment of the evolution of the inflationary process in their respective economies. In the main advanced economies, most central banks continued tightening their monetary policy stances. However, some authorities moderated the magnitude of their reference rate increments or stopped increasing them. Other authorities raised their interest rates again, after keeping them unchanged during several monetary policy meetings. In the main emerging economies, most central banks left their rates unchanged. Some central banks announced interest rate cuts in their recent monetary policy decisions. Overall, monetary authorities have pointed out that future adjustments will depend on the evolution of economic indicators.

* *Note: In the electronic version of this document, the information that allows to generate all the charts and tables included in this report can be obtained by clicking on them, except for those that are not produced or prepared by Banco de México.*

In August 2022, the US government enacted the "CHIPS and Science Act" to boost local research and production of high-tech goods, especially in the semiconductor sector. The box Nearshoring of semiconductor production promoted by the US government briefly outlines the main content of this legislation. It also includes an analysis based on a global input-output matrix. While the results suggest relatively low interlinkages of this US sector with the rest of the world, they also indicate that there is room for increases in production and productivity in this sector to spill over to other countries, including Mexico.

In this complex international environment, economic activity in Mexico continued to display resiliency during the second quarter of 2023, expanding at a similar pace to the previous quarter. This resiliency can be associated with the good performance of domestic spending overall. Growth in the second quarter was a reflection of the good performance of both secondary and tertiary activities.

Domestic financial markets registered an orderly behavior during the period covered by this Report. This was supported by Mexico's sound macroeconomic fundamentals compared to other emerging market economies, as well as by lower international financial volatility. In particular, interest rates exhibited narrow fluctuations, while the Mexican peso appreciated against the US dollar. However, in August longer-term interest rates adjusted upwards somewhat, while the exchange rate displayed a slight depreciation at the beginning of the month, an adjustment that has been reversing. This occurred in a context of a greater risk aversion at the global level.

Annual headline inflation in Mexico continued decreasing during the period analyzed in this Report. Specifically, it shifted from 7.46% in the first quarter of 2023 to 5.71% in the second one, and then to 4.67% in the first fortnight of August. This downward pattern was the result of a decline in both core and non-core components. Between the referred quarters, core inflation adjusted from 8.28 to 7.31%,

and subsequently to 6.21% in the first fortnight of August, which is still a high level. Within core inflation, annual inflation of both merchandise and services remained high. The latter has been affected by the global shocks, which have exerted upward pressures on services' costs, and by the higher demand services have been facing. On the other hand, annual non-core inflation decreased significantly from 5.06 to 1.00% between the referred quarters, reaching 0.13% in the first fortnight of August.

The econometric model presented in the box *Estimation of an inflation regime-switching model* suggests that headline inflation is already at levels that would be consistent with those observed in periods of low inflation based on its historical behavior (an inflation regime with a relatively lower mean). This does not mean that the disinflationary process should be taken for granted, as headline inflation is still above Banco de México's target and core inflation remains at high levels.

In the monetary policy decisions of the reported period, the Governing Board left the reference rate unchanged at 11.25%. This, considering that, although the outlook remained complicated, it was less adverse than what it had been during most of last year. The ongoing deflationary process is in contrast with the clear and pronounced upward trend which inflation had shown. In addition, the Board deemed that, the level already attained by the reference rate in the hiking cycle, constituted a solid stance to address the challenges of the inflationary environment. Thus, after having raised the reference rate in 15 consecutive monetary policy meetings, accumulating 725 basis points of increases, it decided to keep such rate unchanged.

The Board will thoroughly monitor inflationary pressures as well as all factors that have an incidence on the foreseen path for inflation and its expectations. It estimates that the inflationary outlook will be complicated and uncertain throughout the entire forecast horizon, with upward risks. Thus, in order to achieve an orderly and

sustained convergence of headline inflation to the 3% target, it considers that it will be necessary to maintain the reference rate at its current level for an extended period. The central bank reaffirms its commitment with its primary mandate and the need to continue its efforts to consolidate an environment of low and stable inflation.

As for Banco de México’s macroeconomic outlook, the following stands out:

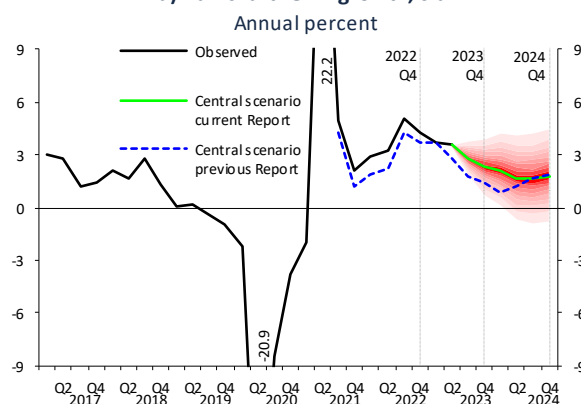
Growth of the national economy: Driven by the resilience of the Mexican economy, GDP growth during the second quarter of the year was higher than anticipated in the previous Report. This implies an expectation of higher GDP growth for 2023 as a whole (Chart 1a). The revision for 2023, in turn, provides a greater base for the following year's growth, and thus the expected GDP growth for 2024 is also adjusted upwards. For 2024, the pace of growth is projected to be similar to that of the previous Report. Although growth expectations for US industrial production for 2024 were adjusted slightly downwards, which could affect economic activity in Mexico, the resilience of the Mexican economy is expected to offset this effect. Thus, within the forecast horizon, a slowdown in economic activity is still anticipated with respect to the recently observed dynamism, in line with the expected behavior of the US economy. Likewise, domestic demand is still foreseen to continue supporting domestic economic activity.

Based on the above, GDP growth is expected to be between 2.5 and 3.5% in 2023, with a central estimate of 3.0% (higher than the 2.3% of the previous Report). For 2024, economic growth is expected to be between 1.3 and 2.9%, with a central estimate of 2.1% (higher than the 1.6% of the previous Report; Table 1).

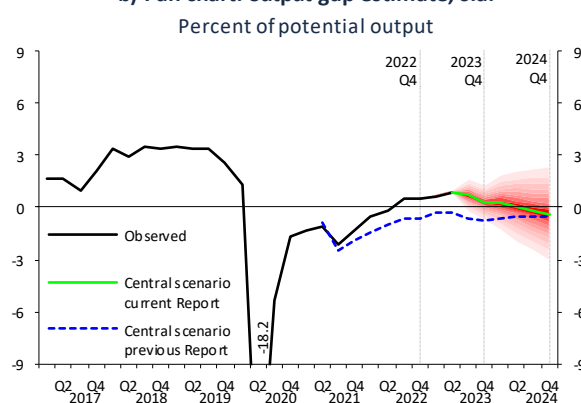
Regarding the cyclical position of the economy, the estimate of the output gap is expected to be close to zero throughout the forecast horizon (Chart 1b). It should be noted that the estimation of this unobservable indicator is subject to a high degree of uncertainty.

Chart 1

a) Fan chart: GDP growth, s.a.



b) Fan chart: output gap estimate, s.a.



s.a./Seasonally adjusted figures.

Note: In the base scenario of the present Report the forecast begins in Q3 2023. In the central scenario of the previous Report, it started in Q2 2023.

Source: a) INEGI and Banco de México. b) Banco de México.

Table 1
Forecasts for GDP growth
Annual percent

Year	Central	Interval
2023	3.0	Between 2.5 and 3.5
2024	2.1	Between 1.3 and 2.9

Note: Not seasonally adjusted forecasts. The central estimates for 2023 and 2024 compare with the previous Report’s forecasts of 2.3 and 1.6% for each year. Intervals compare to those published in the previous Report of 1.7 and 2.9% for 2023 and 0.6 and 2.6% for 2024. Mexico’s GDP increased 3.9% in 2022 with figures that are not seasonally adjusted.

Source: Banco de México.

Employment: Table 2 presents the forecasts for IMSS-insured jobs. Based on projections for economic activity and the most recent information on the evolution of formal employment, these forecasts are revised upwards compared to the previous Report.

The box *Cyclical and non-cyclical factors in the evolution of Mexico's labor force participation rate since 2005* shows that the female labor force participation rate has trended upwards, which partly reflects a greater propensity of new generations to participate in the labor market. In contrast, male labor force participation exhibits a downward trend largely attributed to a decline in the participation of young and older male adults. Among other results, it should be noted that the higher level of schooling attained by the Mexican population over the years seem to have positively affected the trend in labor participation for the economy as a whole.

Table 2
Forecasts for the number of IMSS-insured jobs
Annual change in thousands of jobs

Año	Interval current report	Interval previous report
2023	Between 670 and 830	Between 600 and 800
2024	Between 570 and 770	Between 530 and 730

Source: Banco de México.

Current account: Table 3 shows the forecasts for the trade balance and the current account based on the latest information.

Table 3
Forecasts for the trade balance and current account

Year	2023	2024
Trade balance		
% of GDP	Between -1.7 and -1.3	Between -1.7 and -1.2
Billions of dollars	Between -30.6 and -24.1	Between -30.4 and -22.2
Current account		
% of GDP	Between -1.8 and -1.2	Between -1.6 and -0.8
Billions of dollars	Between -31.6 and -21.5	Between -28.6 and -15.6

Note: Figures for 2023 compare with those of the previous Report of a trade balance of between -26.9 and -20.9 billion dollars (-1.6 and -1.2% of GDP) and a current account balance of between -22.3 and -12.3 billion dollars (-1.3 and -0.7% of GDP). Figures for 2024 compare with the previous Report's figures of a trade balance of between -28.9 and -20.9 billion dollars (-1.7 and -1.2% of GDP) and a current account balance of between -19.8 and -7.7 billion dollars (-1.2 and -0.4% of GDP).

Source: Banco de México.

The box *Mexico's gain of share in US imports of goods* outlines the evolution of this indicator since 2017. It shows that the increase in share between 2017 and 2019 can be associated, in part, with the imposition of higher tariffs on China by the United States. Subsequently, the disruptions caused by the pandemic, which mainly affected the automotive sector, forced Mexico's share to return to its 2017 level in 2021. Finally, the recovery of this sector during the first half of 2023, together with a greater presence in other non-automotive goods, allowed Mexico to become the main supplier of the United States.

Risks to growth: The outlook for domestic economic activity remains complex and uncertain. However, Mexico's economic performance and that of the United States has remained resilient. Also, the nearshoring of firms to Mexico, although incipient, seems to be underway. In this context, risks for the outlook of economic activity in Mexico are now considered to be balanced. Among the risks to the downside in the forecast horizon, the following stand out:

- i. A lower external demand to the detriment of economic activity in Mexico, particularly in the event of a deep and lasting recession in the United States.
- ii. Tighter-than-expected financial conditions and/or episodes of volatility in international financial markets that affect financial flows to emerging economies.
- iii. Negative effects on international trade, given the diverse geopolitical and commercial tensions in different regions of the world.
- iv. Lower-than-expected or insufficient recovery of investment spending in Mexico to support the growth of the economy, particularly in the long term.
- v. That severe weather phenomena, such as extreme temperatures or cyclones, adversely impact national economic activity.

Among the risks to the upside in the forecast horizon, the following stand out:

- i. That the slowdown in the US economy is lower than expected.
- ii. That the Mexican economy shows greater resilience than expected in light of the difficult international environment and the anticipated weakness of global economic growth.
- iii. That, within the USMCA framework, Mexico becomes an attractive investment destination in light of a global reconfiguration of production processes, benefitting its economic activity and productivity.

- iv. That higher-than-anticipated public spending is observed, resulting in a greater boost to economic activity.

Inflation: Given the mitigation of diverse pressures, and as anticipated, the disinflationary process has continued in Mexico. In this context, the forecasts for headline and core inflation published in the previous Quarterly Report, as well as in the June 22 and August 10, 2023 Monetary Policy Statements are similar, although with some adjustments in the short term. The forecasts published in the latter Statement remain unchanged in the current Quarterly Report (Chart 2).

In comparison to the forecast published in the previous Quarterly Report, the current Report considers a downward revision for annual headline inflation in the short term. This adjustment is attributed to the unexpected and atypical low levels of non-core inflation due to lower-than-expected variations in energy and agricultural and livestock product prices. The remaining trajectory of headline inflation continues at the same levels as those considered in the previous Report. Meanwhile, the expected trajectory for core inflation between the previous and current Reports was adjusted slightly upwards between the fourth quarter of 2023 and the second quarter of 2024. This change mainly reflects a revision to the expected trajectory of variations of services prices, which continue being affected by the shocks of the pandemic and the military conflict in Ukraine on their operating costs, in an environment in which the demand for services has been recovering. For the rest of the forecast horizon, the trajectory of core inflation remains at the same levels as in the previous Report.

Thus, headline inflation is still expected to continue decreasing for the rest of 2023 and in 2024. It is also expected to be close to the target level of 3% as of the fourth quarter of 2024 (Table 4 and Chart 3). Additionally, the prevision for core inflation to continue decreasing and reach levels close to 3% by the fourth quarter of 2024 is maintained. The expected downward trend in headline and core

inflation trajectories considers the monetary policy actions implemented by Banco de México, as well as the forecast of a continued easing of various pressures on inflation.

Table 4 and Chart 4 show the annual rate of change and the annualized seasonally adjusted quarterly rate of change of the headline and core indices. The prevision that the seasonally adjusted annualized quarterly rates of headline and core indices are expected to decline in the following quarters is maintained, reaching levels of around 3% in early 2024. Since annual rates are influenced over twelve months by short-term shocks on inflation, their reduction is slower than that of seasonally adjusted ones. As a result, the annual variations of the headline and core indices are above the seasonally adjusted ones at the stage in which the shocks on inflation are assimilated.

Although the disinflationary process in Mexico has overall continued as expected, it continues evolving in a complex and uncertain environment. There is still the possibility that the effects of the shocks that inflation has been facing last longer than expected, that they intensify or that additional shocks occur and exert upward pressures on it. In particular, although

core inflation remains on a downward trajectory, it continues to decline gradually and remains at high levels. The persistence of core inflation and the possibility of non-linearities associated with the still high levels this indicator presents could imply a more complicated scenario for inflation than forecasted. In this context, the balance of risks for the expected trajectory of inflation over the forecast horizon is considered to remain biased to the upside.

The box *Anchoring of long-term inflation expectations in Mexico* delves into three properties of expectations' anchoring. These are their stability, the average size of their adjustments and their response to inflationary surprises and to changes in short- and medium-term inflation expectations. The box illustrates that, for the available sample, specialists' revisions to their long-term inflation expectations have been rare and their average magnitude is near zero. Also, it provides econometric evidence suggesting that these expectations have not responded to inflationary surprises, nor to movements in lower-term inflation expectations. These results provide further evidence on the anchoring of long-term inflation expectations in Mexico.

Among main risks for inflation in the forecast horizon, the following stand out:

To the upside:

- i. Persistence of core inflation, given the magnitude, scope and duration of the shocks that have been faced and that have raised it to high levels.
- ii. Exchange rate depreciation as a result of international financial volatility.
- iii. Higher cost-related pressures that could be passed on to consumer prices.
- iv. 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 exchange rate appreciation contributes more than anticipated to mitigate certain pressures on inflation.
- iv. A greater-than-anticipated effect of the Federal Government's measures to counteract inflation.

Table 4
Forecasts for headline and core inflation

Annual percentage change of quarterly average indices

	2023				2024				2025	
	I	II	III	IV	I	II	III	IV	I	II
CPI										
Current Report = Monetary Policy Statement of August 2023 ^{1/}	7.5	5.7	4.7	4.6	4.1	3.7	3.4	3.1	3.1	3.1
Previous Report = Monetary Policy Statement of May 2023 ^{2/}	7.5	6.0	5.2	4.7	4.2	3.7	3.4	3.1	3.1	
Core										
Current Report = Monetary Policy Statement of August 2023 ^{1/}	8.3	7.3	6.2	5.1	4.2	3.6	3.2	3.1	3.1	3.1
Previous Report = Monetary Policy Statement of May 2023 ^{2/}	8.3	7.4	6.2	5.0	4.1	3.5	3.2	3.1	3.1	
Memo										
Annualized seasonally adjusted quarterly variation in percent^{3/}										
Current Report = Monetary Policy Statement of August 2023^{1/}										
CPI	4.9	3.9	4.4	4.9	3.1	2.7	3.2	3.5	3.1	2.8
Core	6.9	5.1	4.5	4.0	3.2	2.8	2.9	3.3	3.2	2.8

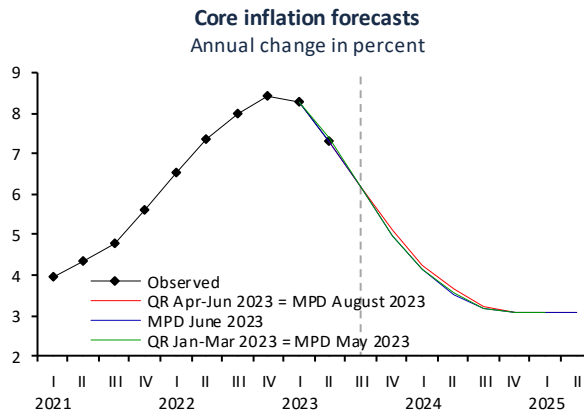
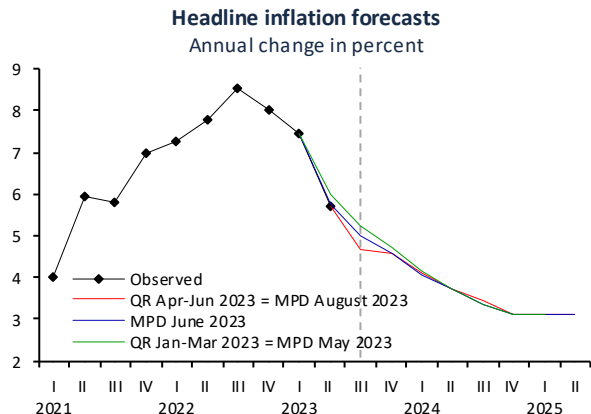
^{1/} Forecast starting August 2023. It corresponds to the forecast published in the Monetary Policy Statement of August 10th 2023.

^{2/} Forecast starting May 2023. It corresponds to the forecast published in the Monetary Policy Statement of May 18th 2023.

^{3/} See [Methodological Note](#) on seasonal adjustment process.

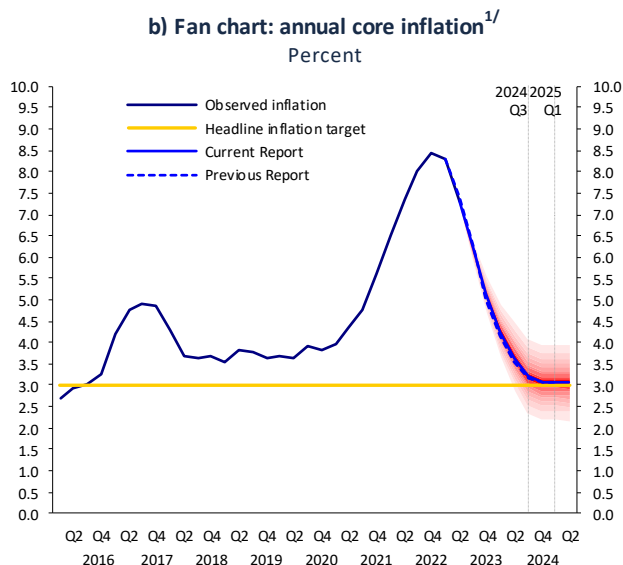
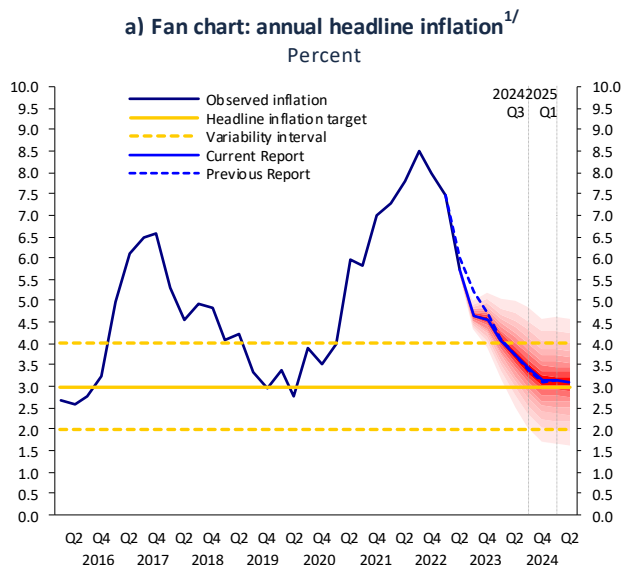
Source: INEGI for observed annual variation figures and Banco de México for seasonally adjusted figures and forecasts.

Chart 2



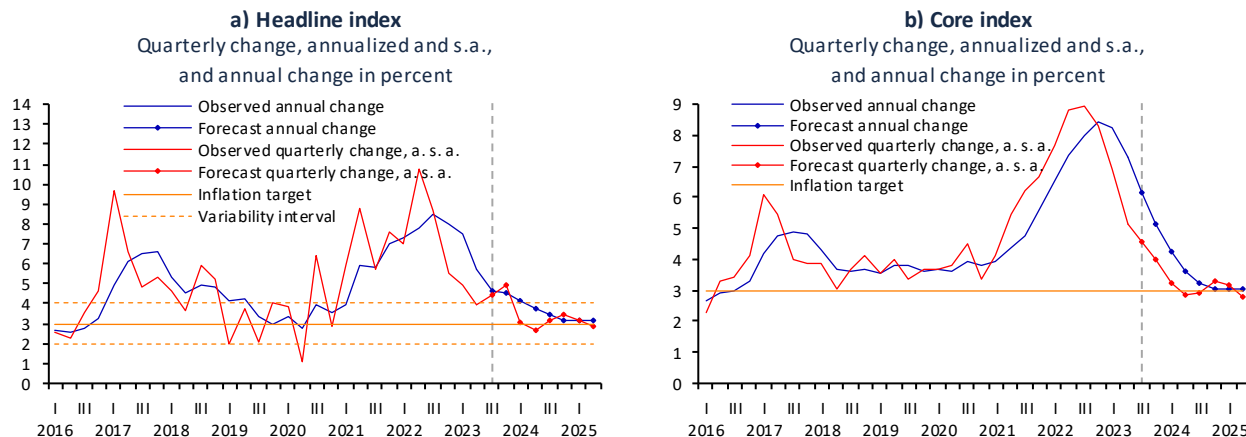
Note: QR refers to Quarterly Report and MPD refers to Monetary Policy Decision. Vertical line corresponds to third quarter of 2023.
Source: Banco de México and INEGI.

Chart 3



^{1/} Quarterly average of annual inflation. The next four and six quarters are indicated with vertical lines, using as a reference the third quarter of 2023, that is, the third quarter of 2024 and the first quarter of 2025, respectively, to indicate the time frames in which the transmission channels of monetary policy fully operate.
Source: Banco de México and INEGI.

Chart 4



s.a. seasonally adjusted figures.
a.s.a. annualized seasonally adjusted figures.
Vertical line corresponds to third quarter of 2023.
Source: Banco de México and INEGI.

Despite having declined, inflation in several countries, including Mexico, remains at high levels. Additionally, a number of risk factors persist, which could once more exert upward pressure on it or delay its decline. 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 of the economy as a whole, in order to lead inflation to its 3% target and ensure the anchoring of inflation expectations. This central bank will persevere in its efforts to restore a low and stable inflation in order to mitigate the multiple costs associated with a high and volatile inflation. Among these costs are the decline in households' purchasing power, as well as the negative effects on the planning of productive projects and on investment decisions.

Going forward, a deceleration of world economic activity is anticipated. At the same time, the gradual

process of reconfiguration of global production chains offers an opportunity to attract greater investment to Mexico. In this context, it is essential to maintain the country's macroeconomic soundness, including fiscal discipline, a healthy financial system, and a monetary policy focused on achieving price stability. However, while maintaining a sound macroeconomic framework is necessary for greater economic development, it is not a sufficient condition. An environment conducive to investment and productive activity must also be fostered. It is also necessary to adopt measures that promote an adequate allocation of resources to increase the country's productivity in order to generate more and better jobs. In addition, as it has been emphasized in previous Reports, it is important to continue strengthening the rule of law and to continue fighting insecurity and corruption. All of this will allow to lay the foundation for greater and sustained growth in the long term. This would contribute to improve households' quality of life.



BANCO DE MÉXICO®

August 30th, 2023

www.banxico.org.mx