



BANCO DE MÉXICO®

## Minutes number 91

**Meeting of Banco de México's Governing Board on the occasion of  
the monetary policy decision announced on March 24, 2022**

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## 1. PLACE, DATE AND PARTICIPANTS

**1.1. Place:** Meeting held by virtual means.

**1.2. Date of Governing Board meeting:** March 23, 2022.

### 1.3. Participants:

Victoria Rodríguez, Governor.  
Galia Borja, Deputy Governor.  
Irene Espinosa, Deputy Governor.  
Gerardo Esquivel, Deputy Governor.  
Jonathan Heath, Deputy Governor.  
Rogelio Eduardo Ramírez, Secretary of Finance and Public Credit.  
Gabriel Yorio, Undersecretary of Finance and Public Credit.  
Elías Villanueva, Secretary of the Governing Board.

Prior to this meeting, preliminary work by Banco de México's staff analyzing the economic and financial environment as well as the developments in inflation and the determinants and outlook for inflation, was conducted and presented to the Governing Board (see Annex).

## 2. ANALYSIS AND RATIONALE BEHIND THE GOVERNING BOARD'S VOTING

### *International environment*

**Most members stated that available indicators suggest a moderation in global economic activity during the first quarter of the year. Some** members noted that economic activity remains affected by the pandemic. **One** member added that supply restrictions and demand-related pressures derived from the change in consumption patterns, have been more persistent than anticipated. He/she pointed out that back orders, delivery times and sea freight costs remain higher than they were prior to the pandemic. He/she added that, as control of the pandemic improves, supply restrictions will decline and inflationary pressures will ease, although he/she also acknowledged that said process will be gradual and is not exempt from facing interruptions. **Some** members noted that mobility indicators have

recovered, particularly in emerging economies. **One** member mentioned the improvement in indicators related to manufacturing and services purchases, which points to a lower intensity and duration of the effects caused by the Omicron variant, compared with previous waves of contagion.

**Most members pointed out that the Russia-Ukraine conflict has generated an environment of volatility and uncertainty, as well as a deterioration in the outlook for growth at a global level. One** member mentioned that, measured through the foreign trade flows of these economies, their direct ties and the destination of their products, the impact could concentrate mostly in Eastern Europe and euro area countries, as well as in China, although he/she considered that, given the importance of the economies involved, as suppliers of metals and commodities and as producers of fertilizers, global economic activity could be affected. **Some** members stated that the economic sanctions imposed on Russia could affect financial markets, international trade, and supply chains. **One** member mentioned as a risk factor an increase in the number of infections in China and expectations of strong lockdown measures. **Some** members noted that the balance of risks for world economic growth is biased to the downside and is subject to high uncertainty, mainly for European economies.

**All members stated that the geopolitical conflict intensified inflationary pressures worldwide. Most members pointed out the important role that the countries involved play in the supply and trade of commodities, especially metals, fertilizers and grains. In this regard, most members mentioned that commodity prices increased significantly. Some** members considered that this pattern could continue until 2023. **One** member pointed out that in view of the above, the convergence of inflation to their respective central banks' targets could take longer than expected. He/she added that commodity prices have surpassed those registered during the pandemic and other stress episodes. However, **some** members noted that said increases have partially reversed recently. **One** member added that, in the future, the conflict could lead to a reconfiguration of global value chains, with ensuing cost-related pressures.

**Most members mentioned that, in addition to the above, world inflation continued increasing due to pressures originated by bottlenecks and high levels of food and energy prices. One** member added that the reallocation of spending also

continued exerting pressure on prices. **Another** member highlighted the case of the United States, where inflation in February reached its highest level in 40 years. **One** member mentioned that inflation expectations drawn from surveys and from market instruments deteriorated once again. **Another** member stated that, for advanced economies, short-term inflation expectations continue increasing and longer-term inflation expectations show increments as well, although recently they have decreased slightly. **Some** members considered that the continuous rebound in headline and core inflation could accelerate as a result of the adverse effects on freight transport and the potential shortage of inputs in the face of historically low inventories. **One** member added that the inflationary environment could worsen as a result of the lockdown measures adopted in some regions of China. **Another** member mentioned as factors that would contribute to reduce world inflation, the lower number of infections and higher vaccination rates, as well as lower monetary and fiscal stimuli in systemically important economies.

**Most members highlighted the less accommodative monetary policy stances in advanced economies. All members mentioned that, in its latest monetary policy decision, the Federal Reserve raised the target range for the federal funds rate by 25 basis points and announced that it expects to continue increasing it in the remaining meetings of 2022. Some** members pointed out that, recently, the chair of the Federal Reserve expressed that its monetary policy stance could be adjusted more aggressively. **One** member mentioned that its asset purchase program has concluded. **Another** member added that it is expected to begin a gradual reduction of its balance sheet in May. He/she highlighted that the United States is experiencing strong economic growth and faces a tight labor market, while inflation is registering levels unseen in more than three decades. **One** member mentioned that the Federal Reserve announced the possibility of maintaining a monetary policy stance slightly above its neutral rate for 2022 and 2023. **Some** members stated that there is still uncertainty over the rate and the magnitude of said monetary cycle, which has been exacerbated by changes in the environment caused by the geopolitical conflict. **Some** members noted that a large number of central banks in emerging market economies continued increasing their reference rates. **One** member stated that most of these economies maintain real interest rates that are negative or close to zero, while Mexico stands out for its positive real interest rate.

**Most members noted that international financial markets registered high volatility due to the uncertainty associated with the armed conflict. Some** members mentioned that financial conditions tightened. **One** member added that said conflict has exerted pressure to a larger extent on fixed-income and commodity markets.

**Most members pointed out that, since the last monetary policy decision, stock market indices in advanced economies continued falling. Some** members added that government bond interest rates for different terms increased throughout the year, in response to central banks' tighter monetary policy stances. **One** member stated the flattening of the yield curve in the United States is associated with further monetary tightening and to provisions of a deceleration in economic growth. **Another** member mentioned that, in recent days, risk appetite increased, driven by the relatively optimistic tone of the Federal Reserve regarding the expected performance of the US economy. He/she added that, in that context, stock market indices increased, which offset the previous decreases. He/she stated that this shows how the signals sent by central banks can be equally or more relevant than the policy decisions regarding the interest rate.

**Some** members underlined that financial markets in emerging economies exhibited a mixed behavior. They added that stock market indices performed heterogeneously according to their geographical and trade proximity to Russia. **One** member underlined the fall in stock markets in Eastern Europe and the better performance these registered in Latin America. **Another** member highlighted the interest rate increases, the appreciation of most Latin American currencies, the outflows in fixed income instruments, and the moderate inflows in equity instruments. **One** member pointed out that the recent increase in risk appetite benefited emerging economies, especially those with a more favorable economic growth outlook, which registered appreciations in their currencies and increases in their stock market indices. This, despite the Federal Reserve's interest rate increase.

**Most members mentioned that financial conditions are foreseen to continue tightening as a result of the interest rate increases stemming from the normalization of the main central banks' monetary policy stances and the geopolitical turmoil. One** member added that the exclusion of Russia from international payment systems, such as SWIFT, and potential cyber-attacks as a form of reprisal, could affect financial stability.

## *Economic activity in Mexico*

**Most members mentioned that available indicators suggest that economic reactivation could have resumed at the beginning of 2022.**

**One** member stated that the Timely Indicator of Economic Activity (IOAE, for its acronym in Spanish) suggests an annual increase in economic activity of 2.8% in February and of 3.5% for secondary activities. **Nonetheless, most members pointed out that the recovery remains gradual, incomplete, and heterogeneous across sectors.** **One** member pointed out that, in January, economic activity in nearly 50% of sectors had still not returned to pre-pandemic levels. **Another** member stated that in the fourth quarter of 2021 economic activity was 3.3% below its level of the fourth quarter of 2019, although it is anticipated to continue recovering gradually.

**On the supply side, most members highlighted that industrial production continued recovering in January, as a result of growth in manufacturing, particularly non-automotive manufacturing, and an unusual rebound in mining. Nonetheless, they underlined the lack of vigor in construction, as well as in automobile production and exports due to supply chain problems.** **One** member added that in January industrial activity registered four consecutive months of growth and that manufacturing, excluding transportation equipment, has remained on an upward trajectory for several months. **Most members stated that the services sector continued registering weakness, with levels lower than those prior to the pandemic, as well as a heterogeneous behavior among subsectors. They considered that the weakness in the services sector partly reflects the impact of the labor outsourcing reform.** **One** member pointed out that this effect is of an accounting nature. He/she pointed out that, apart from the effect of this reform, most services have continued to recover. **Another** member pointed out that the contraction in business support services contributed to a reduction of 1.3 percentage points in GDP growth in 2021. He/she indicated that weakness in the services sector and heterogeneity among its components is expected to persist. He/she highlighted that primary sector activities rebounded significantly in December 2021.

**On the demand side, most members stated that consumption continued recovering in December 2021.** **Some** members noted that it registered levels similar to those observed prior to the pandemic. **One** member mentioned that, although consumption of

services is lagging, consumption of non-durable goods surpassed its pre-pandemic levels since early 2021 and has performed better than during the 2008 crisis. He/she stated that the above derives, among other factors, from the favorable evolution of some indicators, such as consumer confidence, the wage bill, remittances, and social transfers. **Some** members mentioned that various leading consumption indicators improved in early 2022. **Most members highlighted that investment remains weak.** **One** member stated that it remains stagnant at levels below those observed prior to the health emergency. He/she added that public investment has performed better than private investment, as it is 5% above its pre-pandemic levels and is trending upwards, which contrasts with the negative trend this indicator had exhibited for over a decade. **Some** members stated that exports contracted at the margin in January. However, **one** member stated that they remain at relatively high levels.

**Regarding the labor market, most members highlighted the progress observed in different indicators, although negative effects still persist. They pointed out that unemployment and underemployment rates declined in January.** **One** member added that the labor informality rate also decreased. **Some** members forewarned that this improvement in indicators was partially a result of the fall in labor participation, caused by the increase in the number of infections. Consequently, **one** member pointed out that unemployment and underemployment rates have still not returned to their pre-pandemic levels. **Another** member highlighted the gender bias that has favored men in the labor market recovery process. He/she stated that, in January, said progress was based on male formal employment, while a setback in female employment was observed. He/she added that the increase in economically inactive population is still concentrated in women. **Some** members mentioned that minimum wage increases have had an upward effect on wage revisions of IMSS-insured workers. **One** member pointed out that this was the result of both mechanical and non-mechanical increases. He/she added that said revisions averaged a historically high annual increase of 9.5% in February. He/she recalled that, when comparing January of this year with previous years, there was a greater proportion of salary increases for workers that are not tied to the minimum wage, which confirms the presence of certain wage-related pressures.

**Most members agreed that ample slack conditions persist. However, they added that, in the first quarter of 2022, these are foreseen to be**

**lower than those registered during the previous quarter.** **One** member delved into the fact that GDP continues showing a negative gap of over 10% with respect to the trend observed prior to the pandemic. **Another** member anticipated that slack conditions will gradually decrease, although they will still show a considerable gap. **One** member mentioned that uncertainty prevails regarding the traditional estimation of the output gap and of potential GDP to determine the degree of slack in the economy.

**Most members acknowledged that the geopolitical turmoil between Russia and Ukraine has generated a new source of uncertainty for the Mexican economy.** **Some** members agreed that the impact on Mexico's economic activity, either directly or indirectly through the US economy, will be limited, due to the geographic distance and the relatively weak trade and financial ties with the countries in conflict. **One** member considered that such impact is uncertain. **Another** member pointed out the following risks to Mexico's economic activity. On the downside: i) a greater-than-expected persistence of the pandemic; ii) prolongation or intensification of bottleneck problems in supply chains, or higher costs of inputs and production in various sectors of the economy; iii) additional episodes of volatility in international financial markets; and iv) lower-than-expected or insufficient investment to support economic recovery and long-term growth. On the upside, he/she highlighted: i) a greater control of the pandemic; ii) that national and international stimuli continue to support consumption and investment; iii) Mexico being an attractive destination for investment in view of a reconfiguration of global production processes within the framework of the USMCA; and iv) the maintenance of global financial conditions to enable a faster economic recovery. He/she highlighted that some of the downside risks have been accentuated by the conflict in Eastern Europe. **Some** members mentioned that the balance of risks for growth remains biased to the downside while **one** member stated that it has deteriorated at the margin.

### ***Inflation in Mexico***

**Most members mentioned that during the first fortnight of March, headline and core inflation registered annual variations of 7.29 and 6.68%, respectively.** **Some** members noted that this was attributed to the performance of the core component, which was partially offset by a marginal reduction in the non-core component. **One** member noted that, after two consecutive months in which monthly headline inflation was close to its historical average, it accelerated again in February. He/she added that

the annual rate is far above its target. **Some** members expressed their concern about price dynamics, which have followed a marked upward trend for a long period. **One** member added that price growth is accelerating even faster than in 2017, which is most noticeable in the core component. **Most members argued that inflation remains under pressure mainly by global factors associated with the pandemic.** **One** member pointed out that this has been reflected mainly in the merchandise component. **Another** member said that these effects are largely transmitted through tradable goods, including final goods, intermediate goods, and raw materials. He/she highlighted that the annual inflation of the National Producer Price Index (INPP, for its Spanish acronym) of intermediate inputs excluding oil reached a peak last December, that in February it continued declining, and that its current level is lower than the all-time high reached during the inflationary episode of 2017. **One** member highlighted that inflation is a generalized problem and that inflationary pressures are not only imported, but also domestic and are affecting non-tradable goods. He/she stated that domestic pressures are the result of idiosyncratic factors, such as public insecurity, adverse weather conditions, lack of specific inputs and wage pressures, in a context where there are doubts about the traditional estimations of the output gap and potential GDP. **Another** member noted that in Mexico food products have a higher weight in the CPI as compared to advanced and some emerging economies, and thus increases in food prices at the global level have generated a negative bias on Mexico's inflation. He/she highlighted that, nevertheless, Mexico does not stand out for being the country with the highest levels of headline inflation among other countries that registered similar levels of inflation prior to the pandemic. **One** member pointed out that inflation of practically all CPI food items is growing at annual rates higher than 4% and around half of them are registering variations higher than 10%.

**Most members mentioned that core inflation shows generalized increases.** **Some** members stated that this reflects the persistence of the shocks that have affected it. **One** member pointed out that this dynamic does not pertain to a specific group of consumer goods and/or services, as it has affected the entire consumer basket. **Some** members noted that this component reached its highest rate since 2001. **One** member mentioned that it has accumulated 15 consecutive months of increases. **Another** member stated that it has grown significantly above its historical pattern and is influencing the upward trajectory followed by

headline inflation. **Some** members noted that its monthly variation accelerated in February. **One** member noted that said variation was more than double that observed for a month of February since mid-2001. **Another** member noted that its annualized monthly variation has followed an upward trend, going from 3% in January 2021 to 8% in February 2022. **One** member pointed out that the merchandise component registered an annual variation of more than 8% and that more than 80% of the items that comprise it registered annualized monthly increases of more than 5%. **Another** member stated that food merchandise registered an annualized monthly rate of 12% and non-food merchandise a variation of 9%. **One** member pointed out that within the food merchandise component, significant price increases were observed in products derived from soybeans, corn, wheat and cold meats, while in the non-food merchandise component, price pressures were registered in household cleaning products, personal hygiene and health care products, and in automobiles. **Another** member mentioned that services registered an annualized monthly inflation of 5%. **One** member noted that services excluding education and housing registered an annual rate of 6.6%. **Another** member stated that the prices of food services, tourism and transportation have been under pressure.

**The majority of the members mentioned that non-core inflation continues being subject to pressures. Some** said that agricultural and livestock products' inflation continues registering increases. **Most members noted that energy inflation decreased at the margin. Some** members pointed out that gasoline prices have been contained by fiscal stimuli. **One** member added that various estimates suggest that, in the absence of such stimuli, headline inflation would have been higher, which reflects the magnitude of the shocks currently being faced.

**All members mentioned that inflation expectations for 2022 and 2023 increased again. Some** members noted that those for 2022 are above the upper limit of the variability interval while those for 2023 are above the point target. **One** member pointed out that almost all analysts surveyed by Banco de México assign a minimal probability of inflation returning to 4% this year. **Another** member highlighted that most business agents interviewed by Banco de México said that the prices of their inputs have changed with a similar or greater frequency than in the previous quarter, and that they hold their 12-month inflation expectations at twice the target level. On the other hand, **one** member pointed out

that economic analysts' expectations for the next 12 months were revised slightly downwards. **Most members mentioned that medium-term expectations for headline inflation increased. All members mentioned that long-term expectations have remained stable at levels above the target. One** member noted that medium-term expectations are approaching the upper limit of the variability interval. **Another** member added these are both above their historical average, as well as above the average observed in other inflationary episodes. **One** member expressed his/her concern about the upward trend that expectations for the next four years have had since August of last year. **Another** member said that, although long-term inflation expectations remain anchored, the risks surrounding their formation process should not be underestimated. **One** member warned that in recent months these expectations have already started to be revised upwards. **Most members noted that expectations drawn from market instruments have also deteriorated. One** member pointed out that expectations measured through compensation for inflation and inflation risk in 10-year bonds reached a historical high, and that the 10-year inflation risk premium remains at levels similar to those registered during other stress periods. **Another** member noted that expectations from market instruments for the 6- to 10-year average were close to 3.1%.

**All members stated that forecasts for headline and core inflation were revised upwards. Most members mentioned that convergence to the point target has been delayed. One** member highlighted that Banco de México's forecasts now estimate inflation at 5.5% for the last quarter of 2022. **Another** member noted that, up to March 2022, there have been ten consecutive monetary policy decisions in which inflation forecasts have been revised upwards. He/she underlined that, during this period, convergence to the target was deferred from the second quarter of 2022 in December's 2020 decision, to the first quarter of 2024 in the current decision. He/she warned that the systematic underestimation of inflation forecasts has generated an inflationary inertia that has already affected medium-term expectations and, if this continues, could lead to a de-anchoring of long-term expectations. **One** member noted that the factors associated with the pandemic are expected to continue having an influence on the inflation outlook worldwide. **Another** member mentioned that the current outlook is even more challenging as it is optimistic to believe that the effect of the accumulation of supply and demand shocks on inflation will dissipate immediately. He/she added

that inflation will likely remain at high levels for a long period before decelerating. He/she highlighted that the forecast decline in headline inflation assumes that the core component registers moderate levels and that non-core inflation decreases, which is unlikely to materialize under the current conditions.

**Among upside risks to inflation, most members highlighted the persistence of core inflation at high levels, external inflationary pressures associated with the pandemic, increases in agricultural and livestock product prices and in energy prices due to the recent geopolitical conflict, and cost-related pressures. Some members added the possibility of an exchange rate depreciation. One member pointed out that external inflationary pressures have originated from logistical problems, high sea freight costs, disruptions in global value chains, and from changes in consumption patterns. He/she added that these pressures are not expected to be resolved soon. He/she noted that the greater pressures on food prices have high social costs and could affect household inflation expectations, which would accelerate inflationary dynamics even if other goods prices were to perform better. Another member mentioned that persistent supply and demand imbalances have also been due to production rigidities. He/she noted the risk of contractual wage revisions becoming contaminated given the high levels of observed and expected inflation, and in the presence of mechanical, above-inflation wage revisions. He/she indicated that greater unforeseen adjustments to the reference rate in the United States could increase the risk of an exchange rate depreciation. One member considered that the risk of energy prices being subject to pressures is limited due to the domestic fuel price policy. He/she added that some estimates show that, even if the aforementioned policy is considered, increases in oil prices do not imply a deterioration in public finances. Among downside risks to inflation, another member included: i) a decline in the intensity of the military conflict; ii) that given the slack conditions, cost-related pressures and wage revisions do not exert pressure on prices; iii) that energy prices are lower than those anticipated; and iv) an exchange rate appreciation. One member noted that the decline in annual inflation of INPP intermediate inputs excluding oil could imply lower future pressures for core inflation. Most members stated that the balance of risks for the trajectory of inflation over the forecast horizon has deteriorated again and remains biased to the upside. One member pointed out that this is due to the possibility that the effects of the geopolitical conflict are greater than expected.**

**Another** member considered geopolitical tensions as a new source of uncertainty for inflation. **One** member warned that the ongoing occurrence of supply and demand shocks continues to deteriorate the balance of risks.

#### *Macrofinancial environment*

**Most members highlighted that, in domestic financial markets, the exchange rate appreciated slightly albeit registering some episodes of volatility, while interest rates increased accordingly to global developments. One member pointed out that financial markets showed greater resilience since the previous monetary policy meeting. Another member considered that they displayed a mixed performance. One member said that, so far this year, the peso's performance contrasts with that of other Latin American currencies and the South African currency, which have appreciated significantly. Some members pointed out that increases were observed in practically all nodes of the yield curve. One member stated that, while nominal interest rates adjusted upwards up to 96 basis points, the real yield curve adjusted between -30 and 33 basis points. Another member pointed out that Mexico continues having a wide volatility adjusted interest rate spread relative to the United States. Some members noted that the stock market registered increases. One member pointed out that these were in line with other stock market indices in the region. However, another member noted that Mexico's stock market performance was surpassed by that of other Latin American economies, which could reflect better economic prospects and greater attractiveness for raising capital in those countries. One member warned that the escalation of the conflict between Russia and Ukraine could add limited risks to the stability of Mexico's financial system. He/she stated that, looking ahead, episodes of depreciation and high volatility in financial markets are not ruled out due to the environment of global uncertainty that persists.**

**One member highlighted that consumer credit has recovered at a faster rate than during the 2008 crisis, while financing to firms has reactivated more slowly. Another member pointed out that credit to individuals with business activity decreased around 35% with respect to the highest level recorded in the first quarter of 2017. He/she added that credit to Small- and Medium-sized enterprises (SMEs) remains more than 10% below its pre-pandemic levels, including in those sectors that did not experience a recession, thus suggesting that the lack of credit can be partially attributed to the supply side.**



He/she said that as long as credit to businesses remains deteriorated, it will be very difficult to see a substantial improvement in private investment. **One** member pointed out that the lack of private investment is due to a deterioration in the business climate originated by external and idiosyncratic internal factors that were present way before the beginning of the tightening cycle, and therefore the weakness of investment can hardly be attributed to the adjustment of the monetary policy stance. **Another** member highlighted that during January 2022 there was a decrease in the sources of financial resources due to a reduction in investment funds' balances, while the strong demand for highly liquid instruments persisted. He/she added that markets have still not incorporated the risk of possible increases in the cost of corporate financing derived from the balance sheet reduction by the Federal Reserve.

### *Monetary policy*

**The Governing Board evaluated the magnitude and diversity of the shocks that have affected inflation and the factors that determine it, along with the risk of medium- and long-term inflation expectations and price formation becoming contaminated. Most members also considered the challenges posed by the ongoing tightening of global monetary and financial conditions, and the environment of significant uncertainty and greater inflationary pressures associated with the geopolitical conflict. Based on these considerations, all members voted to raise the target for the overnight interbank interest rate by 50 basis points to 6.50%. All members highlighted that, with this action, the monetary policy stance adjusts to the trajectory required for inflation to converge to its 3% target within the forecast horizon.**

**Most members stated that in the next monetary policy decisions, the Board will monitor thoroughly the behavior of inflationary pressures as well as of all factors that have an incidence on the foreseen path for inflation and on its expectations. The latter, in order to set a policy rate that is consistent at all times with the trajectory needed to facilitate the orderly and sustained convergence of headline inflation to the 3% target within the time frame in which monetary policy operates as well as an adequate adjustment of the economy and financial markets.**

**One member** highlighted that, given the inflationary pressures associated with the geopolitical conflict

and the beginning of a less expansionary policy by the Federal Reserve, the monetary policy stance must be reinforced to reduce possible second-round effects in the price formation process, and to maintain financial stability. However, he/she mentioned that, in Mexico, the current interest rate is relatively high, as little monetary stimulus was granted during 2020 and began to be withdrawn early in 2021. In this regard, he/she noted that it is not convenient to overreact to the expected rate increases in the United States. He/she highlighted that domestic inflation will decrease along with world inflation, as the number of infections decline, as vaccination coverage improves at a global level, and as monetary and fiscal policies in systemically important economies are adjusted. He/she added that inflationary risks stemming from the geopolitical conflict are limited due to Mexico's fuel price policy. Given the aforementioned balance of risks, looking ahead, the policy response should be moderate and gradual, avoiding taking the reference rate to an excessively restrictive level. He/she pointed out that the interest rate levels anticipated by both private sector analysts and market traders are too high, considering the level of deviation of inflation from its target, and the slack conditions in Mexico relative to other economies. He/she warned that the Mexican economy shows weakness precisely where monetary policy has a direct influence, such as the deterioration of credit for productive purposes, the stagnation of investment, the lack of dynamism in construction, the fall in consumer credit, and the reduction in domestic sales of new automobiles. He/she stated that, in contrast, consumption of non-durables, which responds more to other determinants, has performed better. He/she added that continuing to raise the reference rate at an excessively elevated pace could affect the country's growth outlook, which would reduce its attractiveness to capital flows seeking high yields in emerging market equities. He/she warned that a recession would translate into macroeconomic and financial instability, exerting pressures on both risk premium and the exchange rate, which eventually could affect inflation.

**Another member** mentioned that Mexico is one of the few economies with a positive ex-ante real interest rate close to its neutral level, which has maintained solid macroeconomic fundamentals, and still has a widely negative output gap. He/she stated that geopolitical tensions constitute a new source of uncertainty for the behavior of Mexico's nominal, real and financial variables, and that their potential effects will depend on the duration and intensity of said tensions. He/she added that, up to now, the impact

on economic activity is uncertain, while regarding inflation, the risks are several. He/she pointed out that inflation in Mexico continues being subject to pressures related mainly to the effects of the pandemic and whose global factors may continue to influence the inflation outlook. As a result, Banco de México's forecasts were significantly revised and convergence to the inflation target was also adjusted accordingly to the horizon in which monetary policy operates. He/she stated that the rapid increase in inflation could affect the anchoring of inflation expectations if sufficient measures are not implemented. He/she mentioned that the monetary policy stance must remain robust so that the balance of risks regarding the medium-term inflation forecast acquires a more neutral character. He/she added that under an inflation forecast targeting framework, it is fundamental to guarantee that long-term expectations remain anchored and that shorter-term expectations return to the target. Thus, looking ahead, if the ex-ante real interest rate needs to be above the range estimated as neutral, a balanced relative monetary policy stance must be maintained. He/she pointed out that commitment to the constitutional mandate requires monetary policy stance be such that it ensures convergence to the inflation target, maintaining a proper balance in light of the imminent cycle of upward adjustments in the United States, and also foster the proper functioning of the financial system and an orderly adjustment in markets. He/she considered that, looking ahead, Banco de México must continue monitoring the observed and expected determinants of inflation.

**One member** stated that inflationary pressures continue increasing and their persistence is not expected to diminish for a long period. He/she noted that it is necessary to induce a downward trajectory of inflation towards its long-term target. He/she argued that, at least in the short term, it is necessary to respond to the Federal Reserve's cycle of interest rate increases with proportional ones in order not to relax the relative monetary policy stance, for which there is no room for maneuver. He/she also pointed out that Banco de México must remain attentive to any possible effects of the Federal Reserve's monetary tightening on financial markets, but without acting mechanically. He/she pointed out that a greater tightening than that of the Federal Reserve could be required when the outlook for domestic inflation so demands, but without introducing excessive monetary restriction. He/she stated that given the possibility of inflation reaching its peak in the next quarter and then begin declining, decisions should be taken cautiously. He/she argued that a balance should be sought when assessing inflation

persistence, the cyclical conditions, and the Federal Reserve's cycle of interest rate increases, keeping in mind inflation as the most important issue to tackle. He/she noted that the ex-ante real interest rate is still at the bottom of the neutral interest rate range, which implies that monetary policy must continue to be adjusted at the current pace until exiting the neutral stance and reaching one that is consistent with the current situation. He/she pointed out that inflation expectations and the price formation process have continued to deteriorate and that, without the expectations channel functioning properly, monetary policy's transmission mechanisms will be limited. He/she added that the expectations channel should not be minimized by arguing that a rate increase only mitigates the effect of inflationary shocks of a certain nature. He/she argued that, instead, acting decisively should make expectations adjust downwards. Thus, understanding the causality of the expectations channel and the lag with which it operates is crucial to avoid narratives incompatible with its functioning. He/she also highlighted that the credit channel is the least effective in the Mexican economy due to the low levels of depth, inclusion, and competitiveness of the financial system, and the high levels of labor informality. He/she mentioned that being in favor of an insufficient monetary policy response, based on the possible negative effects on economic activity, could be counterproductive, as it would contribute to higher levels of inflation, which in turn could hinder economic growth. Therefore, he/she pointed out that sending distorted signals that might undermine the credibility regarding the central bank's primary mandate should be avoided. He/she noted that, according to the latest Regional Economic Report, around 30% of business agents surveyed consider inflation as one of the main obstacles to growth. He/she stated that the fact that high inflation has a greater negative effect on low-income population should also be taken into consideration.

**Another member** mentioned that the outlook for inflation has deteriorated in light of the geopolitical conflict, in addition to the negative implications of the pandemic. He/she warned about the risk of high and persistent inflation affecting the price formation process and inflation expectations, especially longer-term ones. He/she recalled that the expectations channel is one of the most important for monetary policy transmission in Mexico, and that being complacent in light of the observed levels of inflation could lead to their unanchoring, which would imply a high cost for society. He/she pointed out that monetary policy faces a greater dilemma because the recovery of economic activity is still incomplete. He/she mentioned that the fundamental role of

monetary policy is to stop the inflationary inertia that has developed over the last year, and that it is therefore necessary to act in a timely and decisive manner. He/she argued that the desired effect on the real interest rate has not been achieved because forecasts have systematically underestimated inflation, leading to lower real interest rates than necessary. He/she stated that central banks that have acted more rapidly have been able to reduce their monetary stimulus more effectively. He/she added that it is necessary to analyze more extensively whether front loading the pace of adjustment of the reference rate would curb inflationary inertia more firmly, shorten the expected duration of the upward cycle, and achieve a final interest rate of lower magnitude. He/she noted that markets expect an elevated trajectory for the reference rate. He/she added that failure to act rapidly and decisively may imply having higher and longer-lasting real interest rates in the future, which would increase the cost in terms of domestic production and employment. He/she underlined that the action brought forward maintains consistency between communication about the primary objective and the actions that are being implemented, and that it seeks to strengthen medium- and long-term expectations. He/she considered that, given the balance of risks for inflation, the risk of a greater monetary tightening at a global level, and the possible impact of the current geopolitical conflict on markets, it may be necessary to modify the pace of adjustment of the reference rate, for which the Governing Board is prepared to make the appropriate decisions.

**One member** mentioned that monetary policy faces an unprecedented environment, because in addition to the challenges to fulfill the primary mandate derived from the pandemic, which have not been fully resolved, there is a geopolitical conflict that has generated strong additional inflationary pressures and significantly higher levels of uncertainty. He/she argued that given the greater possibility of Mexico's price formation process becoming contaminated, it is important to adjust the monetary policy stance to keep inflation expectations anchored. He/she warned that if the necessary measures are not taken, inflation expectations could be affected given the high levels of inflation that have been observed for an extended period, which could in turn jeopardize convergence to the inflation target. He/she pointed out that the global inflationary environment would also lead to tighter monetary conditions. He/she argued that given Mexico's high degree of financial and trade integration with the rest of the world and its exposure to various types of external shocks, it is

necessary to maintain a solid macroeconomic stance at all times. He/she underlined that, within Banco de México's attributions, this implies procuring a low and stable inflation and safeguarding the financial system's strength. He/she warned about the social and economic costs of current inflation, which affect the lower-income population to a greater extent. He/she considered it imperative that, given the aforementioned challenges, the monetary policy response be clearly consistent with the convergence of inflation to the target within the forecast horizon, and seek to maintain inflation expectations anchored. He/she highlighted that future decisions should consider the evolution of the different shocks that have exerted pressure on inflation throughout the economic recovery, after the initial shock of the pandemic, and of those associated with the conflict in Eastern Europe, so that Banco de México fulfills its constitutional mandate.

### 3. MONETARY POLICY DECISION

The Governing Board evaluated the magnitude and diversity of the shocks that have affected inflation and the factors that determine it, along with the risk of medium- and long-term inflation expectations and price formation becoming contaminated. It also considered the challenges posed by the ongoing tightening of global monetary and financial conditions, and the environment of significant uncertainty and greater inflationary pressures associated with the geopolitical conflict. Based on these considerations, and with the presence of all its members, the Board decided unanimously to raise the target for the overnight interbank interest rate by 50 basis points to 6.50%. With this action, the monetary policy stance adjusts to the trajectory required for inflation to converge to its 3% target within the forecast horizon.

For the next monetary policy decisions, the Board will monitor thoroughly the behavior of inflationary pressures as well as of all factors that have an incidence on the foreseen path for inflation and its expectations. The latter, in order to take the necessary actions to avoid the price formation process from becoming contaminated, and set a policy rate that is consistent at all times with the trajectory needed to facilitate the orderly and sustained convergence of headline inflation to the 3% target within the time frame in which monetary policy operates as well as an adequate adjustment of the economy and financial markets.

#### **4. VOTING**

Victoria Rodríguez, Galia Borja, Irene Espinosa, Gerardo Esquivel, and Jonathan Heath voted in favor

of increasing the target for the overnight interbank interest rate by 50 basis points to 6.50%.

## ANNEX

The information in this Annex was prepared for this meeting by the staff of Banco de México's Directorate General of Economic Research and Directorate General of Central Bank Operations. It does not necessarily reflect the considerations of the members of the Governing Board as to the monetary policy decision.

### A.1. External conditions

#### A.1.1. World economic activity

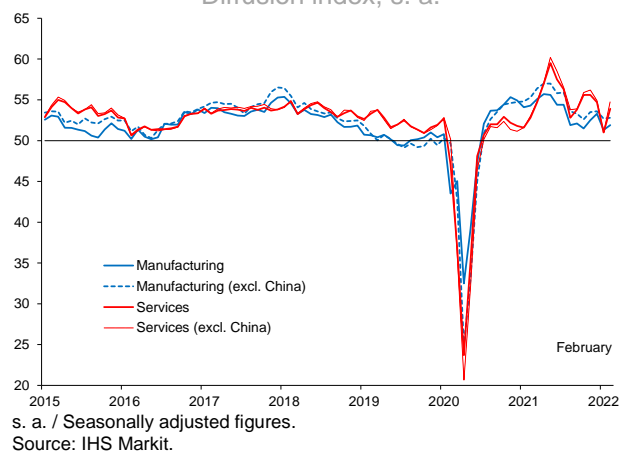
Available indicators suggest a moderation in global economic activity during the first quarter of 2022, due to, among other factors, the rapid spread of the Omicron variant of the SARS-CoV-2 virus and, more recently, to its BA.2 subvariant. Leading indicators, however, showed a recovery in February, particularly in the services sector, suggesting that the latest wave of infections have been of shorter duration and have had a lower impact on world economic activity than in previous episodes (Chart 1). Nevertheless, the Russian invasion of Ukraine is expected to have negative repercussions on world economic growth, as a result of the significant rise in international commodity prices, such as those of energy and food, the disruptions in supply chains and world trade, and the fall in business and investor confidence, which may lead to a tightening of international financial conditions.

World inflation continued increasing, pressured by bottlenecks and the high levels of food and energy prices. As a result, in most of the main advanced and emerging economies, inflation remained above their central banks' targets. In most major advanced economies, central banks continued adjusting their monetary policy stances. In its latest decision, the Federal Reserve raised the target range for the federal funds rate by 25 basis points and announced that it anticipates that successive increases in the target range will be appropriate, although it noted that the Federal Open Market Committee (FOMC) would be prepared to adjust the monetary policy stance as necessary if risks that could prevent it from achieving its goals arise. In emerging economies, a large number of central banks continued raising their reference rates. The ongoing increase in global inflation has generated expectations of a faster reduction of monetary stimulus worldwide. International financial conditions tightened, with interest rates increasing and a strengthening of the

dollar, in a context of greater risk aversion associated with the recent geopolitical conflict.

Among risks to the global economy, those associated with the pandemic, longer-lasting inflationary pressures, escalating geopolitical tensions, and further adjustments in monetary and financial conditions stand out. In particular, the magnitude of the effects that the Russia-Ukraine conflict will have on the economy is uncertain and will depend on its intensity and duration, as well as on the effects and extent of the economic sanctions imposed on Russia.

**Chart 1**  
**Global: Purchasing Managers' Index:**  
**Production Component**  
Diffusion index, s. a.

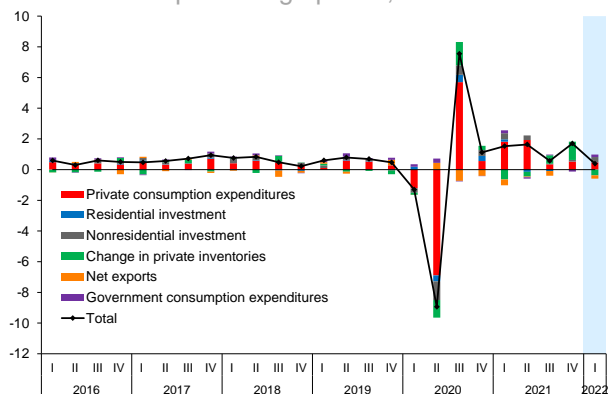


In the United States, available indicators suggest that economic activity continued to recover in the first quarter of 2022, albeit at a more moderate pace, after having grown at a seasonally adjusted quarterly rate of 1.7% during the fourth quarter of 2021 (Chart 2).<sup>1</sup> Available figures suggest that private consumption remains one of the main drivers of US economic activity, while fixed investment, mainly in machinery and equipment, is expected to recover.

<sup>1</sup> Expressed as a seasonally adjusted quarterly annualized rate, US GDP grew at a rate of 7.0% in the fourth quarter of 2021.

**Chart 2**  
**US Real GDP and Components**

Quarterly percentage rate and contribution in percentage points, s. a.



s. a. / Seasonally adjusted figures.

Source: BEA and Blue Chip, March 2022.

US industrial production increased at a monthly rate of 0.5% in February, after having grown 1.4% in January, mainly due to a rebound in manufacturing activity. Manufacturing production grew at a monthly rate of 1.2% in February, as a result of a marked increase in activity in sectors such as business equipment and construction materials that offset the fall in motor vehicle production, which continued to be affected by the shortage of semiconductors. Mining grew 0.1%, reflecting a modest increase in oil drilling, despite the high level of oil and gas prices, and the fall in oil extraction. In contrast, electricity and gas production contracted 2.7% as weather conditions improved, after the unusually low temperatures of January. The manufacturing Purchasing Managers' Index (PMI) suggests that this sector will continue recovering, although it is expected to continue being subject to pressures related to the disruptions in global supply chains.

The US labor market continued improving in February. The non-farm payroll increased by 678,000 jobs, after having expanded by 481,000 in January, mainly reflecting the growth of the sector of entertainment, recreation and art, temporary accommodation and food preparation activities, and professional, corporate and business support services. Despite this improvement, the level of employment in February was 2.1 million jobs below its pre-pandemic level. The unemployment rate decreased from 4.0% in January to 3.8% in February.

<sup>2</sup> In annualized terms, euro area GDP registered a quarter-on-quarter seasonally adjusted variation of 1.0% during the fourth quarter of 2021.

In the euro area, available indicators suggest that economic activity will remain weak in the first quarter of 2022, after having grown at a seasonally adjusted quarterly rate of 0.3% during the fourth quarter of 2021.<sup>2</sup> The region has also started to be affected by the effects of the Russia-Ukraine conflict, particularly in regards to the price and supply of energy. The unemployment rate decreased from 7.0% in December to 6.8% in January. Purchasing Managers' Indices suggest an acceleration in the services and manufacturing sectors during February, as the effects of the Omicron variant began to fade. However, these indicators precede the beginning of the Russia-Ukraine conflict.

In Japan, available information suggests that economic activity weakened once again in the first quarter of 2022, after having expanded at a seasonally adjusted quarterly rate of 1.1% during the fourth quarter of 2021.<sup>3</sup> This, as a reflection of a deterioration in household spending due to the increase in COVID-19 cases and a lower mobility since the beginning of 2022. In addition, the persistent disruptions in supply chains and shortage of semiconductor continued to affect the industrial sector's performance, particularly automobile production. In this context, the unemployment rate increased slightly from 2.7% in December to 2.8% in January. Purchasing Managers' Indices suggest a contraction in the services sector and point to a slower pace of expansion in the manufacturing sector given the continued disruptions in production chains.

In the main emerging economies, available indicators suggest a slower pace of growth during the first quarter, although with a marked heterogeneity across countries, depending on the evolution of the pandemic and the exposure of each country to the effects on global supply chains and the Russia-Ukraine conflict. In Emerging Asia, available information indicates a weakening in GDP growth in most economies. In China, although economic activity indicators for February showed a rebound, economic activity is expected to slow down during the first quarter of the year due to the restrictions imposed on several cities and provinces to contain the recent increase in COVID-19 cases, which has been the most severe so far in some regions such as Shanghai and Guangzhou. In Latin America, indicators point to a heterogeneous performance, with the possible weakening of economic activity in Chile due to the high number of COVID-19 infections registered during the quarter standing out. In

<sup>3</sup> In annualized terms, the quarterly seasonally adjusted variation of Japan's GDP during the third quarter of 2021 was 4.6%.

Emerging Europe, available indicators suggest a moderation in the pace of recovery in some countries, while in Ukraine and Russia a sharp contraction is expected due to the armed conflict and the economic sanctions imposed on Russia.

International commodity prices trended upwards since Mexico's previous monetary policy decision and have exhibited volatility in recent weeks. At the beginning of March, oil prices reached their highest level since 2008, following the sanctions imposed on Russian oil exports, in a context in which oil markets worldwide are facing significant supply restrictions. The sanctions include the refusal of refineries, banks and shipping companies to trade oil exported from Russia and the decision by some countries, such as the United States, Canada and the United Kingdom, to ban or gradually reduce oil imports from this country. Subsequently, oil prices registered episodes of high volatility due partly to the announcement to release crude oil reserves by the International Energy Agency's members, the possibility that a new nuclear agreement is signed with Iran that would allow the resumption of oil exports from that country, and the disruptions in the supply of oil from a pipeline in Kazakhstan. Natural gas reference prices rose significantly, particularly in Europe, due to the high risk of a disruption in the flow from Russia to the region, although this trend has partially reversed in recent weeks. Grain prices rose as a result of uncertainty about a possible reduction in global supply due to the geopolitical conflict, mostly because Russia and Ukraine account for almost a quarter of global grain exports. Similarly, industrial metal prices trended upwards due to the risk of disruptions in the supply from these countries, which are also important producers of these metals and other raw materials needed for their production, in an environment of low inventory levels.

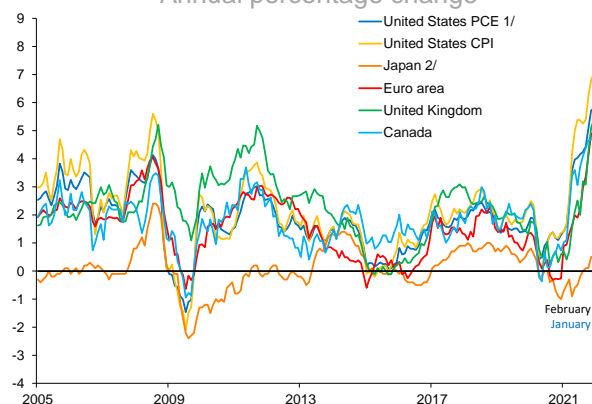
### A.1.2. Monetary policy and international financial markets

Inflation continued rising worldwide, pressured by bottlenecks and high food and energy prices. Given the persistence of bottlenecks in supply chains, producer prices remained high in both advanced and emerging economies, suggesting that upward pressures on world inflation may last longer.

Headline and core inflation continued increasing in most of the main advanced economies, with the former standing above their central banks' targets, except for Japan, whose inflation remains at low levels (Chart 3). In most of these economies, headline inflation has reached its highest level in

decades. In particular, in the United States, the annualized consumer price index went from 7.5% in January to 7.9% in February, its highest level since 1982, reflecting an increase in food inflation and in its core component, which rose from 6.0 to 6.4% during the same period. In this context, short-term inflation expectations drawn from surveys and financial markets increased for most of these economies, while longer-term inflation expectations drawn from financial instruments also rose, although in some cases they have been revised slightly downwards in recent weeks. This upward revision in inflation expectations is largely attributed to the marked increase in commodity prices, mainly due to the geopolitical conflict.

**Chart 3**  
**Selected Advanced Economies:**  
**Headline Inflation**  
 Annual percentage change



1/ The personal consumption expenditure deflator is used.  
 2/ Excludes fresh food. This series does not exclude the effect of the rise in consumption tax in May 2014 and October 2019, nor the effect of the free daycare and preschool program in October 2019.  
 3/ Preliminary figures for January.  
 Source: Bureau of Economic Analysis, Bureau of Labor Statistics, Eurostat, Bank of Japan, Statistics Canada, Office of National Statistics.

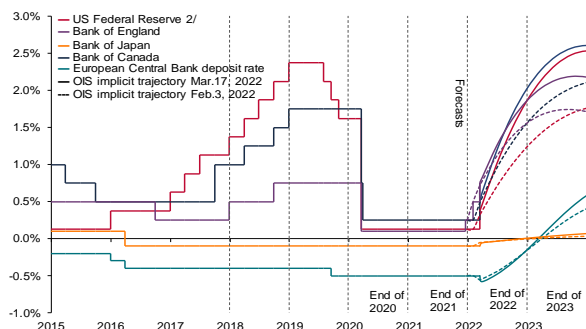
In most of the main emerging economies, inflation continued rising as a result of the same factors affecting advanced economies. A wide range of items were subject to pressures, with increases in the prices of energy, food and in core items standing out. Some countries were also affected by pressures associated with the depreciation of their exchange rates. In most of these economies, inflation remained above their central banks' targets, except for some Asian countries, such as Indonesia and China.

Looking ahead, the possibility that the Russia-Ukraine conflict leads to longer-lasting disruptions in the supply of commodities, could maintain their prices at high levels, and even lead to higher levels of inflation. The aforementioned conflict may also prolong bottlenecks due to effect on the

transportation of goods, and to the possible shortage of inputs. The effect of said shock on inflation is subject to a high degree of uncertainty.

In this context, the central banks of most major advanced economies continued their plans for monetary policy normalization. In some cases, they announced a gradual reduction in securities holdings, a slower pace of net asset purchases or increases in their reference rates. Expectations for interest rate increases in the main advanced economies were adjusted downwards at the beginning of the Russian invasion of Ukraine, although they have recently been adjusted upwards in view of the persistent upside risks to world inflation. Based on the latest available information, expectations drawn from financial instruments for most major advanced economies foresee a faster pace of interest rate increases than previously expected, anticipating increases throughout 2022 and 2023 (Chart 4).

**Chart 4**  
**Reference Rates and Trajectories**  
**Implied in OIS Curves<sup>1/</sup>**  
 Percent



1/ OIS: Fixed floating interest rate swap where the fixed interest rate is associated to the effective overnight reference rate.  
 2/ For the observed reference rate of the US, the average interest rate of the target range of the federal funds rate (0.0% - 0.25%) is used.  
 Source: Banco de México with data from Bloomberg.

Among the recent monetary policy decisions in the main advanced economies, the following stand out:

i) At its March meeting, the Federal Reserve raised the target range for the federal funds rate by 25 basis points to 0.25-0.50%. It pointed out that it anticipates that successive increases in the target range will be appropriate. It also announced that the Federal Open Market Committee (FOMC) expects to begin reducing its holdings of Treasury securities, agency debt, and agency mortgage-backed securities at an upcoming meeting, and that it would be prepared to adjust the monetary policy stance as appropriate if risks arise that

could jeopardize the attainment of its goals. Regarding the balance sheet, the chairman stated that they may begin to reduce it as soon as its next meeting in May, although he forewarned that this is not a decision that the Fed has already made. He added that the stimulus withdrawal scheme would be similar to that of the last time it was implemented, but that it would be faster and take place much earlier in the cycle with respect to the previous episode. The Committee's medians for headline inflation expectations were revised upwards from 2.6 to 4.3% for 2022, from 2.3 to 2.7% for 2023, and from 2.1 to 2.3% for 2024. As for core inflation, the medians were revised from 2.7 to 4.1% for 2022, from 2.3 to 2.6% for 2023 and from 2.1 to 2.3% for 2024. Regarding expectations for the reference rate, the medians show an increase from 0.875 to 1.875% for 2022, from 1.625 to 2.750% for 2023, and from 2.125 to 2.750% for 2024. However, the median for the long-term rate decreased slightly from 2.5 to 2.375%. This suggests expectations of a total of seven 25 basis point interest rate increases in 2022, which compares to three anticipated in the projections published last December. For 2023, the median of forecasts foresees three additional increases at least. In this regard, the Fed's Chairman reiterated on March 21 that if the Committee concludes that it is appropriate to act more aggressively by raising the federal funds rate by more than 25 basis points at one or more meetings, they would do so, and if it deems necessary to go beyond the common neutral measures and adopt a more restrictive policy stance, it could do so as well. The above has been reflected in the expected trajectory for the federal funds rate implicit in financial instruments which, considering the latest available information, anticipates a higher-than-expected interest rate increase at the end of 2022 than that based on the median of the Committee's expectations.

ii) At its March meeting, the European Central Bank left its refinancing, key lending and key deposit rates unchanged at 0.0, 0.25 and -0.5%, respectively. It pointed out that the Governing Council expects these interest rates to remain at current levels until: i) inflation reaches the 2% target well before the end of their forecast horizon; ii) inflation remains consistently at that level for the remainder of the forecasted horizon; and iii) this central bank considers that improvement in core inflation is sufficiently advanced to be consistent with stabilizing inflation at the 2% target in the medium term. It pointed out that any adjustment to interest rates will be gradual and



will take place at a certain point after net purchases under the Asset Purchase Program (APP) have concluded. Regarding the latter, this central bank accelerated the pace of reduction of its purchases for the coming months. This central bank stated that monthly net asset purchases will stand at €40 billion in April, €30 billion in May and €20 billion in June, and added that, if data supports the expectation that the medium-term inflation outlook will not weaken even after its net asset purchases have concluded, the Council will thus conclude net purchases under the APP in the third quarter. Regarding its Pandemic Emergency Program (PEPP), it reiterated that it will conclude its net asset purchases by the end of March 2022. The Council also decided to extend the Eurosystem repo facility for central banks (EUREP) until January 15, 2023.

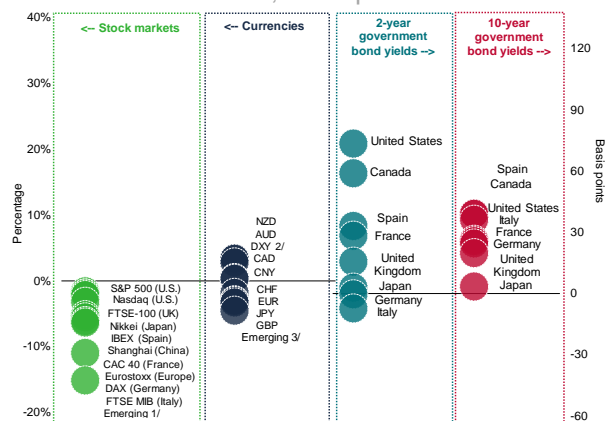
iii) At its January meeting, the Bank of Japan left its reference rate at -0.1% and its long-term interest rate target (indexed to its 10-year bond) at around 0%. It restated that it expects interest rates to remain at their current levels or even lower. With respect to its commercial paper and corporate bond purchase program, it reiterated that it will continue its purchases until the end of March 2022 and that, beginning in April, it will make its purchases at the same pace as prior to the pandemic, so that outstanding amounts will gradually return to pre-pandemic levels.

Since Mexico's previous monetary policy decision, a large number of central banks of major emerging economies continued raising their reference rates, including those of Brazil, Peru, Hungary, Poland and Russia.

International financial markets registered a significant increase in volatility and tightening, particularly at the end of February and beginning of March, in a context of greater risk aversion associated with the recent geopolitical conflict (Chart 5). In particular, the stock markets of most of the main advanced economies exhibited a negative behavior from the second week of February to the second week of March, although recently they have been recovering. In foreign exchange markets, the dollar strengthened significantly against the currencies of most advanced economies. As for government bond interest rates in the main advanced economies, they have increased significantly so far in March, in view of the outlook of a downturn in economic activity for some specific regions, high levels of inflation, and expectations of a less accommodative monetary policy by the main central banks. In emerging

economies, there was a generalized increase in long-term government bond interest rates, while stock and foreign currency markets exhibited a mixed performance by region (Chart 6). On the one hand, in the European region, stock indexes fell sharply and currencies weakened as a result of their greater exposure to the Russia-Ukraine conflict, with the Russian stock market plummeting and the ruble depreciating significantly. On the other hand, in Latin America, stock markets showed gains and currencies strengthened, partly as a result of the increase in commodity prices. In this context, since Mexico's previous monetary policy decision, there was a moderation in capital inflows to emerging economies' equity markets, with the recent outflows from the Russian market standing out. There were outflows of fixed income instruments, particularly from China, due to expectations of a more accommodative monetary policy in that country.

**Chart 5**  
**Change in Selected Financial Indicators from February 3, 2022 to March 17, 2022**  
 Percent; basis points



Note: An upward adjustment indicates currency appreciation.  
 1/ The MSCI Emerging Markets Index consists of 24 countries.  
 2/ DX: a weighted average estimated by the Intercontinental Exchange (ICE) of the nominal exchange rate of the main six currencies operated globally with the following weights: EUR 57.6%, JPY: 13.6%, GBP: 11.9%, CAD: 9.1%, SEK: 4.2%, and CHF: 3.6%.  
 3/ J.P. Morgan index is constructed with the weighted average by the nominal exchange rate of emerging economies' currencies with the following weights: TRY: 8.3%, RUB: 8.3%, HUF: 8.3%, ZAR: 8.3%, BRL: 11.1%, MXN: 11.1%, CLP: 11.1%, CNH: 11.1%, INR: 11.1% and SGD: 11.1%.  
 Source: Bloomberg and ICE.

**Chart 6**  
**Selected Emerging Economies: Financial Assets Performance since February 2, 2021**

Percent, basis points

Region	Country	Currencies	Equity markets	2-year interest rates	10-year interest rates	CDS
Latin America	Mexico	0.40%	4.48%	87	85	-1
	Brazil	3.94%	1.06%	132	126	-7
	Chile	1.07%	6.04%	170	15	-5
	Colombia	2.73%	0.88%	136	91	-37
	Peru	2.70%	10.90%	8	51	-10
Emerging Europe	Russia	-56.04%	-30.29%	2,336	1,939	1,301
	Poland	-6.43%	-6.88%	148	72	36
	Turkey	-10.10%	6.93%	299	275	57
	Czech Republic	-5.30%	-7.80%	59	36	4
	Hungary	-8.63%	-16.76%	150	82	46
Asia	China	-0.02%	-3.28%	12	9	5
	Malaysia	-0.23%	5.22%	1	2	6
	India	-1.29%	-2.84%	8	-10	15
	Philippines	-2.55%	-6.05%	43	48	5
	Thailand	-0.37%	0.65%	-12	12	0
	Indonesia	0.11%	3.69%	-9	29	7
Africa	South Africa	2.14%	-0.75%	11	37	-11

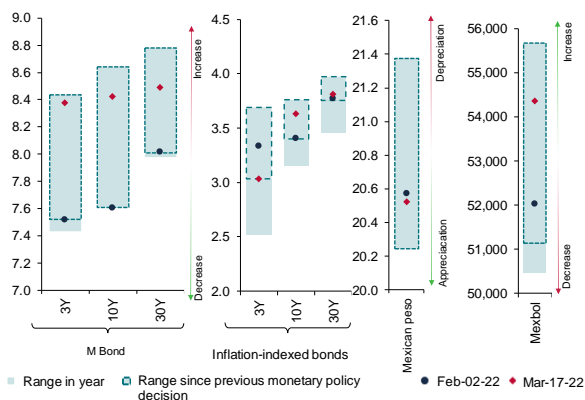
Note: An upward adjustment indicates currency appreciation. Interest rates correspond to swap rates at the specified terms, except for Hungary, where government securities with 3-year maturities were used as a reference. For the Philippines, a 2-year swap rate was used, and for Russia, a 2-year and 3-year swap rate was used.  
 Source: Bloomberg.

## A.2. Current situation of the Mexican economy

### A.2.1. Mexican markets

In the international context described above, in domestic financial markets, the exchange rate appreciated slightly, although with some volatility, and interest rates rose across all terms, in line with what was observed at the global level (Chart 7).

**Chart 7**  
**Mexican Markets' Performance**  
 Percent, MXN/USD and index

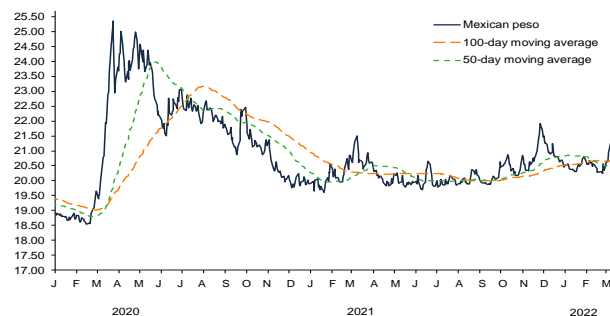


Source: Prepared by Banco de México.

The Mexican peso fluctuated in a range of 1 peso and 14 cents, between 20.24 and 21.38 pesos per dollar,

ending the period with an appreciation of 0.40% (Chart 8). This occurred in a context in which both spot and future trading conditions deteriorated slightly with respect to the previous period.

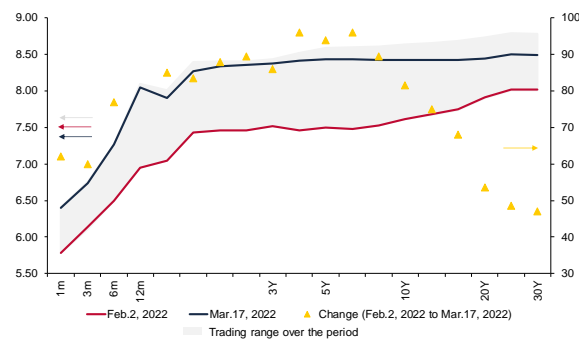
**Chart 8**  
**Mexican Peso Exchange Rate with Moving Averages**  
 MXN/USD



Source: Prepared by Banco de México.

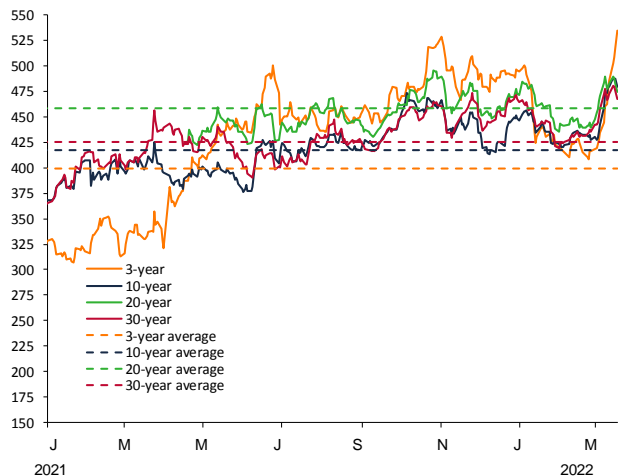
Interest rates of government securities exhibited upward adjustments, in line with the movements of yield curves worldwide (Chart 9), with increases of up to 89 basis points in shorter-term bonds and of up to 96 basis points in longer-term ones. The yield curve of real interest rate instruments showed a similar dynamic, with adjustments between -30 and 33 basis points for the short term and of 6 basis points for the long term. In this context, compensation for inflation and inflationary risk implicit in spreads between nominal and real interest rates of market instruments increased between 33 and 116 basis points for all terms (Chart 10). These adjustments took place in an environment in which trading conditions deteriorated during the period covering the monetary policy decision.

**Chart 9**  
**Nominal Yield Curve of Government Securities**  
 Percent, basis points



Note: The chart does not include bonds maturing in December 2021 and June 2022. CETES with similar maturities are considered.  
 Source: PIP.

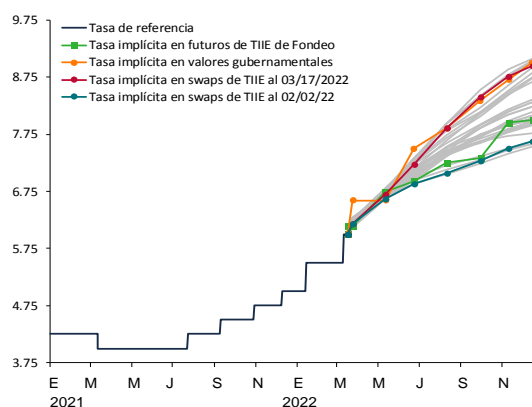
**Chart 10**  
**Compensation for Inflation and Inflationary Risk**  
**Implicit in Government Securities' Interest Rate**  
 Basis points



Source: PIP.

Regarding expectations for the trajectory of the monetary policy reference rate, information implied by the Interbank Equilibrium Interest Rate (TIIE, for its Spanish acronym) swap curve incorporates an increase of around 70 basis points between the March and May 2022 meetings, while for the end of 2022 it points to a reference rate close to 8.95% (Chart 11). Most forecasters surveyed by Citibanamex anticipate the interest rate to increase by 50 basis points to 6.50% in the March decision, while for the end of 2022 a rate of 7.50% is expected.

**Chart 11**  
**Banco de México Overnight Interbank Rate**  
**Implied in TIIE IRS Curve**  
 Percent



Source: Prepared by Banco de México with Bloomberg data.

<sup>4</sup> Refers to the value of merchandise exports in current dollars. This value differs from that reported for goods exports in Mexico's

## A.2.2. Economic activity in Mexico

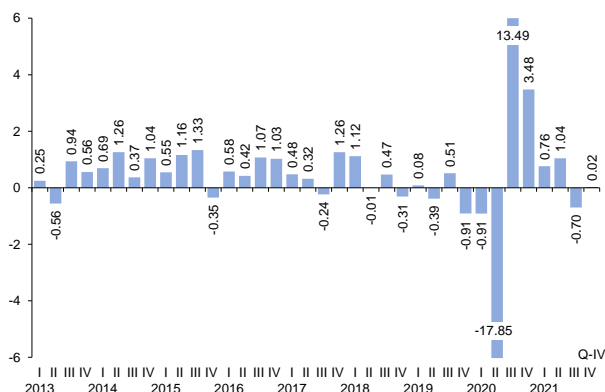
In the last quarter of 2021, Mexico's GDP stagnated (Chart 12), although in November and December economic activity slightly improved, which might have extended into early 2022, despite the increasing number of infections by the omicron variant in January. Although recently the pandemic seems to have evolved more favorably, the worsening of geopolitical conflicts represents a new factor of high uncertainty for the development of economic activity.

With respect to external demand, in January 2022, both automotive exports and those of other manufactured goods contracted at the margin (Chart 13).<sup>4</sup> Despite this decline, the non-automotive manufacturing component remains at relatively high levels, while automotive manufacturing continues to show some volatility due to persistent problems in the supply of certain inputs. By destination, manufacturing exports to the United States were at high levels, while those to the rest of the world remained weak.

System of National Accounts, since the latter represents value added, measured in constant pesos.

**Chart 12**  
**Gross Domestic Product**

Quarterly percentage change, s. a.

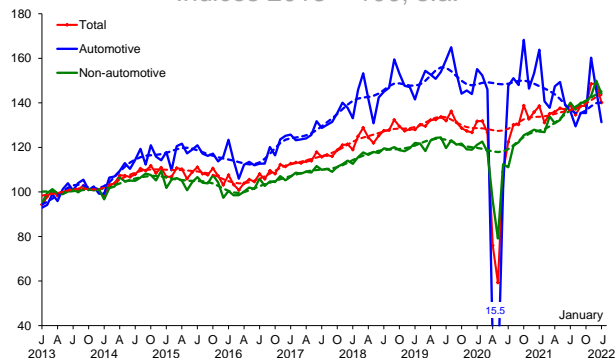


s. a. / Seasonally adjusted figures.

Source: Mexico's System on National Accounts (SCNM, for its Spanish acronym), INEGI.

**Chart 13**  
**Total Manufacturing Exports**

Indices 2013 = 100, s. a.



s. a. / Seasonally adjusted series and trend series based on data in nominal US dollars. The former is represented by a solid line and the latter by a dotted line.

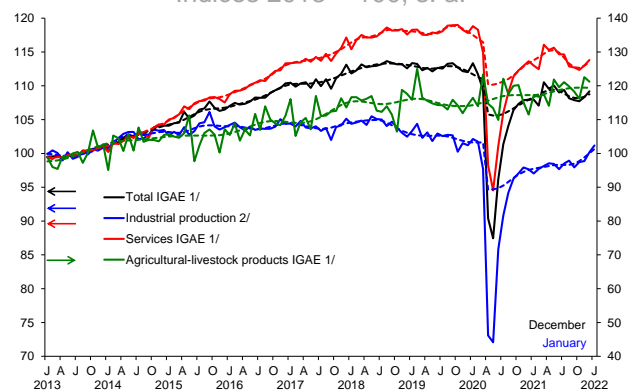
Source: Prepared by Banco de México with data from the Tax Administration Service (SAT, for its Spanish acronym), the Ministry of the Economy (SE, for its Spanish acronym), Banco de México, the National Institute of Statistics and Geography (INEGI, for its Spanish acronym), Mexico's Merchandise Trade Balance, and the National System of Statistical and Geographical Information (SNIEG, for its Spanish acronym), Information of national interest.

On the domestic demand side, based on its monthly indicator, at the end of 2021, private consumption continued to recover, registering six consecutive monthly increases. This performance reflected increases in the consumption of both domestic and imported goods, as well as the gradual reactivation of services consumption. Meanwhile, gross fixed investment improved in December with respect to previous months, although it remained weak in general. In terms of its components, spending on machinery and equipment continued to recover, while that on construction investment continued performing poorly.

On the production side, despite the upsurge of the pandemic and the persistence of certain disruptions in global supply chains, industrial production continued recovering in January (Chart 14). This is attributed to the performance of mining, which rebounded as a result of a significant expansion in mining-related services, such as oil well drilling. Manufacturing maintained an upward trend, while construction continued to perform weakly (Chart 15). In December 2021, tertiary activities registered their second consecutive monthly increase, maintaining a heterogeneous behavior across its sectors. Within them, the positive contributions of wholesale trade and transport, and information services in mass media stood out. Uncertainty regarding the performance of services in early 2022 prevails due to the upsurge of COVID-19 infections during the period.

**Chart 14**  
**Global Indicator of Economic Activity**

Indices 2013 = 100, s. a.



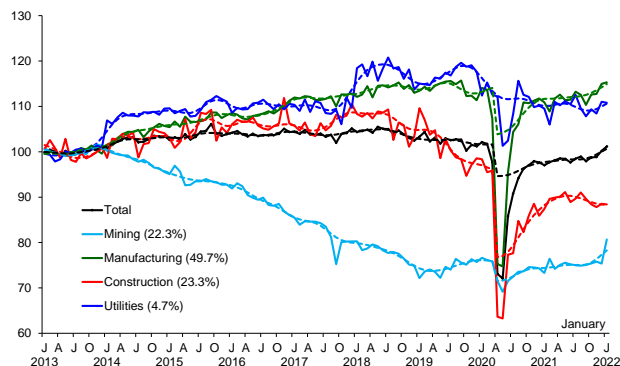
s. a. / Seasonally adjusted and trend series. The former is represented by a solid line and the latter by a dotted line.

1/ Figures as of December 2021.

2/ Figures for January 2022, Monthly Indicator of Industrial Activity.

Source: Mexico's System of National Accounts (SCNM, for its Spanish acronym), INEGI.

**Chart 15**  
**Industrial Activity**<sup>1/</sup>  
 Indices 2013 = 100, s. a.



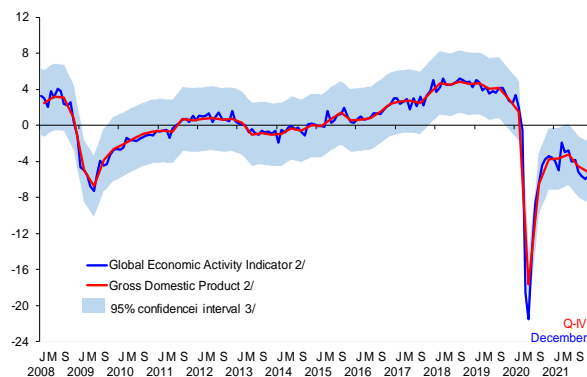
s. a. / Seasonally adjusted and trend series. The former is represented by a solid line and the latter by a dotted line.

1/ Figures in parenthesis correspond to their share in the total in 2013.

Source: Mexico's System of National Accounts (SCNM, for its Spanish acronym), INEGI.

Regarding the cyclical position of the economy, during the last quarter of 2021, output gap estimates continued to suggest that slack conditions remain significantly ample (Chart 16). During the first quarter of 2022, slack conditions are expected to have remained ample, although less than in the previous quarter. In the context of the fourth wave of infections in the country, in January 2022 various labor market indicators exhibited a mixed performance. In particular, national and urban unemployment rates decreased at the margin (Chart 17) in a context in which the labor participation rate and the employment to working-age population ratio contracted, after both indicators registered three consecutive monthly increases. Meanwhile, with seasonally adjusted figures, in February 2022, newly created IMSS-insured jobs registered its largest monthly increase since July 2021. Finally, in January, unit labor costs in the manufacturing sector registered four consecutive months of reductions (Chart 18), as a reflection, to a large extent, of advances in labor productivity.

**Chart 16**  
**Output Gap Estimates**<sup>1/</sup>  
**Excluding Oil Industry**<sup>4/</sup>  
 Potential output percentages, s. a.



s. a. / Calculations based on seasonally adjusted figures.

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

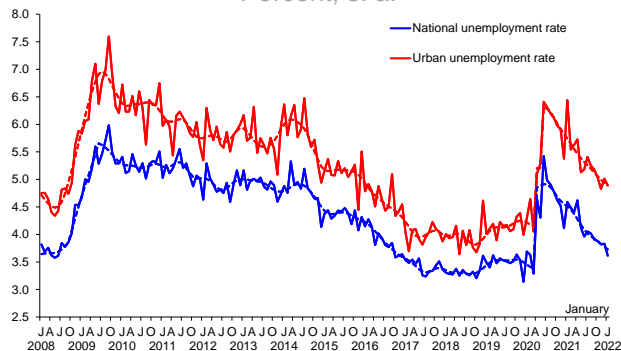
2/ GDP figures up to Q4 2021, and IGAE figures up to December 2021.

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

4/ Excludes both oil and gas extraction, support services for mining, and petroleum and coal products' manufacturing.

Source: Prepared by Banco de México with INEGI data.

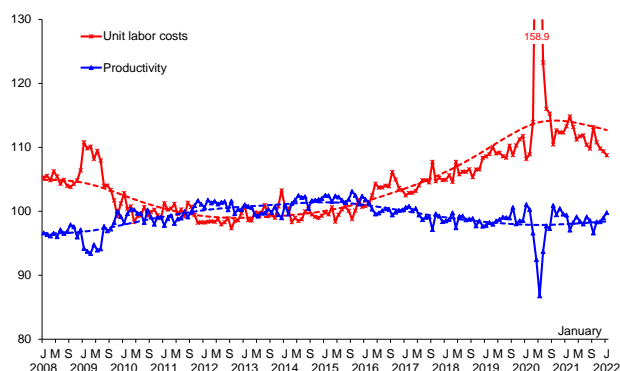
**Chart 17**  
**National and Urban Unemployment Rates**  
 Percent, s. a.



s.a./ Seasonally adjusted series and trend series. The former is represented by a solid line and the latter by a dotted line.

Source: Prepared by Banco de México with data from ENOE, ETOE (from April to June 2020), and ENOE new edition (ENOE<sup>N</sup>) from July to date.

**Chart 18**  
**Productivity and Unit Labor Costs in the**  
**Manufacturing Sector <sup>1/</sup>**  
 Indices 2013 = 100, s. a.



s. a. / Seasonally adjusted and trend series. The former is represented by a solid line and the latter by a dotted line.  
 1/ Productivity based on hours worked.  
 Source: Prepared by Banco de México with seasonally adjusted data of the Monthly Manufacturing Industry Survey and industrial activity indicators of Mexico's System of National Accounts (Sistema de Cuentas Nacionales de México, SCNM), INEGI.

In January 2022, domestic financing to firms registered a real annual reduction similar to that observed in the previous month. Bank credit to firms continued to moderate its annual contraction rate. This, in a context in which corporate demand for credit continued to recover, while lending conditions remained relatively stable, and therefore remain tight. Meanwhile, net corporate debt issuance in the domestic market continued to show low dynamism. As for credit to households, commercial bank housing portfolio kept increasing, albeit at a slower pace as of the last quarter of 2021. At the same time, outstanding bank consumer credit continued to recover, increasing for the fourth consecutive month, mainly as a result of the sustained dynamism of payroll and credit card loans. This, in a context in which household demand for credit has been gradually recovering. Household lending conditions remained stable in both housing and consumer portfolios.

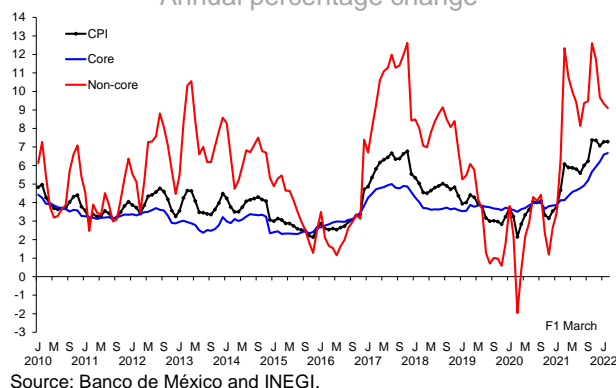
Interest rates on bank credit to firms have followed the dynamics of the overnight interbank interest rate. At the end of 2021, corporate credit intermediation margins, except for issuers, returned to levels similar to those observed prior to the pandemic. At the same time, mortgages remained at levels around their historical lows. Meanwhile, in December 2021, credit card interest rates registered levels similar to those observed during the third quarter of that year, while personal credit rates increased. Thus, consumer credit intermediation margins continued being at levels higher than those observed prior to the

pandemic. As for portfolio quality, in December 2021, delinquency rates for corporate and housing loans remained at low levels. Finally, consumer portfolio delinquency rates were lower than those registered before the onset of the pandemic, although they remain at high levels.

### A.2.3. Development of inflation and inflation outlook

Annual headline inflation continued being subject to pressures related to the COVID 19 pandemic, rising from 7.07 to 7.29% between January and the first fortnight of March 2022 (Chart 19 and Table 1). This result is explained by an increase of 33 basis points in the contribution to headline inflation of the core component, which was partially offset by a reduction of 11 basis points in the incidence of the non-core component.

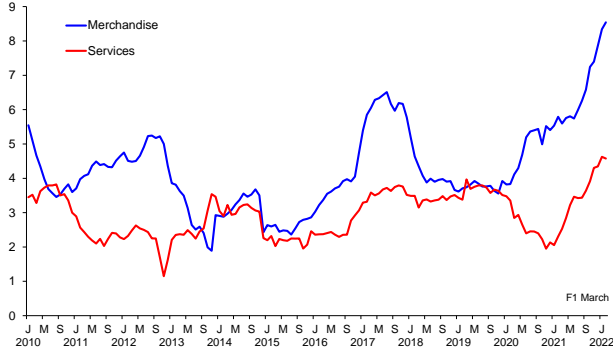
**Chart 19**  
**Consumer Price Index**  
 Annual percentage change



Source: Banco de México and INEGI.

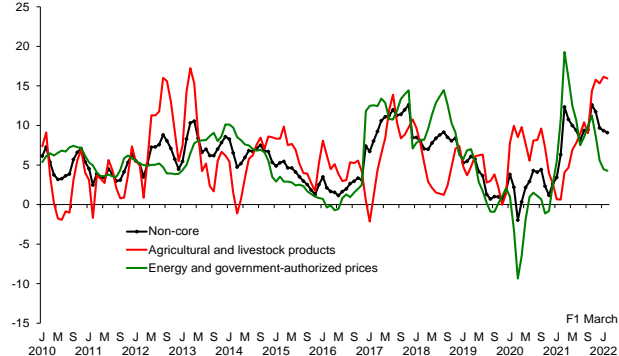
Between January and the first fortnight of March, annual core inflation increased from 6.21 to 6.68%. Within this component, merchandise prices remain affected by the imbalance between supply and demand in various markets, and higher production costs, and thus their annual variation went from 7.86 to 8.54% in that period. (Chart 20). In particular, annual food merchandise inflation increased from 8.76 to 9.84% and non-food merchandise inflation from 6.88 to 7.11%. (Chart 21). Regarding annual inflation of services, it rose from 4.35 to 4.57% in said period, still driven by the reopening of service activities and their increasing demand, which had been contained for several months, also favored by progress in the vaccination campaigns. In this regard, annual inflation of services other than education and housing increased from 6.23 to 6.51%, with the highest annual variation in food services prices standing out.

**Chart 20**  
**Merchandise and Services Core Price Sub-index**  
 Annual percentage change



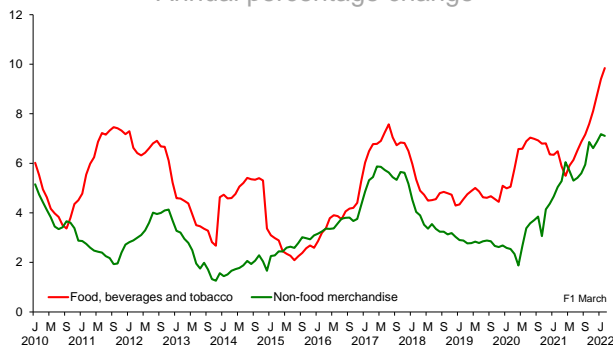
Source: Banco de México and INEGI.

**Chart 22**  
**Non-core Price Sub-index**  
 Annual percentage change



Source: Banco de México and INEGI.

**Chart 21**  
**Merchandise Core Price Sub-index**  
 Annual percentage change



Source: Banco de México and INEGI.

Annual non-core inflation decreased from 9.68 to 9.10% between January and the first fortnight of March 2022 (Chart 22 and Table 1). This was the result of a reduction from 6.75 to 4.60% in the annual inflation of energy prices, which in turn responded to the decrease from 10.20 to 5.68% in the annual variation of gasoline prices. This contrasts with the high levels of annual inflation of agricultural and livestock products, which rose from 15.32 to 15.93% during the same period.

Regarding inflation expectations from the survey conducted by Banco de México among Private Sector Forecasters, between January and February, the median of headline inflation for the end of 2022 increased from 4.27 to 4.68%, while that corresponding to the core component went from 4.29 to 4.62%. At the same time, the median of headline inflation expectations at the end of 2023 was revised upwards from 3.76 to 3.80%, while that for core inflation was revised from 3.60 to 3.70%. On the other hand, the median of headline inflation expectations for the medium term increased from 3.64 to 3.70%, while that for core inflation remained at 3.60%. Expectations for the long term remained around 3.50%. Finally, compensation for inflation increased and remains at high levels. Expectations implied by market instruments continued their upward trend, while inflation risk premium remains elevated.

Given the greater inflationary pressures, convergence to the 3% target is now expected to be achieved during the first quarter of 2024. This forecast is subject to risks. On the upside: i) persistence of core inflation at high levels; ii) external inflationary pressures associated with the pandemic; iii) greater pressures in agricultural and livestock product prices and in energy prices due to the recent geopolitical conflict; iv) exchange rate depreciation; and v) cost-related pressures. On the downside: i) a decline in the intensity of the armed conflict; ii) a greater-than-expected effect from the negative output gap; iii) energy prices below those anticipated; and iv) exchange rate appreciation. The balance of risks for the trajectory of inflation within the forecast horizon has deteriorated and remains biased to the upside.

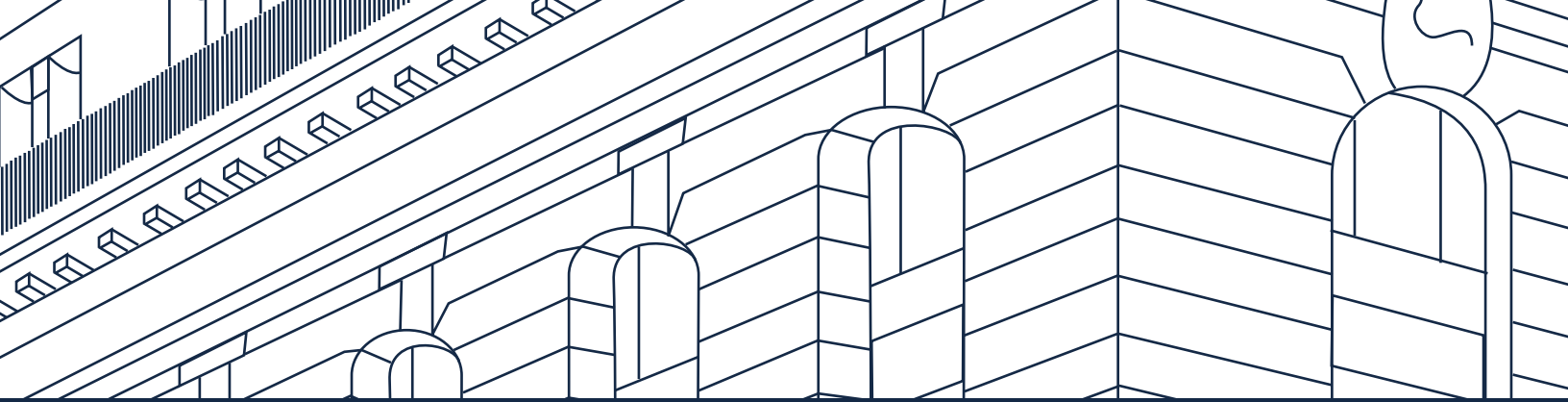
**Table 1**  
**Consumer Price Index and Components**  
Annual percentage change

Item	January 2022	February 2022	1st fortnight March 2022
<b>CPI</b>	<b>7.07</b>	<b>7.28</b>	<b>7.29</b>
<b>Core</b>	<b>6.21</b>	<b>6.59</b>	<b>6.68</b>
<b>Merchandise</b>	<b>7.86</b>	<b>8.34</b>	<b>8.54</b>
Food, beverages and tobacco	8.76	9.40	9.84
Non-food merchandise	6.88	7.18	7.11
<b>Services</b>	<b>4.35</b>	<b>4.62</b>	<b>4.57</b>
Housing	2.61	2.72	2.71
Education (tuitions)	2.73	3.19	3.18
Other services	6.23	6.62	6.51
<b>Non-core</b>	<b>9.68</b>	<b>9.34</b>	<b>9.10</b>
<b>Agricultural and livestock products</b>	<b>15.32</b>	<b>16.17</b>	<b>15.93</b>
Fruits and vegetables	18.44	19.60	20.11
Livestock products	12.87	13.57	12.80
<b>Energy and government-authorized prices</b>	<b>5.56</b>	<b>4.48</b>	<b>4.28</b>
Energy products	6.75	4.97	4.60
Government-authorized prices	2.74	3.27	3.47

Source: INEGI.







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