BANCO DE MÉXICO

Executive Summary

Quarterly Report January – March 2021

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Summary

In a context of considerable negative economic and financial effects and high uncertainty, derived from shocks related to the COVID-19 pandemic, Banco de México has followed a timely and prudent strategy that considers the most recent events and all available information. This, in order to establish a monetary policy conducive to an orderly and sustained convergence of inflation to the 3% target within the forecast horizon. Throughout 2020 and during the period analyzed in this Report, monetary policy has fostered an orderly adjustment in relative prices, financial markets and the Mexican economy, maintaining inflation expectations anchored, close to Banco de México's inflation target.

As to the external environment, the COVID-19 pandemic initially caused a generalized and sharp fall in world economic activity. Since the third quarter of 2020, global economic activity has been recovering, although with a notable heterogeneity across sectors and countries. This heterogeneity has become more prominent during the period analyzed in this Report. In the United States a vigorous reactivation has been observed, reflecting the advances in the vaccination process and the approval of unprecedented fiscal stimuli, while other advanced economies registered slower growth and, in some cases, even displayed a contraction. Industrial production and international trade have continued to expand in a sustained manner, generally surpassing pre-pandemic levels, while the service sector has recovered at a slower rate, although recently it has gained strength.

During 2020, the United States has implemented different fiscal stimulus measures in face of the COVID-19 pandemic. In addition, this year, the current US administration has proposed additional fiscal programs to support the recovery. These stimuli would attain a magnitude unseen since the Second World War. The box *Impact of the Fiscal Stimuli in the United States* seeks to describe these measures and estimate the possible effects of the programs proposed this year using the FRB/US model of the Federal Reserve. The results show that the fiscal stimuli would contribute to the economic recovery and to a moderate increase in inflation, although the latter remains subject to high uncertainty.

In this context, the world growth outlook of international organizations for 2021 and 2022 has been revised upwards, as a result of the expected advances in the vaccination process and of fiscal stimulus programs announced in some of the major economies. Despite the above, in some countries the pandemic has been more persistent than expected, vaccination has presented delays, and new variants of the virus have made its containment more difficult, becoming a risk factor for health and for world economic recovery. In addition, longer-term risks persist, such as those associated with possible pandemic-related effects on potential GDP and on productivity in some economies, as well as those associated with environmental deterioration. In most emerging economies, growth expectations have increased, among other factors, as a result of a higher external demand associated with the vigorous recovery in the US and China. Nevertheless, certain risks could materialize, such as the tightening of global financial conditions as a consequence of a rise in US inflation higher than expected, which would exert pressure on interest rates worldwide.

The box *Advances in the Vaccination Process and the Recovery of Global Economic Activity* describes the significant progress in vaccination worldwide during 2021. Despite concerns regarding the high levels of concentration in vaccine administrations in some countries, there is evidence that this concentration has decreased with the availability of vaccine doses. On the other hand, data suggests a positive relationship between vaccination and mobility, as well as a closer correlation between vaccination and confidence indicators of economic agents, which could be reflected in a more generalized rebound in economic activity.

Global inflation increased as a result of the recent pressures on commodity prices, especially energy-related ones, of the arithmetic effects derived from a lower base of comparison, and from certain cost-push pressures. However, in most advanced economies headline and cost inflation remain at low levels, below their respective central banks' targets. In this context, these central banks have reiterated the decision to maintain accommodative monetary policy stances. Meanwhile, in most emerging-market economies inflation has increased due to the abovementioned factors and the effects of the depreciation of their currencies. In this context, some central banks in this group of economies have started to adopt less accommodative monetary policy stances.

Progress in vaccination campaigns and an improved economic outlook have contributed to a favorable performance of financial markets so far this year. Nonetheless, volatility episodes were observed from mid-February to mid-March due to the considerable fiscal stimulus in the United States and the prospect that it may cause significant inflationary pressures. This led to increases in long-term interest rates in this country, driven by increments in both real rates and inflation expectations. Despite the period of relative higher stability since the second half of March, longer-term interest rates remain at levels above those registered at the beginning of the year, and high uncertainty persists regarding the evolution of international financial markets. Among investors, the following risks are mentioned: a more persistent and greater-than-anticipated increase in inflation in the United States; a sooner-than-expected withdrawal of monetary stimuli that would tighten global financial conditions; possible distortions in the valuation of some financial assets that could result in abrupt price corrections; an increase in public and private sector debt levels; and a greater number of business bankruptcies in the sectors most affected by the pandemic. In addition to the risks to global financial conditions, emerging economies face a greater absorption of financial resources by the public sector in advanced economies that implemented large fiscal stimulus programs, and by the increasing participation of China among emerging economies' fixed-income assets due to the inclusion of the former in the main global investment indices.

In Mexico, during the first quarter of 2021, the recovery of economic activity decelerated, with a heterogeneous performance across sectors of economic activity. Above all, this reflected the weakness prevailing in January and, particularly, in February, as a result of the aggravation of the pandemic since the end of the previous year and the restrictions implemented to contain it, as well as transitory supply chain disruptions in the manufacturing sector. Although some supply problems persisted, lower contagion levels and advances in the vaccination process have allowed for less mobility restrictions. The latter enabled a significant reactivation of economic activity in March.

The box *Sectoral Contributions to Aggregate Slack* shows the significant differences that prevail among different sectors of economic activity: while in some sectors ample slack conditions persist, in others the output gap has practically closed. At a more general level, aggregate slack largely reflects the ample slack prevailing in tertiary activities.

Mexican financial markets have shown a positive performance overall during the year. However, between mid-February and mid-March, these markets displayed adjustments and volatility as a result of global financial conditions. The Mexican peso experienced volatility and long-term interest rates increased, adjusting to an environment of higher medium- and long-term interest rates in the United States.

The box *Relation between Sovereign Risk in Mexico and the Slope of the Yield Curve in the United States* analyzes the relation between the slope of the yield curve in the United States and sovereign risk in Mexico. First, both variables are shown to display a positive correlation over the last two decades. Second, based on a vector autoregression (VAR) model, it is found that the steepening of the yield curve in the United States tends to raise the sovereign risk premium in Mexico. Finally, it is also shown that Mexico's long-term interest rate increases as a result of said shock.

Between the fourth quarter of 2020 and the first one of 2021, average annual headline inflation increased from 3.52 to 3.99%, reaching 6.08% in April. This evolution resulted from higher levels of core and non-core inflation, where the latter contributed considerably to the increase, registering 12.34% in April. This increment included an important rise in annual energy inflation, affected by the arithmetic effects associated with the significant fall registered during the previous year, as well as by the increase observed this year in gasoline and LP gas prices. Consequently, the increase in energy inflation contributed with one percentage point to the increase in headline inflation between the specified quarter, and with 1.61 percentage points to the increase between the average level of the first quarter and that of April. In the first fortnight of May, although headline inflation declined to 5.80%, it was due to the fact that said arithmetic effects started to revert, since core inflation continued to increase because some pandemic-related shocks that have exerted upward pressures on this variable have intensified.

The box *Contribution of the Base Effects to Headline Inflation* estimates the contribution to annual headline inflation of the base effects resulting from the fall in gasoline prices in March and April 2020, as a consequence of the pandemic, using a logarithmic decomposition of annual inflation. Said base effects account for 1.37 percentage points of the 6.08% annual headline inflation registered in April 2021. This base effect is transitory and, as of the first fortnight of May 2021, it has already started to revert.

Average annual core inflation increased from 3.82 to 3.94% in the period between the aforementioned quarters, reaching 4.13% in April and further increasing to 4.22% during the first fortnight of May. Within the core component, differentiated behaviors have been observed. Non-food merchandise inflation has maintained an upward trajectory basically since June 2020, partly reflecting cost-push pressures, such as price increases in commodities or in inputs overall, the disruption to production chains, and the evolution of the exchange rate. This contrasts with the low inflation level of services, particularly those related to housing and education, in an environment of ample slack in the economy. In turn, food merchandise inflation declined in April and during the first fortnight of May, although it still remains at high levels, while at the same time the inflation of certain services, such as those related to tourism and food services, has increased in the context of some reopening of activities. Thus, the disruptions caused by the pandemic point to the possibility that a change in relative prices may continue to be observed, partly associated with a change in the cost structure of different productive activities.

The box *Influence of Mexican Exports to the United States on Domestic Prices of Fruits and Vegetables* shows, based on an instrumental variable econometric model, that Mexican exports to the United States affect the behavior of domestic consumer prices of certain fruits and vegetables. Since these exports exhibit high volatility, the results suggest that they are a source of significant fluctuations for domestic prices of some fruits and vegetables.

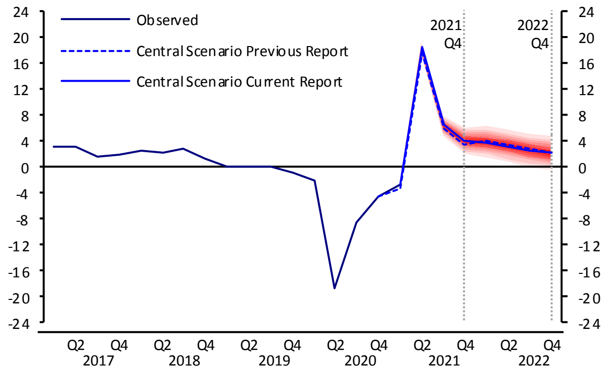
Regarding monetary policy decisions, Banco de México's Governing Board decreased the target for the overnight interbank interest rate by 25 basis points from 4.25 to 4% in February, and subsequently left it unchanged at that level in March and May. In the last decision, the Governing Board emphasized that annual headline inflation increased more than expected and that the balance of risks that may affect its expected trajectory in the forecast horizon is to the upside. The Board highlighted that, given the recent shocks that have affected inflation, it is necessary for the adjustment in relative prices to take place in an orderly manner so that an impact on price formation and inflation expectations is avoided. In its monetary policy decisions, the Board considered inflation forecasts, the risks they are subject to, as well as the need to consolidate a downward trajectory for headline and core inflation to the 3% target. It also stressed that, looking ahead, monetary policy implementation will depend on the evolution of the factors that have an incidence on inflation, on its foreseen trajectories within the forecast horizon, and on its expectations.

The Governing Board will take the necessary actions based on incoming information in order for the policy rate to be consistent with the orderly and sustained convergence of headline inflation to the 3% target within the time frame in which monetary policy operates. It also highlighted that it is necessary to safeguard the institutional framework, strengthen the macroeconomic fundamentals and adopt the necessary actions on both monetary and fiscal policy fronts, to enable a better adjustment of domestic financial markets and of the economy as a whole.

Regarding the macroeconomic scenario foreseen by Banco de México, the following stands out:

GDP growth: For 2021, GDP growth is expected to be 6.0% and for 2022 it is anticipated to be 3.0% (Chart 1).[1] Given the uncertainty around the foreseen dynamics for economic activity, economic growth is expected to be between 5.0 and 7.0% in 2021 and between 2.0 and 4.0% in 2022.

Chart 1
Fan Chart: GDP Growth, s.a.
Annual percent



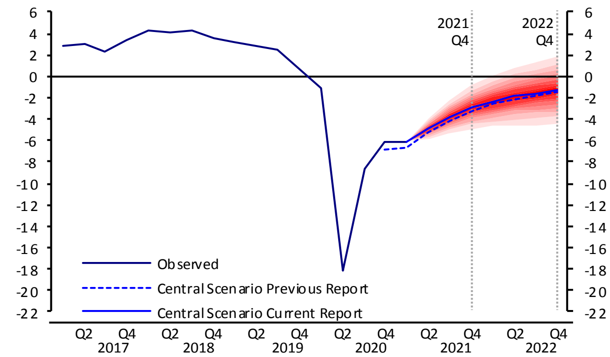
s.a./ Seasonally adjusted figures.
Source: INEGI and Banco de México.

The central forecast for 2021 reflects both a better-than-anticipated performance of the economy during the first quarter of the year, as well as the expectation that the gradual recovery of the economy will be faster from the second quarter onwards. This is due to the effect of the strength of external demand, particularly in view of the considerable fiscal stimulus granted in the United States, and the reactivation of domestic demand as a result of greater advances in the vaccination process and the gradual elimination of mobility restrictions adopted to contain the pandemic. The forecast for 2022 maintains the perspective of a convergence to an inertial growth during that year.

It is worth noting that if GDP growth is near the upper part of the interval in 2021, economic activity would recover during the last quarter of the year to the level observed at the end of 2019. With a GDP growth near the midpoint of the intervals, such recovery would occur around the second quarter of 2022. With a GDP growth near the lower end of both intervals, the level observed at the end of 2019 would be attained in early 2023.

As to the economy's cyclical position, slack conditions overall are expected to decrease gradually throughout the forecast horizon as of the second quarter of 2021 (Chart 2).

Chart 2
Fan Chart: Ouput Gap Estimate, s.a.
Percent of potential output



s.a./ Seasonally adjusted figures.
Source: Banco de México.

Employment: Based on the forecasts for economic activity and the most recent information on the number of IMSS-insured jobs, a variation of between 370 and 570 thousand jobs is expected for 2021, which compares to that of the previous Quarterly Report of between 250 and 570 thousand jobs. For 2022, a variation of between 390 and 590 thousand jobs is estimated, which is the same interval of the previous Report.

Current account: For 2021, the trade balance is expected to be between -\$3.7 and 1.3 billion dollars (-0.3 and 0.1% of GDP) and the current account balance between -\$4.8 and 3.2 billion dollars (-0.4 and 0.2% of GDP). These figures compare with those presented in the previous Report of a trade balance between \$1.5 and 6.5 billion dollars (0.1 and 0.5% of GDP) and a current account balance between -\$7.1 and 3.5 billion dollars (-0.5 and 0.3% of GDP). For 2022, a trade balance between -\$10.9 and -4.9 billion dollars (-0.8 and -0.4% of GDP) and a current account balance between -\$13.4 and -3.4 billion dollars (-1.0 and -0.2% of GDP) are foreseen. These figures compare with those expected in the previous Quarterly Report between -\$6.5 and -1.5 billion

[1] The growth outlook for 2021 compares to the one included in the previous Report for the lower limit, the baseline scenario and the upper limit of 2.8, 4.8 y 6.7%, respectively; while for 2022 it compares to rates of 3.0, 3.3 y 3.4%, for the same order of scenarios.

dollars for the trade balance (-0.5 and -0.1% of GDP) and a current account balance between -$13.0 and -2.5 billion dollars (-0.9 and -0.2% of GDP).

Risks for growth: Challenges to economic recovery and an environment of high uncertainty still prevail, as the COVID-19 pandemic has not faded yet. However, the upward revision to the global growth forecast, particularly in the United States, progress in vaccination campaigns in several countries, including Mexico, and fewer mobility restrictions signal a more favorable outlook for the coming quarters. Risks for growth are thus considered to have tended to balance throughout the forecast horizon.

Among the risks to the downside, the following stand out:

i. That there are delays in the production, distribution or application of vaccines or a worsening of the pandemic, both internationally and domestically, which imply the adoption of new measures to contain it.

ii. That potential bottlenecks in global supply chains lead to shortages of inputs for some sectors in Mexico, particularly the automotive one. Similarly, that the pandemic leads to higher input and production costs in several sectors of the economy.

iii. That additional episodes of volatility in international financial markets are observed, affecting financing flows to emerging economies. This may occur as a result of greater increases in long-term rates in the United States, or due to new episodes of greater risk aversion. The recent inclusion of China in the main indices of global fixed-income investment may represent a challenge to external financing for the rest of emerging economies.

iv. That the recovery of investment is lower than expected and remains at low levels with respect to those required to support the recovery in face of the pandemic and the long-term growth of the country.

Among the risks to the upside, the following stand out:

i. That the pandemic fades faster, particularly due to an effective vaccination campaign, which would support confidence in the economy and expectations of a vigorous recovery.

ii. That the stimuli granted both internationally and domestically contribute to restore consumer and investor confidence, and, overall, to support the recovery of the global economy and trade and to offset the aftermath of the pandemic.

iii. That, in the context of the USMCA, the greater external demand expected in light of the stimulus measures implemented in the United States leads to an increase in investment.

iv. That global financial conditions conducive to an accelerated economic recovery are maintained.

The box *Supply and Demand Determinants of the Recent Evolution of Bank's Credit to Firms* estimates the contribution of different macroeconomic shocks to banks' financing to firms during the pandemic. The results suggest that both negative shocks to activity and, thus, to credit demand, and negative shocks to credit supply have affected lending. Likewise, the temporary increase in bank credit observed at the beginning of the pandemic results from an increase in the demand for liquid resources, which were possibly used to compensate a lower cash flow due to the pandemic.

Inflation: In a context in which there is a reopening of some economic activities and others continue to be affected by the pandemic, an environment with multiple challenges for the economy and for inflation persists. The latter has continued to be influenced by supply shocks -including a change in the cost structure of productive activities-, by a gradual reduction of ample slack conditions, as well as by pressures on the prices of agricultural and livestock products, and energy products. Given the recent shocks that have affected inflation, it is necessary for the adjustment in relative prices to take place in an orderly manner so that the impact on price formation and inflation expectations is avoided.

The effects of these factors implied that during the first quarter of 2021 and at the beginning of the second quarter, headline inflation registered levels higher than those previously anticipated. In particular, the update of the expected trajectory of headline inflation in this Report shows, for the short term, higher levels than those published in the previous Report. Nevertheless, headline inflation is still estimated to be around 3% as of the second quarter of 2022 (Table 1 and Chart 3). This reflects the expectation that the shocks that have recently affected inflation are transitory and that their effect will fade for horizons longer than 12 months.

Although forecasts for headline inflation for horizons of less than 12 months are at higher levels than in the previous Report, a reduction is still anticipated for the third quarter of 2021, after the significant increase it exhibited during the second quarter of the year and that is influenced by the notorious arithmetic effects resulting from low gasoline prices during the same quarter of 2020. Likewise, a certain increase is still expected during the fourth quarter of 2021. This reflects the comparison base effect of the higher intensity of "El Buen Fin" discount sales period in November 2020, which is not expected to be of the same magnitude in 2021, and the reductions in energy prices at the end of that year.

In the case of core inflation, the upward revision in its expected short-term trajectory with respect to what was published in the previous Report considers a higher-than-expected inflation in merchandise and services, as a result of supply shocks, as well as less slack in the economy with respect to the previous forecast. The estimate incorporates a greater increase in the inflation of services, given an environment of fewer restrictions on said activity. These factors are partially offset by a higher appreciation of the exchange rate in relation to what was previously considered. As of the second quarter of 2022, as the aforementioned effects begin to fade, core inflation is expected to decline markedly and to register levels slightly above 3% from that quarter onwards (Table 1 and Chart 3b).

Chart 4 presents, for both headline and core inflation indices, annual variation rates and the annualized seasonally adjusted quarterly variation rates in the forecast horizon. It can be seen that, after the shock observed during the second quarter of 2021, in seasonally adjusted terms inflation declines during the third quarter of the current year and that, as of the fourth quarter of 2021, seasonally adjusted rates already fluctuate around 3%. Because annual rates are affected for 12 months by short-term shocks to inflation, they decrease significantly until the second quarter of 2022.

This central baseline scenario incorporates the shocks that have been affecting inflation, but does not consider additional pressures that might arise. If they were to occur, this would represent a more adverse scenario for inflation. In an environment in which greater uncertainty for inflation prevails, among the main risks to which it is subject, the following stand out:

To the upside:

i. Higher inflation at the international level, which could imply inflationary pressures in our country. This could originate, on the one hand, from higher cost pressures related to increases in commodity prices, including energy products, inputs in general or transportation costs, as well as logistical problems in global production chains. On the other hand, this higher inflation could also result from a more vigorous global recovery, partly due to the implemented stimuli.

ii. Cost-related pressures due to the implementation of additional sanitary measures in the country, disruptions in distribution supply chains, or increases in wages or labor hiring conditions that are passed on to consumer prices, despite the slack in the economy.

iii. Pressures on core inflation derived from a reallocation of spending.

iv. Persistence of core inflation.

v. Episodes of exchange rate depreciation, possibly due to bouts of volatility in international financial markets.

vi. That the drought faced by various regions of the country raises the prices of some agricultural and livestock products.

To the downside:

i. A larger-than-expected effect due to the negative output gap.

ii. Greater distancing measures that reduce the demand for goods and services.

iii. That the exchange rate appreciates.

iv. That given the slack conditions in the economy, cost-related pressures, such as wage revisions, do not exert pressures on prices.

v. That energy prices are lower than expected.

The balance of the aforementioned risks that might affect the anticipated path for inflation within the forecast horizon is biased to the upside.

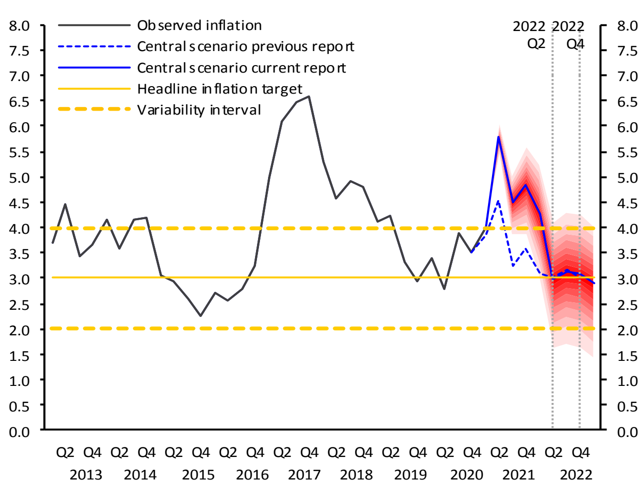
Table 1
Headline and Core Inflation Forecasts
Annual change in percent

	2020	2021				2022				2023
	IV	I	II	III	IV	I	II	III	IV	I
CPI										
Current report[1/]	3.5	4.0	5.8	4.5	4.8	4.3	3.0	3.1	3.1	2.9
Previous report[2/]	3.5	3.8	4.5	3.2	3.6	3.1	3.0	3.2	3.0	
Core										
Current report[1/]	3.8	3.9	4.3	3.9	3.9	3.9	3.3	3.2	3.2	3.2
Previous report[2/]	3.8	3.9	3.6	3.0	3.1	3.0	3.0	3.0	3.0	

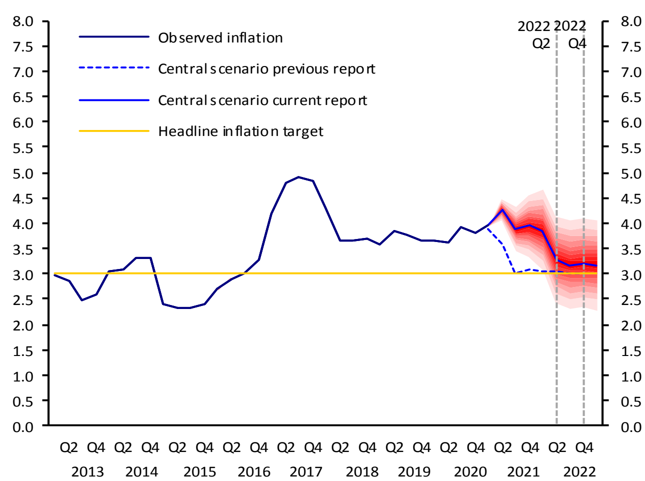
1/ Forecast from May 2021.
2/ Forecast from February 2021.
Source: Banco de México with data from INEGI.

Chart 3

a) Fan Chart: Annual Headline Inflation[1/]
Percent



b) Fan Chart: Annual Core Inflation[1/]
Percent

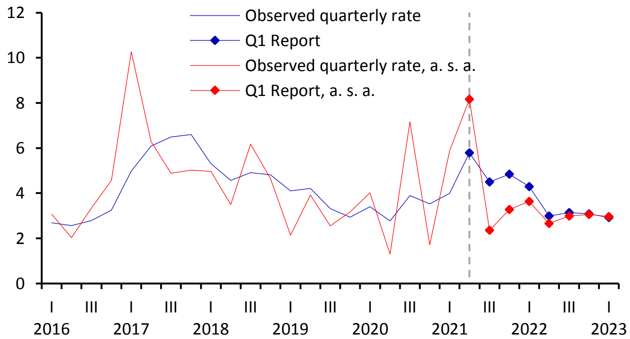


1/ Quarterly average of annual inflation. The next four and six quarters are indicated with vertical lines, using as a reference the second quarter of 2021, that is, until the second and fourth quarters of 2022, respectively, time frames in which the transmission channels of monetary policy fully operate.
Source: Banco de México and INEGI.

Chart 4

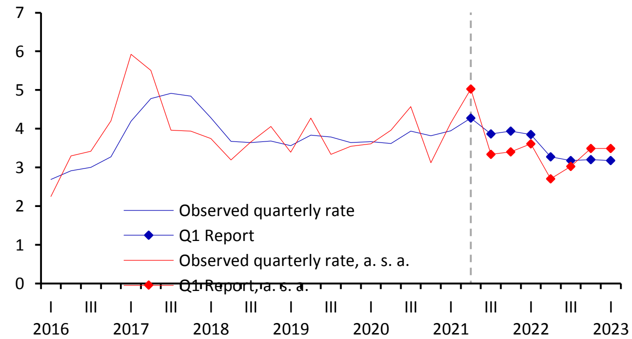
a) Headline Index

Quaterly variation, annualized and s.a., and annual variation in percent



b) Core Index

Quaterly variation, annualized and s.a., and annual variation in percent



s.a. seasonally adjusted figures.
a.s.a. annualized seasonally adjusted figures.
Vertical line corresponds to second quater of 2021.
Source: Banco deMéxico and INEGI.

During the first quarter of the year, the Mexican economy slowed down its pace of recovery due to the worsening of the pandemic that was observed between December of last year and February of this year, as well as to other transitory factors. Nevertheless, although risks remain, the pandemic has been gradually subsiding in the country and progress has been made in the vaccination campaign, which has allowed the loosening of the restrictions implemented during the health emergency. This, together with the announcement of a substantial fiscal stimulus in the United States, suggests that the recovery of the Mexican economy will speed up in the coming quarters. However, challenges to achieve a more rapid, lasting and widespread reactivation of domestic demand and the labor market remain.

The above is taking place in a context in which there is uncertainty regarding the behavior of inflation and long-term interest rates around the world, which may lead to episodes of volatility in international financial markets and could have consequences on capital flows to emerging economies. The Governing Board will determine a monetary policy stance aimed at guaranteeing an orderly adjustment in relative prices, financial markets and the economy as a whole, as well as ensuring the convergence of inflation to the 3% target and the anchoring of inflation expectations.

In view of this context, economic policy, in both the fiscal and monetary fronts, must continue to strengthen macroeconomic fundamentals. It is also important to improve the environment and foster conditions of certainty for investment and productive activity, in order to take full advantage of the anticipated boost from the external recovery, particularly that of the United States. It is also necessary to continue correcting the institutional and structural problems that for years have affected investment and productivity levels. As mentioned in previous Reports, we must strengthen the rule of law and continue fighting insecurity. These actions would allow for a clearer reactivation of the economy, so that not only levels of activity and employment prior to the pandemic are regained, but a long-term growth path is resumed that allows the creation of more and better jobs to achieve higher levels of well-being for the entire population.

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