



BANCO DE MÉXICO®

Executive Summary

Quarterly Report January - March 2023

Summary*

During the first quarter of 2023 and in the second quarter so far, Banco de México, while conducting monetary policy, continued facing a complex and uncertain environment, although different inflationary pressures continued to dissipate. In the external sphere, headline inflation decreased in several countries, although it remained at high levels, and the core component displayed resistance to decrease. During the period covered by this Report, global economic activity recovered as compared to the fourth quarter of 2022. In March, some US and European banks faced deposit runs from their customers. These banks were either bailed out or sold. This situation caused greater risk aversion and turbulence in international financial markets. Most central banks increased their reference rates. In the domestic sphere, the Mexican economy exhibited resilience. The events in the US and European banking systems had a limited impact on the domestic financial system and on Mexico's inflation outlook. Meanwhile, headline inflation continued decreasing, mostly due to the dynamics of the non-core component. Core inflation declined gradually, although it remained at high levels. In this context, Banco de México increased the reference rate, although, in view of the evolution of the inflation outlook and considering the monetary policy stance already attained, it reduced the pace of upward adjustments and, in its latest monetary policy decision, it left the reference rate unchanged. Thus, in a juncture that continued to be difficult, the monetary policy stance strengthened during the period covered by this Report. Going forward, Banco de México will remain committed in its efforts to

consolidate an environment of low and stable inflation, in an outlook foreseen to be complicated throughout the entire forecast horizon.

Delving into the external environment, the decline in headline inflation, which was observed both in advanced and emerging economies during the period covered by this Report, was largely due to lower pressures in energy and food prices. This, in a context in which different inflationary shocks continued easing. For example, the lifting of mobility restrictions in China and the normalization in the functioning of global supply chains continued contributing to reduce pressures on different goods' prices. However, inflationary pressures continued to be significant, and, therefore, the environment remained complex. Thus, in most cases, despite the decline observed, headline inflation remained at still high levels, significantly above the respective central banks' targets. Furthermore, as compared to headline inflation, the core component exhibited a stronger persistence at high levels and, overall, it still does not show a clear downward inflection point. However, a certain stabilization or reduction was registered in several economies. This behavior of global inflation was observed in a context in which world economic activity registered a recovery as compared to the last quarter of the previous year, supported by higher growth in some of the major economies. Labor markets remained tight in most advanced economies. However, the growth outlook as perceived by international organizations continued implying a deceleration of global economic activity in 2023 and a slight recovery in 2024.

* *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.*

This already complex international environment became even more uncertain given the events in the US and European banking systems. In the case of the United States, due to inadequate risk management, which led to losses in bond portfolios of some banking institutions, especially at regional ones, a loss of confidence and a sudden withdrawal of deposits were observed. This led to increased risk aversion and to an episode of high volatility in international financial markets. However, this market behavior was partially reversed due to the actions implemented by financial authorities, including central banks, to protect savers and provide liquidity. This helped to ease concerns regarding a possible contagion.

The box *Heterogeneity in the impact of monetary conditions on manufacturing sectors in Mexico and the United States* illustrates the differentiated responses among sectors, both in terms of the magnitude of the effects, as well as in terms of the timing of responses to adjustments in monetary conditions. Mexico's manufacturing sectors not only respond to domestic conditions, but also to those prevailing in the United States. Thus, in an environment characterized by significant adjustments in monetary stances to curb inflation, going forward, different sectors could be expected to adjust heterogeneously.

In this international juncture, characterized by inflation levels that are still high, the recovery of economic activity, and concerns regarding financial stability, monetary policy worldwide remained focused on controlling inflation. This, considering that the difficulties associated with financial stability could be addressed using different tools, such as liquidity facilities and macroprudential measures, among others. Most central banks, thus, continued tightening their

monetary policy stances, although in several cases, they moderated the pace of reference rate hikes or left such rates unchanged in their most recent decisions.

In a complex external environment such as the one described above, the Mexican economy continued growing and its financial system continued operating normally. In addition, Mexico's inflation outlook was not affected by the recent developments in the US and European banking systems. Economic activity in Mexico also exhibited resilience in the context of a complex outlook. During the first quarter of 2023, economic activity once again expanded at a dynamic rate, similar to the relatively high rates registered between the last quarter of 2021 and the third quarter of 2022. Economic growth during the reported period was driven by the expansion of both services and industrial production. However, looking ahead, the outlook remains uncertain.

The box *Heterogeneity in the behavior of the manufacturing subsectors during the pandemic according to their degree of global integration* shows that those subsectors that are more integrated globally, both in terms of origin of inputs and destination of production, have performed better than the rest of the subsectors, following the initial shock of the pandemic. Similarly, they have registered a greater increase in the use of their installed capacity. This can be associated with a higher world demand for certain types of goods, whose production in Mexico is highly integrated into global value chains.

During most of the period covered by this Report, domestic financial markets exhibited an orderly behavior. Nevertheless, in view of the greater risk aversion associated with the

abovementioned problems of certain financial institutions in the United States and Europe, an episode of financial turbulence was observed in March. Volatility in financial markets increased, while the exchange rate adjusted upwards. However, beyond these effects on domestic financial markets, which turned out to be transitory, the aforementioned events had a limited impact on the Mexican banking system. This is because banking institutions in Mexico do not have a significant exposure to the foreign banks in distress. In the same vein, Mexican banks stand out for meeting with ease regulatory requirements regarding capital and liquidity. Nonetheless, Banco de México has remained vigilant to the evolution of the aforementioned events.

The box *Effect of the recent turbulence in international financial markets on domestic financial markets* describes the recent events in the US and European banking systems, as well as their impact on Mexico's foreign exchange market, stock market, and fixed income market. In contrast to previous episodes of global financial stress, the recent events in the external banking systems have had moderate and short-lived effects on Mexico's financial markets. Among the factors explaining this result are the measures adopted by external financial authorities, which have helped to moderate contagion risk at the international level, and Mexico's macrofinancial framework, which is essential to address external shocks.

Regarding inflation dynamics in Mexico, annual headline inflation decreased from 8.01% during the fourth quarter of 2022 to 7.46% in the first quarter of 2023, reaching 6.00% in the first fortnight of May. This pattern is mainly attributed to the decline in annual non-core inflation. Meanwhile, annual core inflation

decreased gradually between quarters, from 8.43 to 8.28%. This indicator has registered a more notable reduction during the second quarter, reaching 7.45% in the first fortnight of May, although it still remains at high levels. As for its components, annual merchandise inflation has continued to decline, while services inflation has continued exhibiting upward pressures. Annual non-core inflation decreased from 6.77 to 5.06% during the referred quarterly period, registering 1.70% in the first fortnight of May.

In an environment, which, despite the easing of various inflationary pressures, remained complex, Banco de México strengthened its monetary policy stance. Thus, in the meeting of February and March 2023, the Board increased the reference rate by 50 and 25 basis points, respectively, raising it to a level of 11.25%, while in the meeting of May it decided to leave the reference rate unchanged at said level. In the February meeting, the outlook was more complex than anticipated, given that core inflation dynamics turned out to be more unfavorable than previously expected. The Board estimated that inflation would decline more slowly than previously anticipated. Based on the above, it deemed necessary to repeat the magnitude of the increase in the reference rate of the previous monetary policy meeting. It therefore decided to raise the reference rate by 50 basis points, hence strengthening the monetary policy stance. In the March policy meeting, considering the accumulated increase in the reference rate during this hiking cycle, the central bank was in a more solid position than in previous meetings to face a still difficult inflationary outlook. It considered that headline and core inflation had decreased, although the latter more gradually. Similarly, considering the dynamics of the determinants of inflation, the

expected trajectory for inflation was adjusted marginally with respect to that foreseen in the previous policy meeting. In view of the evolution of the inflation outlook and the monetary policy stance already attained, the Board estimated that an additional strengthening of the policy stance could be of lower magnitude. The target for the interbank interest rate was thus raised by 25 basis points to a level of 11.25%. Finally, for the May meeting, the latest information had confirmed that a disinflationary phase had begun as different pressures continued to mitigate. However, it was acknowledged that these pressures continued affecting inflation, which still remained at a high level. Based on the evolution of the inflation outlook and considering the significant monetary policy adjustment throughout the hiking cycle, which have led to a clearly restrictive policy stance, the Board decided unanimously to leave the target for the overnight interbank interest rate unchanged at 11.25%.

In the box *Recent changes in the composition of households' financial savings in Mexico*, an econometric model of households' demand for broad money in Mexico is estimated. The results suggest that, by having induced an increase in bank deposit rates, the hiking cycle in the reference rate has given way to a change in the composition of households' financial savings. In particular, by increasing the opportunity cost of holding assets with low or no yield, interest rate hikes have provided households with incentives to acquire longer term instruments, in substitution of highly liquid assets such as banknotes and coins, as well as transferable deposits.

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.

The box *Recent advances in Banco de México's communication strategy* reviews a series of adjustments implemented by this central bank to its communication strategy in view of the economic repercussions of the pandemic and the military conflict in Ukraine. These adjustments were implemented in response to the challenges for communication posed by the highly complex and uncertain environment, characterized by very atypical shocks. The experience during this episode illustrates the relevance of the communication strategy for a better conduct of monetary policy. It also highlights that the strengthening of said strategy should be an ongoing task.

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

Growth of the national economy: During the first quarter of 2023, the Mexican economy grew at a higher rate than anticipated in the previous Report, as a reflection of the economy's resilience. This increases the base of growth for the rest of the year and leads to an upward revision for the expected growth of 2023 as a whole. In turn, growth prospects for 2024 are revised downwards as a result of a deterioration in the projections for the growth of US industrial

production compared to the previous report. In general, a slowdown in economic activity in Mexico continues being anticipated as of the second quarter of 2023 due to the complex external environment that persists (Chart 1a). Subsequently, the estimate of a gradual improvement in the growth rate of the Mexican economy over the course of 2024 is maintained. Domestic demand is expected to continue supporting Mexican economic activity over the forecast horizon.

Based on the above, GDP growth for 2023 is expected to be between 1.7 and 2.9%, with a central estimate of 2.3% (higher relative to the previous report's 1.6%). For 2024, economic growth is expected to be between 0.6 and 2.6%, with a central estimate of 1.6% (lower relative to the previous report's 1.8%; Table 1).

Regarding the cyclical position of the economy, in the scenario described above, the output gap estimate is expected to remain in negative territory over the forecast horizon, although with some tendency to narrow by 2024 (Chart 1b). It should be noted that the estimate of this non-observable indicator is subject to a high degree of uncertainty.

Table 1
Forecasts for GDP growth
Annual percent

Year	Central	Interval
2023	2.3	Between 1.7 and 2.9
2024	1.6	Between 0.6 and 2.6

Note: Not seasonally adjusted forecasts. The central estimates for 2023 and 2024 compare with the previous Report's forecasts of 1.6 and 1.8% for each year. Intervals compare to those published in the previous Report of 0.8 and 2.4% for 2023 and 0.8 and 2.8% for 2024. Mexico's GDP increased 3.0% in 2022 with figures that are not seasonally adjusted.

Source: Banco de México.

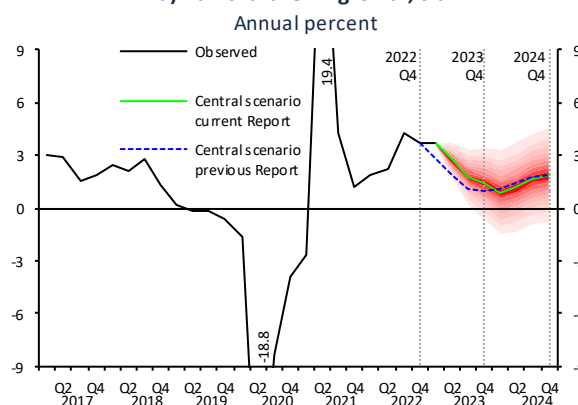
Employment: Table 2 presents forecasts for IMSS-insured jobs. Based on projections for

economic activity and the latest information on the evolution of formal employment, these projections are revised upwards compared with the previous Report.

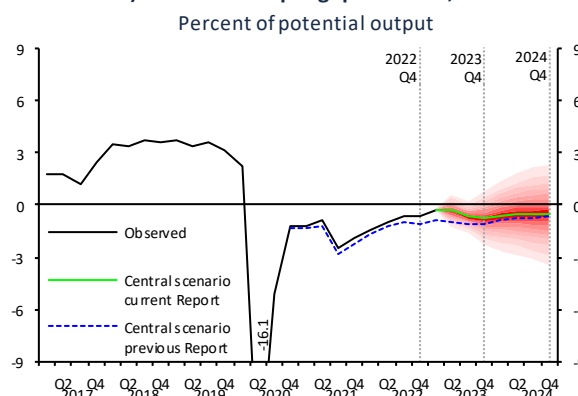
The box *Measures of labor market slack in Mexico* presents additional indicators that contribute to the reading of the degree of labor market slackness and it examines what signals are offered on the behavior of a set of wage indicators. Although reading the cyclical state of the labor market has become more complex due to the shock of the pandemic, the indicators point to a tight labor market, which, in turn, could influence the behavior of wage dynamics.

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 Q2 2023. In the central scenario of the previous Report, it started in Q1 2023.

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

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 600 and 800	Between 420 and 620
2024	Between 530 and 730	Between 540 and 740

Source: Banco de México.

Current account: Table 3 shows 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 -1.6 and -1.2	Between -1.7 and -1.2
Billions of dollars	Between -26.9 and -20.9	Between -28.9 and -20.9
Current account		
% of GDP	Between -1.3 and -0.7	Between -1.2 and -0.4
Billions of dollars	Between -22.3 and -12.3	Between -19.8 and -7.7

Note: Figures for 2023 compare with those of the previous Report of a trade balance of between -24.2 and -18.2 billion dollars (-1.5 and -1.1% of GDP) and a current account balance of between -14.1 and -4.1 billion dollars (-0.9 and -0.3% of GDP). Figures for 2024 compare with the previous Report's figures of a trade balance of between -27.1 and -19.1 billion dollars (-1.7 and -1.2% of GDP) and a current account balance of between -18.9 and -6.9 billion dollars (-1.2 and -0.4% of GDP).

Source: Banco de México.

Risks to growth: The balance of risks for the outlook of economic activity in Mexico is considered to remain biased to the downside, given the high uncertainty and the complex scenario that prevails for the global economy. However, upside risks have gained importance. 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. New issues affecting trade and bottleneck problems in global supply chains.
- 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.

Inflation: As anticipated, inflation in Mexico has been decreasing gradually as the effects of the shocks it has been subject to have been fading and as a result of the monetary policy actions. Thus, the most recent headline and core inflation forecasts have had slight adjustments. The expected trajectories for these indicators published in the previous Quarterly Report, as well as in the March 30 and May 18, 2023 monetary policy statements, are similar. The forecasts published in the latest policy statement

are those that remain unchanged in the current Quarterly Report (Chart 2).

In comparison to the inflation forecast published in the previous Quarterly Report, the current report considers a downward revision in the second quarter of 2023, as well as in the third and fourth quarters, although the latter ones of a lesser magnitude. This revision is associated with lower-than-expected variations in agricultural and livestock product prices and, to a lesser extent, in energy prices. The remaining trajectory of inflation stays at the same levels as those considered in the previous Report. In the case of core inflation, except for the slight upward adjustment in the second quarter of 2023, the rest of the expected trajectory remains at the levels published in the previous Report.

Annual headline inflation continues to be expected to decline more firmly in the next two quarters and to remain on a downward trajectory for the rest of 2023 and in 2024. Thus, this indicator is still expected to be at levels close to the target of 3% by the fourth quarter of 2024 and within the variability interval as of the second quarter of 2024 (Table 4 and Chart 3). Also, it is maintained the prevision for core inflation to continue decreasing and reach levels close to that figure by the fourth quarter of 2024. These downward trajectories reflect the monetary policy actions that Banco de México has been implementing. Similarly, they consider that the effects of the shocks related to both the pandemic and the military conflict are expected to continue fading. These effects, however, have not been completely overcome, the environment for inflation continues to be complicated and, despite the observed reduction in inflation, it remains at high levels and above target.

The annual rate of change and the seasonally adjusted quarterly rate of change of the headline and core indices are shown in Table 4 and Chart 4. The seasonally adjusted annualized quarterly rates of the headline and core indices are still expected to decline in the following quarters, reaching 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 in the stage in which the shocks on inflation are assimilated.

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, cannot be ruled out. Thus, it is still important to remain vigilant in case core inflation shows greater persistence, implying a slower-than-expected reduction and non-linearities that may be associated with the still high levels of inflation. This would imply an even more adverse 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 *Core inflation persistence* shows, through econometric estimations, that persistence in this sub-index appears to have increased in light of shocks that have been deep, generalized and long-lasting, associated with the COVID-19 pandemic and the military conflict in Ukraine. Although core inflation in Mexico has started to decline, this greater persistence could imply challenges for the disinflationary process.

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

To the upside:

- i. Persistence of core inflation at high levels.
- ii. Episodes of exchange rate depreciation, possibly as a result of volatility in international financial markets.
- iii. Higher cost-related pressures that could be passed on to consumer prices.
- iv. Although the international reference prices of some food and energy products have somewhat declined recently, given the prevailing uncertainty, new upward pressures on these prices could result

from changes in international or domestic supply and demand conditions.

To the downside:

- i. That a greater than anticipated deceleration in world economic activity, mainly in the United States and in Mexico, leads to lower pressures on inflation in our country.
- ii. That the pass-through of cost-related pressures onto prices is limited.
- iii. A more efficient functioning of the production and distribution chains, which implies lower pressures on inflation.
- iv. That the measures implemented by the Federal Government to mitigate price increases of certain goods and services have a greater-than-anticipated effect.

Table 4
Forecasts for headline and core inflation
 Annual percentage change of quarterly average indices

	2022		2023			2024			2025	
	IV	I	II	III	IV	I	II	III	IV	I
CPI										
Current Report = Monetary Policy Statement of May 2023 ^{1/}	8.0	7.5	6.0	5.2	4.7	4.2	3.7	3.4	3.1	3.1
Previous Report = Monetary Policy Statement of February 2023 ^{2/}	8.0	7.7	6.4	5.3	4.9	4.2	3.7	3.4	3.1	
Core										
Current Report = Monetary Policy Statement of May 2023 ^{1/}	8.4	8.3	7.4	6.2	5.0	4.1	3.5	3.2	3.1	3.1
Previous Report = Monetary Policy Statement of February 2023 ^{2/}	8.4	8.2	7.3	6.2	5.0	4.1	3.5	3.2	3.1	
Memo										
Annualized seasonally adjusted quarterly variation in percent^{3/}										
Current Report = Monetary Policy Statement of May 2023^{1/}										
CPI	6.1	5.4	4.3	4.9	4.2	3.3	2.6	3.2	3.2	3.4
Core	8.5	7.0	5.3	4.2	3.6	3.4	3.0	2.8	3.1	3.3

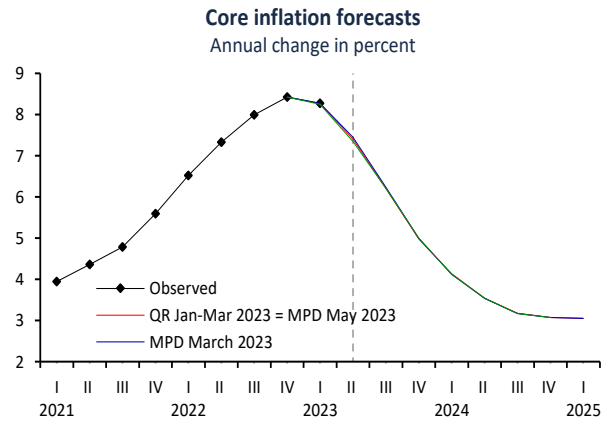
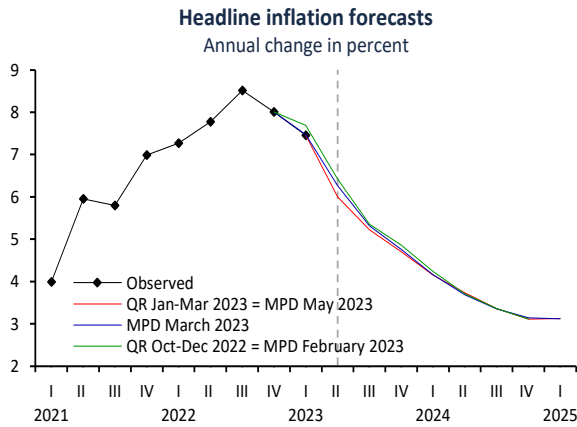
1/ Forecast starting May 2023. It corresponds to the forecast published in the Monetary Policy Statement of May 18th 2023.

2/ Forecast starting February 2023. It corresponds to the forecast published in the Monetary Policy Statement of February 9th 2023.

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

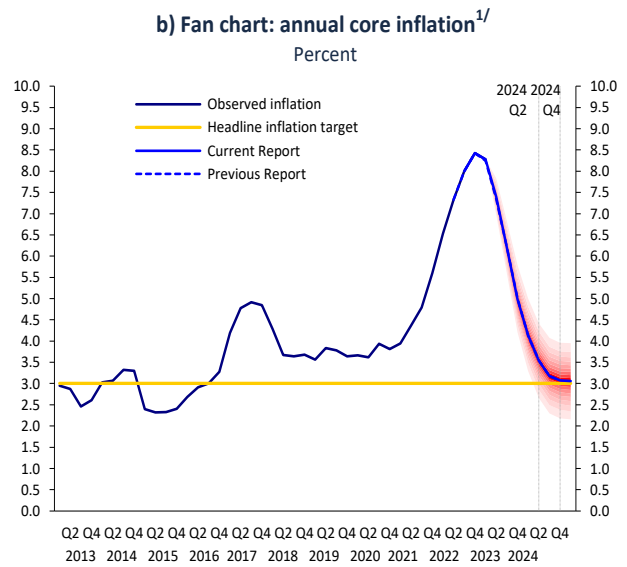
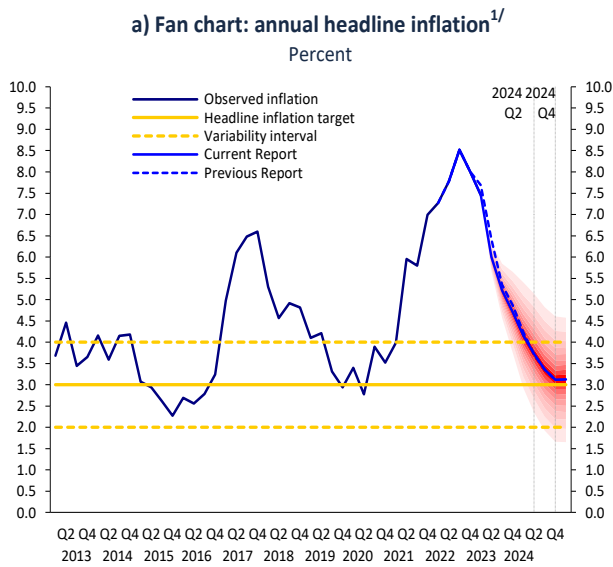
Source: INEGI for observed annual variation figures and Banco de México for seasonally adjusted figures and forecasts.

Chart 2



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

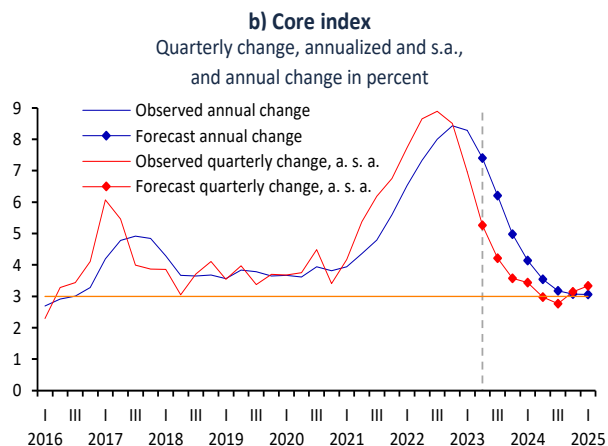
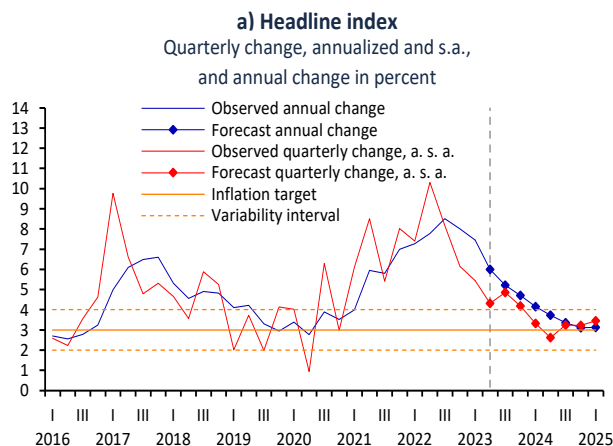
Chart 3



1/ Quarterly average of annual inflation. The next four and six quarters are indicated with vertical lines, using as a reference the second quarter of 2023, that is, the second quarter of 2024 and the fourth quarter of 2024, 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 second quarter of 2023.

Source: Banco de México and INEGI.

The Mexican economy has shown a relatively positive performance given the difficult global context. The recent turbulence in international financial markets caused by the problems of some banks in the United States and Europe highlights the importance of having robust financial and banking systems as part of Mexico’s solid macroeconomic framework. However, it also highlights the relevance of working on a permanent basis to uphold the soundness of all pillars of such a framework, which includes fiscal discipline and a monetary policy focused on maintaining the currency's purchasing power. In this regard, Banco de México's Governing Board will continue setting monetary policy 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 around this target.

Along with the strengthening of the macroeconomic framework, it is essential to encourage an environment conducive to generating greater investment and an adequate allocation of resources in order to increase capital stock and productivity in Mexico. This, along with being a task that should be pursued constantly to achieve greater development, gains urgency and relevance to face the complex environment prevailing for economic activity at the global level and to benefit from investment opportunities that may arise in view of ongoing phenomena such as the reconfiguration of global value chains. As has been emphasized in previous Reports, part of this effort requires further strengthening the rule of law, providing legal certainty in the fulfillment of contracts and property rights, as well as continuing to fight insecurity and corruption. All of this would allow for higher and sustained economic growth and development in order to achieve greater wellbeing for all Mexicans.



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May 31, 2023

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