



BANCO DE MÉXICO®

## Minutes number 90

**Meeting of Banco de México's Governing Board on the occasion of  
the monetary policy decision announced on February 10, 2022**

This document is provided for the reader's convenience only. The translation from the official Spanish version was made by Banco de México's staff. Discrepancies may possibly arise between the original document in Spanish and its English translation. For this reason, the original Minutes in Spanish are the only official document.





#### FOREWARNING

This document is provided for the reader's convenience only. The translation from the official Spanish version was made by Banco de México's staff. Discrepancies may arise between the original document in Spanish and its English translation. For this reason, the original Spanish version is the only official document.

## 1. PLACE, DATE AND PARTICIPANTS

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

**1.2. Date of Governing Board meeting:** February 9, 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 mentioned that world economic activity continued recovering during the fourth quarter of 2021, although at a slower rate and heterogeneously across countries and sectors, due to the evolution of the pandemic and the actions implemented by their health, monetary and fiscal authorities. The majority of members stated that the resurgence of infections led to new restrictions in several countries and that global supply chains remain affected. One member recalled that in 2021 the global economy shifted from a partial shutdown of activities to a scenario of expansion, with disruptions in the production processes. Another member pointed out that some leading indicators suggest that, at the beginning of 2022, tertiary activities moderated, while**

industrial activities recovered gradually, although in emerging economies said sector stopped expanding. He/she stated that, according to the latest projections of the International Monetary Fund, weakness of economic activity at the beginning of the year might be attenuated starting from the second quarter, once the Omicron wave loses strength and economic activity starts to normalize. He/she noted that some indices related to back orders, new orders and delivery times have improved at the margin.

**The majority of members highlighted that the world growth outlook for 2022 has been revised downwards. Some members stated that this was due to the expectation of lower fiscal and monetary stimuli, especially in the United States. One member added the higher number of infections and the persistence of disruptions in supply chains. Another member indicated that these disruptions will possibly dissipate by the end of the year. Some members considered that the main risks to the global economy are those associated with the pandemic. One member underlined the high inflation levels and their persistence. Another member noted that, in economies with a fragile and incomplete recovery, the tightening of monetary conditions represents a risk to growth, employment, and macroeconomic stability. Some members pointed out that the balance of risks for the global economy is biased to the downside.**

**Most members mentioned that world inflation continued increasing due to pressures originated by bottlenecks in production, the reallocation of spending towards merchandise, and high commodity prices, in particular of food and energy products. One member stated that some of these prices have reached all-time highs and that they are expected to continue rising, while another member mentioned that, based on food and energy futures' markets, these prices are anticipated to decline slowly within one year. One member pointed out that disruptions in global value chains have contributed to the higher prices of industrial inputs and have reduced their availability, as in the case of semiconductors. Another member noted that high inflation could also be the result of wage-related pressures and high transportation costs. One member pointed out that sea freight costs are at unprecedented levels and act as a negative supply shock, raising costs and generating substitution effects that generalize the pressures towards other goods. Some members noted that inflation is well above the targets of most central banks. One member mentioned that, although inflation is expected to decline during the year, its convergence**

would be slower as compared to what was foreseen in December, especially for developed economies.

**Most members stated that short-term inflation expectations kept increasing in major economies.** **One** member indicated that, despite remaining at levels below those of observed inflation, inflation expectations have been deteriorating and the implicit breakeven inflation rate remains high. **Some** members noted that longer-term inflation expectations drawn from financial instruments registered moderate changes. **One** member considered that inflation remains transitory and will begin to decline once the pandemic-related disruptions are resolved. **Another** member considered that pandemic-related shocks have turned out to be more profound and longer-lasting than previously anticipated. He/she delved into how the amount of slack in advanced economies has decreased, in view of a solid labor demand and a slow recovery of labor participation. He/she added that this could lead to wage-related pressures, which, along with an upward revision in inflation expectations, increases the risk of a more persistent inflationary process. **One** member listed among risks to the price formation process the sustainability of public and private finances, geopolitical tensions, and emergencies associated with climate change.

**Most members pointed out that faster reductions of the monetary stimuli are anticipated worldwide.** The majority of members mentioned that various central banks in advanced economies have already started to withdraw their monetary stimuli. However, **one** member added that, so far, most of them maintain highly accommodative policy stances. He/she recalled that central banks of advanced economies reduced their policy rates aggressively in 2020, while during 2021 they remained patient and kept rates at historically low levels. He/she considered that this can be explained by their diagnosis about inflation not changing fundamentally. **All members mentioned that, in its latest monetary policy decision, the Federal Reserve announced that it will continue reducing the pace of its asset purchases, and that it will soon increase the target range for the federal funds rate.** **One** member stated that the balance sheet reduction could begin in the middle of this year. **Most members added that the market is anticipating the first increase to the target range in March.** **One** member pointed out that the pace and the speed of such increments could exceed those originally estimated. **Another** member noted that, given the economy's strength and the high levels of inflation, the Federal Reserve's current

monetary cycle is expected to be faster than the previous one. **One** member mentioned that the Federal Reserve has been cautious about its communication and has reiterated that the adjustment will be gradual, which implies that it will seek to avoid surprising the markets. **Another** member pointed out that although the decisions of that central bank have been well communicated, orderly and predictable, currently there is less guidance that allows foreknowledge of the magnitude and pace of the cycle. **Some** members underlined that the Bank of England once again increased its reference rate and that the European Central Bank is preparing to tighten its monetary policy stance. **One** member added that the Bank of Canada is also preparing to do so.

**Most members noted that the central banks of various emerging market economies continued increasing their reference rates.** **One** member pointed out that in their latest meetings they did so at an accelerated pace. **Another** member stated that many economies are expected to increase their reference rates to maintain financial stability and to avoid significant exchange rate depreciations. **One** member added that only the People's Bank of China will maintain a more accommodative policy stance, due to a more marked moderation of its economic activity, the instability in its real estate sector, and the high levels of debt of its provinces.

**Most members highlighted that interest rates for all terms have increased worldwide.** **Some** members noted that most economies exhibited a flattening of their yield curve. **One** member indicated that additional increments in interest rates for different terms are expected throughout the year. **Most members pointed out that stock markets in advanced economies registered losses.** **One** member stated that the technology sector has been especially sensitive to the new narrative of the central banks. **Another** member added that risk premia have increased. **Some** members noted that stock markets in emerging economies registered gains, in part, due to the undervaluation they registered during the previous months. **Some** members underlined that the currencies in some of these economies appreciated, especially in Latin America. They mentioned that capital inflows towards equity assets continue, while capital flows directed towards fixed-rate instruments registered moderate outflows. **Some** members indicated that international financial markets registered volatility, driven by expectations of less accommodative monetary policy stances. **One** member stated that the higher number of

infections and the high valuation of certain financial assets also contributed to the above.

**Most members considered that a tighter monetary policy stance in advanced economies poses risks to financial markets.** Some members emphasized the risks to capital flows, fixed-income assets, and currencies of emerging market economies. Some members mentioned that there does not seem to be a consensus as to the pace and magnitude of the withdrawal of monetary stimulus by the Federal Reserve, which could continue exerting pressure on markets. One member added that the materialization of some geopolitical risks could cause a reallocation of portfolios at the global level. Another member pointed out that the balance of risks to financial stability has deteriorated.

### *Economic activity in Mexico*

**All members highlighted that, based on the latest information, economic activity contracted slightly during the fourth quarter of 2021. Most members mentioned that said contraction mainly derived from a fall in the services sector.** One member underlined the decline in mobility caused by the contagion rate. Most members pointed out that the recovery remains heterogeneous across sectors. One member added that the economic weakness is reflected in the high percentage of sectors that have still not recovered their pre-pandemic levels.

**On the supply side, most members highlighted the weakness of industrial production. The majority of members pointed out that construction exhibits a deficient performance and that manufacturing remains weak.** One member stated that the latter have been mainly supported by the automotive industry, and that a modest progress in the resolution of shortage problems in this sector is expected this year. He/she noted that it is estimated that the shortage of semiconductors may have affected GDP growth in 2021 by approximately 1.3 percentage points. He/she underlined the fall in electricity generation and the weakness of mining. Some members mentioned that services continue to be affected by the new regulation on labor outsourcing. Some members mentioned the mixed behavior observed within services. One member added that a greater setback in temporary accommodation and food preparation activities has been observed, together with a higher dynamism in trade, while professional, corporate and business support services continue registering a significant negative contribution.

**On the demand side, most members stated that exports performed better towards the last quarter of 2021.** One member added that non-automotive exports continue recovering and that automotive exports show an incipient rebound. Another member pointed out that, in general, exports have exceeded their levels registered prior to 2020, driven by the US economy's recovery. However, one member noted that automotive exports remain affected by supply restrictions. Most members indicated that consumption continues recovering gradually. One member stated that its evolution has mainly been concentrated in imported goods. Another member added that private consumption has still not reached its pre-pandemic levels. One member pointed out that, although sales reported by the National Retailers Association of Mexico (ANTAD, for its Spanish acronym) continue expanding, it has been at an increasingly slower rate. He/she added that consumer confidence has declined for two consecutive months, although it still remains at high levels. He/she also mentioned that, despite the fact that the wage bill has continued growing, the average monthly income remains stagnated. He/she argued that remittances have registered the best performance of the last 18 years, although significant challenges are anticipated in the future, given the lower levels of economic growth in the United States, the decreased fiscal stimuli, and the level of employment of Mexican migrants in said country that has already surpassed its pre-pandemic levels. Most members highlighted that investment has contracted. One member pointed out that it has resumed its decreasing trend observed since 2018. Another member pointed out that it has remained stagnant since March 2021.

Some members underlined that certain labor indicators remain deteriorated. They noted that unemployment and underemployment rates are still above pre-pandemic levels. One member argued that, although formal employment has already recovered and total employment is close to its pre-pandemic level, public policy should strive to attain the employment levels that would have been observed if the pandemic had not taken place. He/she indicated that some estimates place that gap at around one million formal jobs.

**Most members agreed that ample slack conditions persisted.** Some members noted significant differences across sectors. One member underlined that GDP's deviation from its pre-pandemic trend suggests that the output gap could be above 10%. Another member highlighted the need to address the challenges in potential GDP

measurement to have a better comprehension of slack conditions and of demand-related inflationary pressures. Looking ahead, **some** members indicated that slack conditions are expected to remain ample. **One** member added that significant differences by sector and gender are expected to persist.

**Some** members mentioned that growth expectations for 2022 have been revised downwards. **One** member pointed out that the above responds to the lower growth observed during the second half of 2021, which could extend to the first quarter of 2022. **Another** member underlined that economic recovery shows signs of sluggishness and fragility. **One** member forewarned about the risk of an even greater economic downturn.

### *Inflation in Mexico*

**Most members highlighted that the rise in inflation is a generalized phenomenon and that various measures of trend inflation show increases.** **One** member pointed out that, despite the decrease of inflation in January, there is a greater number of CPI items whose prices increased at rates above 6%. **Another** member mentioned that the arguments of price increases being due to seasonal factors or comparison base effects are no longer valid. **One** member reiterated that inflation in Mexico is being affected by a global phenomenon, whose origins lie in pandemic-related factors. **Some** members pointed out that inflation remains at levels very much above the 3% target. **Some** members mentioned that by the end of 2021 it reached levels unseen in two decades. **One** member underlined that Mexico's inflation gap is high compared to a broad group of emerging countries. **Another** member warned that CPI simulations by income decile show that inflation is markedly higher in lower-income households.

**Most members mentioned that, from November to January headline inflation decreased mainly due to the deceleration of the non-core component.** **Some** members noted that said deceleration is largely explained by the reduction in the inflation of energy and agricultural and livestock products' prices. **One** member highlighted, however, that the non-core component has posted double-digit annual increases. He/she said that this reflects the high levels of both energy and agricultural and livestock product prices. **Another** member mentioned that, in general, pressures on food prices have increased, with a larger number of them registering double-digit annual variations. He/she added that this has occurred despite the fact that the exchange rate and the international prices of food

commodities have exhibited a better performance, which suggests that there is a significant lag between these variables and food prices in Mexico, which makes these pressures recede slowly and thus they may be synchronized with new shocks. Finally, **one** member pointed out that given the high volatility levels and the random behavior of the non-core component, the observed decline cannot be taken as a permanent improvement given the current inflationary pressures.

**All members mentioned that core inflation continued to increase.** **Some** members highlighted that it has risen in each of the last 14 months. **One** member added that this reflects the persistence of the shocks that have affected it. **Another** noted that in January this component reached a level unseen in 20 years. **One** member added that it reached a historical high since the inflation-targeting scheme was adopted. **Another** member expressed his/her concern over the path of this component as it signals headline inflation's trajectory in the medium term. He/she underlined that in the last five monetary policy decisions, core inflation has been at levels higher than anticipated. **The majority of members pointed out that within the core component, both merchandise and services inflation increased.** **Some** members indicated that, regarding core inflation, the proportion of items with price increases above 5% continued trending upwards, reaching record levels of 80%. **One** member indicated that, although part of the initial increase in merchandise inflation was due to changes in the relative prices of merchandise with respect to services, the concurrence of additional shocks and their persistence have generated a high inertia in this component. **Another** member stated that the pressures that continue to be observed within food merchandise are associated with the behavior of prices of products derived from soybeans, corn and wheat. He/she underlined that price variations in non-food merchandise prices are also relevant and that they have taken place along with recent upward variations in the prices of education services, and more persistently, in those of food services. **One** member mentioned that services inflation has followed an upward trend as a result of the reopening of activities, the increase in their demand, and vaccinations. He/she noted that inflation of services excluding housing and education exceeded 6% in January. **Another** member pointed out that, unlike other countries, core inflation in Mexico includes food merchandise, which tends to be volatile and highly susceptible to supply shocks. Therefore, he/she suggested focusing on the alternative core index Banco de México has used in other occasions, which

includes merchandise and services, but excludes food merchandise. Regarding this index, he/she highlighted that: i) its annual inflation rate is 100 basis points below that of traditional core inflation; ii) it has remained more stable in recent months, while the traditional one has increased; and iii) pressures at the margin for this index decreased significantly in January, when annualized monthly inflation was close to its historical average.

**All members mentioned that inflation expectations for 2022 and 2023 increased again. Most members noted that medium- and long-term expectations remained stable,** although some members pointed out that at levels above 3%. **One** mentioned that expectations for the next twelve months have remained more stable and declined recently, while medium-term expectations also improved at the margin. Nevertheless, he/she pointed out that expectations for the short and medium terms remain at high levels, above those observed in other inflationary periods. He/she highlighted the current discrepancy between analysts' inflation expectations and Banco de México's forecasts for 2023. **Another** member mentioned that the deterioration of inflation expectations increases the risk of them becoming unanchored. Meanwhile, **one** member pointed out that short-term inflation expectations have not stopped increasing despite the sequence of interest rate increases. **Most members stated that inflation expectations derived from market-based instruments continued trending upwards. One** member added that although the ten-year inflation risk premium apparently is decreasing, it remains at levels similar to those recorded in stress episodes. **Another** member underlined that the higher levels of inflation risk premia implicit in market instruments reflect a greater risk of long-term expectations becoming unanchored. However, **one** member noted that expectations drawn from market instruments for the 6-10 year average stood at 3.07% in January. He/she mentioned that the contrast between short- and long-term expectations suggests that analysts and markets foresee that the current inflationary pressures will eventually ease.

**Most members pointed out that forecasts for headline and core inflation increased again. One** member mentioned that they were adjusted upwards for the next five quarters. **Some** members added that their annual measures are expected to converge to the 3% target by the end of the forecast horizon. **One** member stated that the forecasts have repeatedly undershot when anticipating the trajectory of inflation given the continuous appearance of unexpected

shocks. Thus, he/she pointed out that the convergence of the core component will depend on the absence of additional shocks, which he/she considered is a strong assumption given the high levels of oil, commodities, sea freight and food prices. He/she mentioned that the shocks that have affected core inflation are expected to continue at least until the second half of 2022, and that its components most susceptible to shocks related to energy prices and the exchange rate will remain under pressure. **Another** member noted that inflation forecasts have continued to be revised upwards since the current tightening cycle began in June 2021. He/she indicated that core inflation is expected to reach its highest point in the first quarter of 2022, as the inflationary shocks that were observed in the same period of the previous year begin to fade. He/she added that, from then onward, it is expected to decline steadily in part because of the lesser pressures that the non-core component has been subject to, which tend to affect core inflation with some lag. He/she pointed out that this is expected to take place mainly through food merchandise prices, which would reflect the lower pressures on agricultural input prices. **One** member highlighted that the outlook for inflation continued to deteriorate, given the deviation of its trajectory from what was previously forecast.

**Most members stated that the increase in inflation has been persistent, especially regarding its core component. One** member added that this not only responds to temporary external pressures. However, **another** member mentioned that the temporary effects of increases in energy prices and in some agricultural and livestock product prices have started to fade. He/she added that this process is expected to continue and contribute to further declines in inflation.

**Among upward risks to inflation, most members highlighted cost-related pressures and the persistence of core inflation at high levels. Some** members added external inflationary pressures, exchange rate depreciation, and increases in energy prices. **One** member stated that, insofar as the pandemic transitions to a more favorable stage, there could be a reallocation of spending towards services, which could exert pressure on service prices. **Another** member noted the risk of continuing imbalances between supply and demand, due to rigidities in production or the evolution of the pandemic. **Some** members mentioned that there is a positive correlation between the level of inflation and its persistence, and thus high levels of inflation carry the risk of the price formation process becoming

contaminated. **One** member added the risk of wage revisions being influenced by observed inflation and by minimum wage increases. Among downward risks, **another** member mentioned: i) a greater-than-expected effect from the negative output gap, ii) social distancing measures, and iii) exchange rate appreciation. **Most members stated that the balance of risks for inflation within the forecast horizon remains biased to the upside.** **One** member highlighted that the balance of risks has continued to deteriorate.

### *Macrofinancial environment*

**Most members mentioned that the exchange rate appreciated and interest rates increased, mainly short-term ones.** **Some** members noted that, in general, domestic financial markets performed favorably, in line with what was observed in Latin America. They also stated that the behavior of interest rates led to a flattening of the yield curve. They pointed out that the stock market registered gains. **One** member added that default risk premia were slightly above the level observed in the previous monetary policy meeting.

**Some** members mentioned that the economy is well positioned to face a global monetary tightening cycle. They highlighted the low levels of the current account deficit and of non-resident investors' holdings of government debt. **One** member considered that this reduces the vulnerability of the peso. **Another** member added the fiscal balance and the level of international reserves. **One** member considered necessary to maintain a solid macroeconomic stance, procuring a low and stable inflation and the soundness of the financial system, given the country's high degree of trade and financial integration with the rest of the world and its exposure to external shocks. He/she added that this is essential given the outlook of a further monetary tightening worldwide.

**Most members highlighted the weakness of credit to firms.** **Some** members considered that this obeys to structural demand factors, which reflects the deterioration of investment climate. **One** member underlined that this is unrelated to the current monetary policy stance. **Another** member emphasized that financing to the non-financial private sector continued to moderate its contraction. He/she stated that, in 2021, external sources of financing registered a negative balance for the first time in 12 years, while domestic sources rebounded due to increases in the reference rate. He/she mentioned that mortgage lending displays an upward trend. **One** member stated that monthly variations of

credit to the private sector have finally started to be positive towards the end of last year. However, he/she considered that this improvement is not enough and is at risk due to the interest rate increases, which would have an impact on the demand for credit. He/she pointed out that during the fourth quarter of 2021, the annual flow of domestic financing to the private sector accounted for 1.1% of GDP, in contrast to the 3.2% recorded in 2017, prior to the tightening of monetary conditions in Mexico.

### *Monetary policy*

**The Governing Board evaluated the magnitude and diversity of the shocks that have affected inflation and its determinants, along with the risk of medium- and long-term inflation expectations and price formation becoming contaminated, as well as the additional challenges posed by the ongoing tightening of global monetary and financial conditions. Based on these considerations, on this occasion, the majority decided to increase the target for the overnight interbank interest rate by 50 basis points to 6.00%. Most 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. They expressed that for the next monetary policy decisions, the Board will monitor thoroughly inflationary pressures as well as all factors that have an incidence on the foreseen path for inflation and its expectations. The latter, in order to set a policy rate that is consistent at all times with both an orderly and sustained convergence of headline inflation to the 3% target and an adequate adjustment of the economy and financial markets.**

**One member** highlighted that, in contrast to other economies, Mexico provided a reduced monetary stimulus in 2020 and started to withdraw it early in 2021, despite its sound fundamentals. He/she noted that Mexico's monetary policy stance is currently among the least accommodative among emerging market economies, surpassed only by economies with geopolitical conflicts or deteriorated macroeconomic fundamentals. He/she considered that, given the mandate of price stability, an increase in the reference rate is justified, especially to preserve financial stability. However, he/she mentioned that the concern is whether to raise it by 25 or 50 basis points. He/she questioned the arguments for accelerating the monetary tightening. First, the real interest rate has not changed



significantly despite the previous increases to the reference rate. In this regard, he/she pointed out that these increases created the expectation of a more permanent inflation, and therefore did not affect the real interest rate. Second, as to the Federal Reserve's adjustments possibly being greater than anticipated, he/she highlighted that said central bank has reiterated that it will adjust its rates gradually. He/she stated that, if the adjustment were greater than expected, given that Banco de México makes its decisions in calendar dates close to those of the Federal Reserve, there would be time to react and in this regard he/she considered unnecessary to act ahead or over-react to that central bank's actions. He/she added that, given its robust macroeconomic stance, Mexico is in a better position to face the Fed's restrictive cycle. Third, he/she mentioned that although other emerging economies have increased their reference rates at a quick pace, the relevant variable is the interest rate level and that Mexico continues having one of the highest among these economies. He/she noted that, in other economies, the greater adjustment is due to the fact that they reduced them more markedly in the past or because they face idiosyncratic problems. He/she mentioned that the current inflationary phenomenon is mostly explained by factors linked to the evolution of the pandemic and that, in the face of these exogenous pressures, there is not much that a more restrictive monetary policy stance can do. He/she added that the cost associated with a higher rate must be considered, as there is the risk of reaching a restrictive policy stance too soon, thus affecting the economic recovery. He/she mentioned that this would generate greater risk aversion and macroeconomic instability, which could translate into exchange rate- and price-related pressures, making it difficult to achieve Banco de México's objective. He/she stated that the central bank's actions and the way it communicates them affect both expectations and the price formation process.

**Another member** considered that some readings on inflation and its expectations have started to move in the right direction. However, he/she noted that it is still necessary to strengthen the downward trajectory of inflation, given that pressures have not dissipated, and to make the balance of risks to inflation more neutral and symmetric around the medium-term forecasts. He/she stated that there is empirical evidence of a positive correlation between high levels of inflation and its degree of persistence, and therefore if price variations do not begin to revert, there is the risk of inflation becoming more persistent. He/she considered that, throughout this inflationary episode, inflation expectations have been more

sensitive by incorporating increases when observed inflation has been higher than expected, but have reacted less when it has decreased for some months, which in his/her opinion suggests that monetary policy should support more decisively the decline in inflation. He/she mentioned that the fact that the real ex-ante interest rate has increased since the last meeting indicates that the stance adopted by Banco de México is consistent with its mandate, but added that it is necessary to continue in this direction in order to influence short- and long-term expectations. He/she stated that, in view of the Federal Reserve's announced cycle of monetary normalization, the decisions taken by Banco de México since last year place our country in a relatively solid monetary position compared to that of the United States, and such position is close to reaching, both in nominal and real terms, the largest spread observed in the last cycle. He/she argued that, under different macroeconomic metrics, Mexico is well positioned with respect to previous monetary cycles, and thus it must not assume a mechanical rule with respect to the Federal Reserve's adjustments, but rather act by assessing all the information available at each moment in time. He/she considered that Banco de México faces a scenario of slow economic recovery and persistent inflation, especially in its core component, which represents a complex combination. He/she mentioned that maintaining a robust monetary policy stance in the face of persistent inflation will allow to better address the challenges ahead and thus fulfill the constitutional mandate of price stability.

**One member** highlighted that core inflation was again higher than anticipated in January, that medium-term expectations were revised upwards, and that the new forecast trajectory for inflation was above that previously published. He/she warned that current inflation is not a temporary phenomenon focused on the prices of certain CPI items and that, if the policy response is not decisive, there is the risk of having a more persistent inflationary episode and of long-term expectations becoming unanchored, which would reduce the effectiveness of the expectations channel, which is the most relevant channel for monetary policy. He/she considered that given the continuing emergence of unanticipated shocks, the adjustments prescribed by the monetary models have not been sufficient to attain the convergence to the inflation target. He/she highlighted that, so far, given the continuous increase in expected inflation, the reference rate increases have been neutralized in the ex-ante real interest rate. He/she stated that, in his/her opinion, the dilemma is between maintaining the current pace of

increase at 50 basis points or raising it to 75 basis points. He/she considered that the decision should seek a balance among three factors: high levels of inflation that are not receding, which is the primary factor, the imminent interest rate increases by the Federal Reserve, and the adverse cyclical conditions of the economy. He/she noted that, although Banco de México started the cycle a little earlier and from a less expansionary level than most central banks, if it does not accelerate the monetary tightening, it will be overtaken by most of them, since some countries have raised their rates at a triple-digit pace in their last meetings, and intend to maintain said pace. He/she argued that a pace of adjustment must be adopted in order to synchronize the domestic and global monetary cycles. The relative monetary policy stance must be adjusted cautiously in terms of margin of maneuver with regards to possible deviations from the cycle of rate increases by the Federal Reserve, in order to address, in a non-mechanical way, the short- and medium-term inflationary effects and the equilibrium of the abovementioned factors. He/she added that, although the cyclical position of the economy seems to provide some room to maneuver, core inflation remains on a strong upward trend. He/she stressed that the main challenge is to control core inflation, which is above 6%, remains on an inertial upward trajectory, and is persistent. He/she underlined that actions must be taken to maintain long-term expectations anchored and Banco de México's credibility about its commitment to its primary objective of price stability. He/she considered that lessons from recent experience are that the monetary astringency necessary to anchor expectations and ensure compliance with the price stability mandate should not be underestimated, and that achieving that objective is the best social contribution to the country, since neglecting it would imply regressive effects on the most vulnerable population.

**Another member** highlighted a fundamental dilemma in the face of historically and persistently high levels of inflation, especially in its core component, in a complex international environment and with an economy that contracted during the third and fourth quarters of 2021. He/she noted that the appropriate pace at which to reduce monetary stimulus must be assessed to ensure an orderly convergence to the target. He/she underlined four factors to act decisively. First, recent analyses suggest that the presence of a possible inflationary inertia may lead to an unanchoring of expectations. He/she indicated that this could occur if inflation is systematically above forecasts and these tend to be

revised upwards, as has occurred previously. Second, monetary policy actions have not achieved the desired effect on the real interest rate. He/she argued that underestimating future inflation systematically leads to lower real interest rates than those consistent with the disinflationary process, which implies maintaining higher real rates in the future and for a longer period of time. Third, a balance of risks to inflation that is clearly biased to the upside. Fourth, the risks to global financial stability that have increased with the confirmation of the tightening cycle in the United States. He/she added that the increase in slack conditions does not justify a moderation in the monetary policy stance because the limited impulse that could be achieved would not offset the cost of expectations becoming unanchored, which would imply a more aggressive adjustment in the future, with higher costs for the population. He/she warned that the deterioration of the inflationary outlook has increased the risk of delaying the convergence of inflation to the target, thus affecting price dynamics. He/she expressed that an increase of 50 basis points to the reference rate would contribute to maintain consistency between the communication regarding the primary objective and the actions to achieve it. He/she pointed out that these actions are intended to strengthen the expectations channel and limit demand pressures. He/she added that this measure places the central bank in a better position to face more astringent global financial conditions. He/she considered it fundamental for the monetary policy statement to mention that the balance of risks for inflation has continued to deteriorate, and that it restates the central bank's commitment to price stability. Finally, he/she recalled that the greatest contribution that the central bank can make to foster sustained growth and increase the population's welfare is to guarantee compliance with its constitutional mandate. He/she highlighted that, with these actions, it is possible to lay the foundations of stability and confidence necessary to promote investment and a better allocation of resources in the economy.

**One member** noted that Banco de México has faced an unprecedented environment, in which atypical, deep and widespread shocks derived from the pandemic have posed significant challenges for the fulfillment of its mandate to safeguard the stability of the currency's purchasing power. He/she stated that the main challenge is that world inflation has reached levels unseen in decades. He/she argued that, given the social and economic costs derived from high inflation, which affect the lower-income population to a greater extent, monetary policy must continue focusing on consolidating an environment of low and

stable inflation. He/she stated that allowing inflation to remain at high levels, considering that inflation expectations might continue to be affected, could erode monetary policy's credibility, posing an obstacle for the convergence of inflation to the target, and affecting domestic financial markets and economic activity. He/she considered that in the current scenario, the central bank's commitment to fulfilling its mandate should be strengthened. He/she mentioned that the monetary policy response must be consistent with the convergence of inflation to its target in the forecast horizon and should seek to keep inflation expectations anchored. He/she considered that Banco de México's communication should provide certainty that the necessary actions will be taken so that the price formation process is not contaminated. He/she argued that the above, in addition to having a favorable impact on the convergence of inflation to its target, will contribute to induce orderly conditions in the foreign exchange and fixed income markets, in an environment where the international monetary cycle might generate volatility. He/she added that the outlook for monetary policy has become more complex, given the outlook for a faster withdrawal of monetary stimulus around the world, particularly in the United States. He/she pointed out that the upcoming decisions should consider, as the Governing Board has been doing, the evolution of all inflation determinants, including inflation expectations, especially longer-term ones, cost-related pressures, slack conditions, the evolution of financial markets, and international monetary policy. He/she expressed that the evolution of the shocks that have exerted pressures on inflation must be considered, evaluating whether they are starting to mitigate as economic conditions normalize and, at the same time, monitoring the risk of new shocks arising or the effects of those already observed becoming amplified.

### **3. MONETARY POLICY DECISION**

The Governing Board evaluated the magnitude and diversity of the shocks that have affected inflation and its determinants, along with the risk of medium- and long-term inflation expectations and price formation becoming contaminated, as well as the additional challenges posed by the ongoing tightening of global monetary and financial conditions. Based on these considerations, on this occasion, the Board decided to increase the target for the overnight interbank interest rate by 50 basis points to 6.00%. 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 inflationary pressures as well as all factors that have an incidence on the foreseen path for inflation and its expectations. The latter, in order to set a policy rate that is consistent at all times with both an orderly and sustained convergence of headline inflation to the 3% target within the time frame in which monetary policy operates and an adequate adjustment of the economy and financial markets.

### **4. VOTING**

Victoria Rodríguez, Galia Borja, Irene Espinosa, and Jonathan Heath voted in favor of increasing the target for the overnight interbank interest rate by 50 basis points to 6.00%. Gerardo Esquivel voted in favor of increasing the target for the overnight interbank interest rate by 25 basis points to 5.75%.

### **5. DISSENTING OPINIONS / VOTES**

**Vote.** Gerardo Esquivel

The anticipated beginning of the Federal Reserve's restrictive cycle will have significant implications for international financial markets. Banco de México must remain vigilant and be prepared to take the necessary actions to guarantee the country's financial stability. From June to date, the target rate in Mexico has increased by 150 basis points, in the same magnitude as the interest rate spread relative to the United States. This implies that we have already taken steps forward in addressing this issue. For this reason, I believe that a 25-basis point increase should be enough to face the uncertainty before the referred cycle begins. It must also be recalled that headline inflation reached an all-time high during the second fortnight of November, and that it has already started to decrease. Moreover, although core inflation has continued to increase, it is foreseen to reach its highest level during the first quarter of 2022, and from that point, to also start decreasing. I reiterate that I do not consider it appropriate to get too far ahead of the Fed's interest rate normalization process because that could take us too soon to a very restrictive monetary policy stance, which could have detrimental economic and financial effects.

## 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

World economic activity continued recovering during the fourth quarter of 2021, although at a slower rate than expected due to the persistent bottlenecks in supply chains and the resurgence of infections due to the Omicron variant of the SARS-CoV-2 virus. This recovery continued to be heterogeneous across countries and sectors due to differences in the evolution of the pandemic and in vaccinations, as well as to the different responses of the health, monetary and fiscal authorities. Leading indicators have shown a moderation in service activities, while industrial activities have continued to gradually recover (Chart 1).

World inflation continued increasing as a result of price pressures across a broader range of items. These pressures have resulted from bottlenecks in production, the reallocation of spending towards merchandise, high food and energy prices, as well as the recovery of some services affected by the pandemic. As a result, in most major economies, both advanced and emerging, inflation remained above their central banks' targets.

The central banks of most of the main advanced economies continued adjusting their monetary policy stances, by slowing the pace of asset purchases, in some cases by increasing their reference rates, or by announcing that they would be raised soon. In emerging market economies, a large number of central banks continued to increase their reference rates.

In this environment, international financial markets performed positively during the second half of December, although with greater volatility and risk aversion in January, associated with the monetary policy adjustments by some of the systemically important economies and the expectation of a faster-than-anticipated withdrawal of monetary stimulus in view of the continued increase in world inflation. In this context, there was a tightening of financial conditions in which interest rates increased and the dollar strengthened moderately.

The evolution of the global economy continues to be subject to a high degree of uncertainty, particularly associated with the COVID-19 pandemic or the possibility that it becomes an endemic disease, the global vaccination process, disruptions in supply chains, the evolution of inflationary pressures, adjustments in monetary and financial conditions, and the evolution of geopolitical tensions in various countries.

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

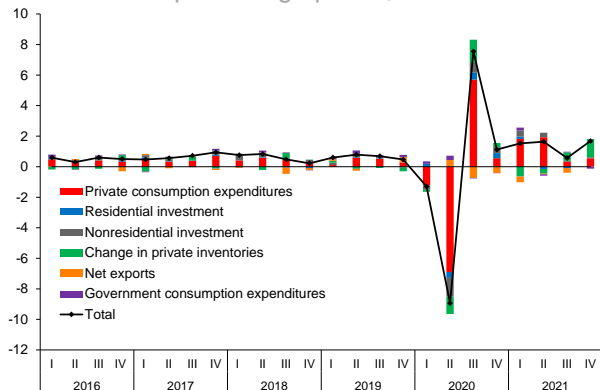


In the United States, economic activity accelerated its pace of expansion during the fourth quarter of 2021, by growing at a seasonally adjusted quarterly rate of 1.7%, after having grown 0.6% in the previous quarter (Chart 2).<sup>1</sup> This was mainly due to a recovery in inventory investment, as well as a moderate rebound in household consumption, which in turn benefited from still accommodative financial conditions, favorable household balance sheets, and

<sup>1</sup> Expressed as a quarterly annualized rate, US seasonally adjusted GDP grew at a rate of 2.3% in the third quarter of 2021 and of 6.9% in the fourth.

the solid recovery of employment. Fixed investment recovered moderately, limited by the increase in the prices of capital goods. In contrast, residential investment and government spending contributed negatively to growth during the same quarter. Net exports had a null contribution to growth given that, although exports had a positive contribution, this was offset by the negative contribution of imports.

**Chart 2**  
**US Real GDP and Components**  
Quarterly percentage rate and contribution in percentage points, s. a.



s. a. / Seasonally adjusted figures.  
Source: BEA.

US industrial production contracted at a monthly rate of 0.1% in December, after having grown 0.7% in November. This moderation was due to a 1.5% contraction in gas and electricity generation and a 0.3% contraction in manufacturing activity, largely explained by the decline in automotive production, which continued to resent the effects of bottlenecks and the shortage of semiconductors. These contractions were offset by a 2% expansion in mining that mainly reflected improvements in the oil and gas sector. The manufacturing Purchasing Managers' Index (PMI) suggests that this sector will continue to recover, although it is expected to remain limited by the persistence of bottlenecks, high input costs, and labor shortages.

The US labor market continued to improve in December and January despite the higher absenteeism due to the surge of new infections caused by the Omicron variant of the SARS-CoV-2 virus. Non-farm payrolls increased by 489,000 jobs on average during the same months, after having expanded by 647,000 jobs in November, reflecting the continued expansion of employment in private

services. The level of employment in January was below its pre-pandemic level by 2.9 million jobs. The slight increase in the unemployment rate from 3.9% in December to 4.0% in January was mainly due to an increase in labor force participation.

In the euro area, growth in economic activity moderated during the fourth quarter of 2021, at a seasonally adjusted quarterly rate of 0.3%, after having expanded 2.3% during the third quarter.<sup>2</sup> Economic activity has continued to recover gradually in the region, with GDP recovering its pre-pandemic level, driven by the positive impact of both monetary and fiscal stimulus on domestic demand. However, the slower pace of growth was the result of lower mobility associated with the resurgence of COVID-19 infections, the impact on production chains, the sharp increase in energy prices, and the shortage of materials, equipment, and labor. The unemployment rate decreased from 7.1% in November to 7.0% in December. Purchasing Managers' Indices suggest a slowdown in the service sector during the first quarter of the year and a gradual recovery in manufacturing activity.

In Japan, available information suggests that economic activity rebounded during the fourth quarter of 2021, after having contracted at a seasonally adjusted quarterly rate of 0.9% during the third quarter.<sup>3</sup> This would reflect the normalization of productive activities following the lifting of the state of emergency in October, lower supply constraints, strong private consumption, and high mobility levels, despite the increase in new COVID-19 cases at the end of 2021. Unemployment declined slightly from 2.8% in November to 2.7% in December. Purchasing Managers' Indices suggest that the manufacturing sector would continue to expand and that the services sector would contract.

In the main emerging economies, during the fourth quarter of 2021, growth was also heterogeneous across regions and countries, depending on the evolution of the pandemic and each country's exposure to the impact on global supply chains. In Emerging Asia, available information points to a rebound in the pace of GDP growth in most economies, partly due to relatively high levels of mobility despite the new wave of COVID-19 cases. China exhibited a slight recovery by growing from a seasonally adjusted quarterly rate of 0.7% during the third quarter to 1.6% during the fourth, as both the effects of the imposition of strict restrictions to

<sup>2</sup> In annualized terms, euro area GDP registered a quarter-on-quarter seasonally adjusted variation of 1.2% in the fourth quarter of 2021 and of 9.4% in the third.

<sup>3</sup> In annualized terms, the quarterly seasonally adjusted variation of Japan's GDP during the third quarter of 2021 was -3.6%.

contain COVID-19 cases in some regions and the electricity rationing measures implemented during the third quarter faded.<sup>4</sup> In Latin America, indicators point to a slower pace of recovery of economic activity in most countries, while in Emerging Europe, available indicators suggest that the recovery has taken place at a heterogeneous pace, depending on the restrictions adopted as a result of the resurgence of COVID-19 cases in some economies of the region.

International commodity prices have increased since Mexico's previous monetary policy decision. Oil prices increased and even in February 2022 reached their highest level in more than seven years. This was the result of the decision by the Organization of Petroleum Exporting Countries (OPEC) and other producers to maintain production cuts, the technical difficulties that have prevented several members from reaching their production quotas, the continued recovery in demand for oil, and the risks to supply posed by increasing geopolitical tensions in Eastern Europe and the Middle East. Natural gas prices increased in the United States as a result of the low temperatures recorded in the northwest region of the country at the beginning of the year, while in the European market, reference prices decreased due to the effect of warmer temperatures forecast in Europe, lower demand in Asia, and the greater volume of imports from countries such as the United States and Norway that has contributed to offset the lower flow of natural gas from Russia to the region. Meanwhile, the prices of most grains increased due to the uncertainty surrounding world supply caused by the effects of drought on harvests in Argentina and Brazil, as well as geopolitical conflicts in major producing regions such as Ukraine. The prices of most industrial metals followed an upward trend since Mexico's previous monetary policy decision. Steel prices were driven by expectations of a higher demand, mainly from China, in an environment of low inventory levels. Likewise, aluminum and copper prices increased significantly due to a strong demand and the higher prices of energy and other inputs.

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

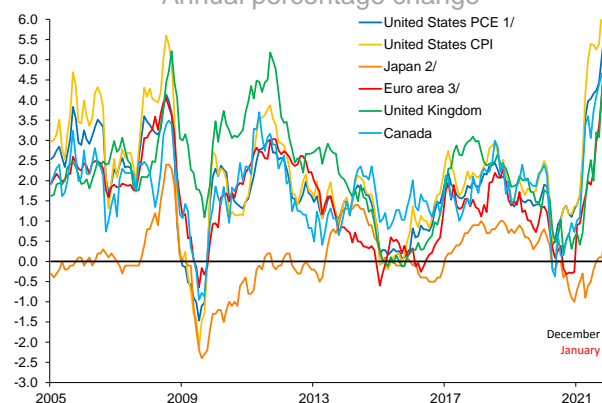
Headline and core inflation continued increasing worldwide, reflecting price pressures in a wider range of items, although there is still heterogeneity across countries. This has been the result of bottlenecks in production chains, the reallocation of household spending towards merchandise, high food and

<sup>4</sup> In annualized terms, China GDP registered a quarter-on-quarter seasonally adjusted variation of 4.0% in the fourth quarter of 2021 and of 4.9% in the third.

energy prices, and the recovery of certain services affected by the pandemic.

Headline inflation in most major advanced economies continued to be above their central banks' targets, except for Japan, whose inflation remains at low levels (Chart 3). In this context, short-term inflation expectations drawn from surveys continued to increase for these economies, while long-term inflation expectations drawn from financial instruments have generally shown limited adjustments.

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



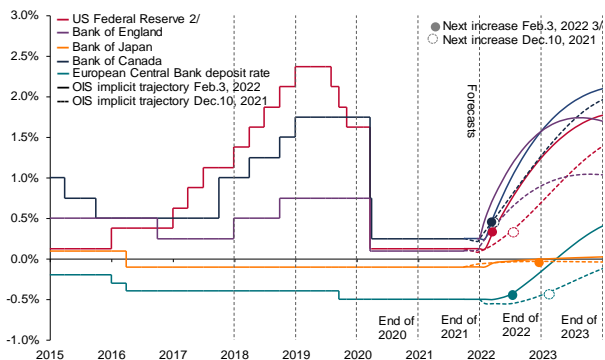
1/ The personal consumption expenditure deflator is used.  
2/ Excludes fresh food. This series does not exclude the effect of the rise in consumption tax in May 2014 and October 2019, nor the effect of the free daycare and preschool program in October 2019.  
3/ Preliminary figures for January.  
Source: 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 to increase. This was the result of the effects of the pandemic and, in some cases, the depreciation of their exchange rates. In most of these economies, inflation remained above their central banks' targets, except for some in the Asian region, such as Indonesia and China.

In this context, the central banks of most of the main advanced economies continued adjusting their monetary policy stances, by slowing the pace of net asset purchases, in some cases by increasing their reference rates, or by announcing that they would be raised soon. This, together with the continuous increase in world inflation, led to expectations of a faster reduction of monetary stimulus worldwide. In this regard, expectations drawn from financial

instruments foresee a faster pace of interest rate increases in most of the main advanced economies 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.  
 3/ A first increase of 25 bps is assumed for the US Federal Reserve and the Bank of Canada, and 10bps for the European Central Bank and 15bps for the Bank of Japan. For the Bank of England, a date has not been set for the next rate increase given that it has already started its rate rising cycle.  
 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 January meeting, the Federal Reserve left unchanged its target range for the federal funds rate at 0.0-0.25%. It pointed out that, with inflation well above 2% and a strong labor market, the Federal Open Market Committee (FOMC) expects that it will soon be appropriate to increase the target range for the federal funds rate. It also decided to continue reducing the monthly pace of its net asset purchases and that it will bring them to an end at the beginning of March. The Federal Reserve also released a series of principles for reducing the size of its balance sheet. It stated that it expects said reduction to begin after the process for raising the federal funds rate has begun and that it would be carried out in a predictable manner, through adjustments to the reinvestment amounts of securities maturities. Regarding the timing for the interest rate increase, the Fed's Chairman stated at a press conference that, assuming conditions are appropriate to do so, the Committee could consider raising the federal funds rate at its March meeting. In this context, the implied trajectory of financial instruments incorporates the expectation

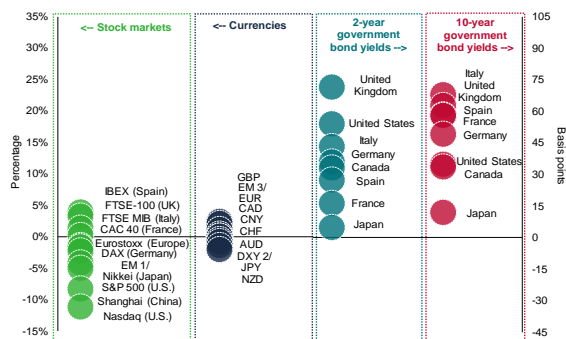
of around four to five rate increases by the end of 2022 and between two and three during 2023. The Chairman of said institution pointed out that the current conditions of the US economy are different from those that triggered the beginning of reference rate increases in 2015, as there is greater strength in economic activity and the labor market, as well as higher levels of inflation, and that such differences will probably have important implications for the appropriate pace of monetary policy adjustments.

- ii) At its February meeting, the European Central Bank (ECB) confirmed the decisions announced at its previous meeting. In particular, it maintained its refinancing, key deposit and key lending rates unchanged at 0.0, -0.5 and 0.25%, respectively. It also reiterated the conditions under which the Governing Council expects interest rates to remain at or below current levels. Regarding its Pandemic Emergency Program (PEPP), it reiterated that: i) in the first quarter of this year the Council is making net asset purchases at a slower pace than in the fourth quarter of 2021; ii) that it will end net asset purchases by the end of March 2022; and iii) that it will reinvest until at least the end of 2024, the principal payment of maturing securities. In addition, it left the monthly pace of purchases under its Asset Purchase Program (APP) unchanged, in line with what was announced at its December policy decision, and net purchases are expected to end shortly before the ECB begins to raise interest rates.
- 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. Although it left its asset purchase program unchanged, it extended by one year the deadline for loan disbursements under its Fund-Provisioning Measure to Stimulate Bank Lending.

In the main emerging economies, given the increase in inflation and the risks they face for price formation, a large number of central banks have continued to raise their reference rates. Since Mexico's previous monetary policy decision, the central banks of Brazil, Chile, Peru, Colombia, Hungary, Poland, the Czech Republic, Russia and South Africa, among others, have raised their interest rates. Turkey's central bank left its interest rate unchanged at its last meeting, after having lowered it on several previous occasions. The People's Bank of China announced a decrease in its reference rate.

In the context described above, since Mexico's previous monetary policy decision, international financial markets performed favorably in the second half of December and exhibited high volatility and greater risk aversion in mid-January. In particular, after showing a positive performance towards the end of December, the stock markets of most of the main advanced economies exhibited significant falls at the beginning of January that have been partially reversed (Chart 5). Stock indices of emerging economies overall performed positively (Chart 6). Financial conditions tightened throughout the period due to expectations of a faster withdrawal of monetary stimulus in some advanced economies in response to inflationary pressures. As for government bond interest rates in the main advanced economies, both short- and long-term interest rates increased. Likewise, long-term interest rates in emerging economies rose. In foreign exchange markets, the dollar strengthened moderately against most currencies of advanced economies during January, although it recently reversed this trend. The currencies of emerging economies generally exhibited a moderate bias towards appreciation. Finally, moderate capital outflows to fixed-income markets were observed in most emerging economies except for some countries such as China, which registered significant inflows to equity markets.

**Chart 5**  
**Change in Selected Financial Indicators from December 10, 2021 to February 3, 2022**  
 Percent; basis points



1/ The MSCI Emerging Markets Index consists of 24 countries. 2/ DXY: 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 December 13, 2021**  
 Percent, basis points

Region	Country	Currencies	Equity markets	2-year interest rates	10-year interest rates	CDS
Latin America	Mexico	2.14%	3.13%	54	29	-1
	Brazil	7.19%	4.57%	78	77	-9
	Chile	3.59%	5.91%	52	36	-10
	Colombia	-1.07%	13.25%	82	79	8
	Peru	4.89%	10.74%	30	18	-3
Emerging Europe	Russia	-3.45%	-2.06%	94	89	94
	Poland	2.35%	0.95%	85	83	-6
	Turkey	2.51%	-4.72%	-28	125	13
	Czech Republic	4.98%	1.96%	107	78	1
	Hungary	3.93%	4.60%	66	66	4
Asia	China	0.09%	-8.68%	-37	-18	5
	Malaysia	1.02%	1.16%	8	12	5
	India	1.22%	2.19%	39	51	7
	Philippines	-1.41%	3.63%	20	3	12
	Thailand	0.62%	2.58%	-2	13	-1
	Indonesia	-0.10%	0.67%	22	13	8
Africa	South Africa	4.41%	5.27%	28	-23	-10

Note: Interest rates correspond to swap rates at the specified terms, except for Hungary, where government securities with 3-year (instead of 2-year) maturities were used as a reference. For the Philippines, a 2-year swap rate is used.

Source: Bloomberg.

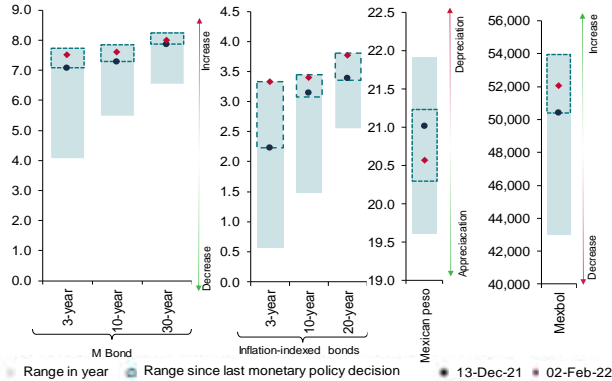
## A.2. Current situation of the Mexican economy

### A.2.1. Mexican markets

In the international context described above, in domestic financial markets, the exchange rate appreciated and interest rates rose (Chart 7).



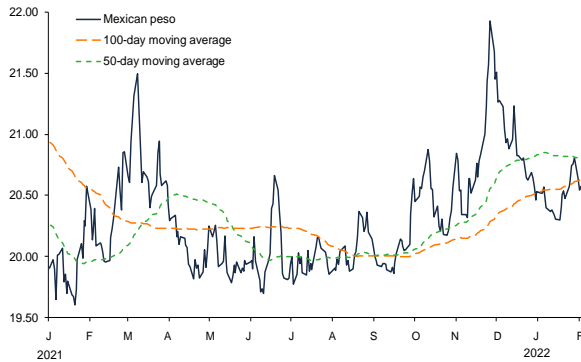
**Chart 7**  
**Mexican Markets' Performance**  
 Percent, MXN/USD and index



Source: Prepared by Banco de México.

The Mexican peso fluctuated in a range of 93 cents, between 20.30 and 21.23 pesos per dollar, ending the period with an appreciation of 2.14% (Chart 8). This occurred in a context in which both spot and future trading conditions improved with respect to the previous period.

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



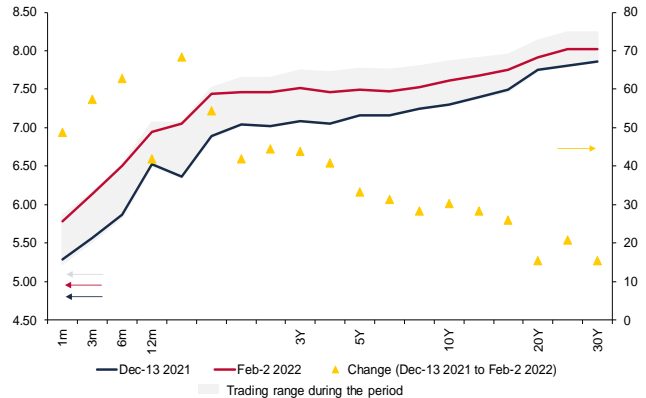
Source: Prepared by Banco de México.

Interest rates of government securities exhibited a flattening dynamic (Chart 9), with increases of up to 69 basis points in shorter-term bonds and of up to 21 basis points in longer-term ones. The yield curve of real interest rate instruments showed a similar dynamic, with increases of up to 118 basis points for the short term and of 23 basis points for the long term. In this context, compensation for inflation and inflation risk premia implicit in spreads between nominal and real rates of market instruments showed mixed movements, although most terms were above 400 basis points (Chart 10). These movements took

place in an environment in which trading conditions improved during the period covering the monetary policy decision.

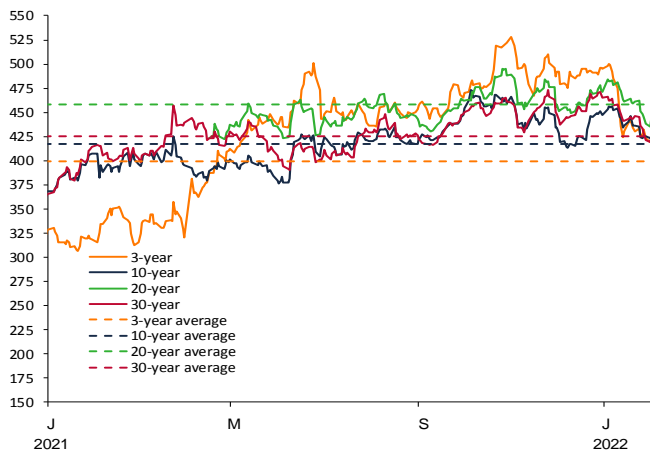
Regarding expectations for the trajectory of the monetary policy reference rate, information implied by the Interbank Equilibrium Interest Rate (TIIE, for its Spanish acronym) swap curve incorporates an accumulated increase of around 78 basis points for the February and March 2022 meetings, while for the end of 2022 it points to a reference rate close to 7.62% (Chart 11). Most forecasters surveyed by Citibanamex anticipate the interest rate to increase by 50 basis points to 6.00% in the February decision, while for the end of 2022 a rate of 6.75% is expected.

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



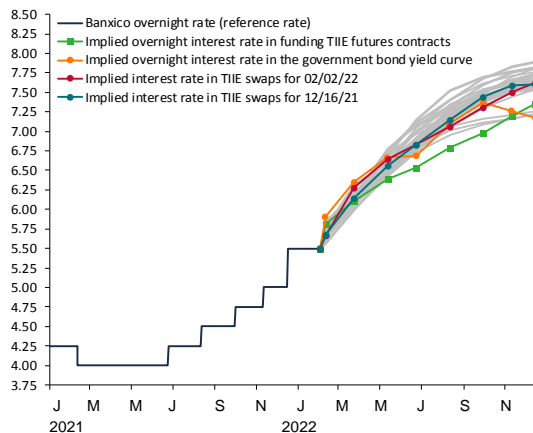
Note: The chart does not include bonds maturing in December 2021 and June 2022. CETES with similar maturities are considered.  
 Source: PIP.

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



Source: PIP.

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



Source: Prepared by Banco de México with Bloomberg data.

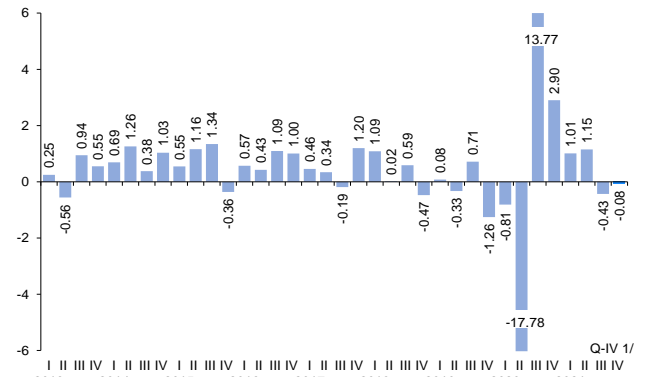
### A.2.2. Economic activity in Mexico

According to Mexico's GDP flash estimate published by INEGI, during the fourth quarter of 2021 economic activity contracted slightly (Chart 12), maintaining a heterogeneous behavior across its sectors. This, in an environment in which high uncertainty regarding the global evolution of the pandemic as well as disruptions in global supply chains, prevailed.

<sup>5</sup> Refers to the value of merchandise exports in current dollars. This value differs from that reported for goods exports in Mexico's

Regarding external demand, in the fourth quarter of 2021, the value of manufacturing exports rebounded, reflecting the dynamism of non-automotive exports and an incipient recovery in the automotive sector (Chart 13).<sup>5</sup> By destination, manufacturing exports to the United States continued trending upwards, while those to the rest of the world exhibited a lower dynamism.

**Chart 12**  
**Gross Domestic Product**  
 Quarterly percentage change, s.a.

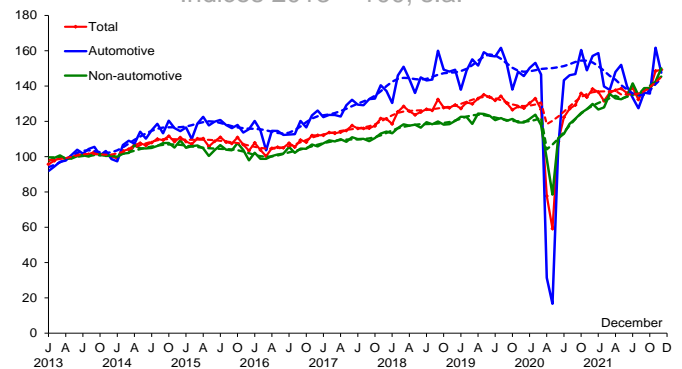


s. a. / Seasonally adjusted figures.

1/ The figure for the fourth quarter of 2021 refers to the timely estimate of quarterly GDP published by INEGI.

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.

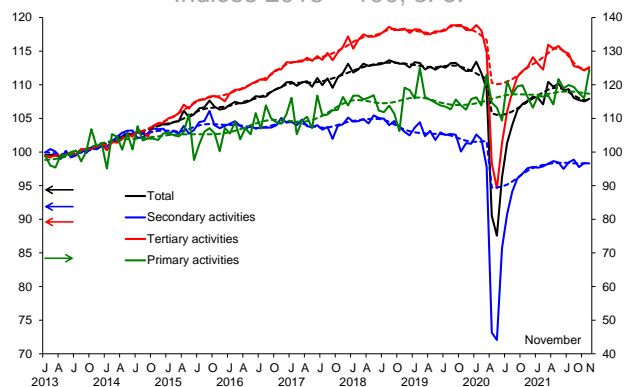
Source: Prepared by Banco de México with data from the Tax Administration Service (SAT, for its Spanish acronym), the Ministry of the Economy (SE, for its Spanish acronym), Banco de México, the National Institute of Statistics and Geography (INEGI, for its Spanish acronym), Mexico's Merchandise Trade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

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

According to its monthly indicator, at the beginning of the fourth quarter of 2021, private consumption maintained a moderate upward trajectory, although still below the level observed in February 2020. As for its components, consumption of imported goods reactivated, that of domestic goods continued to show some sluggishness, and that of services continued to recover gradually. After the fall registered in September, at the beginning of the last quarter of 2021, gross fixed investment remained weak. This reflected setbacks in construction investment spending and a relative stagnation of the machinery and equipment component.

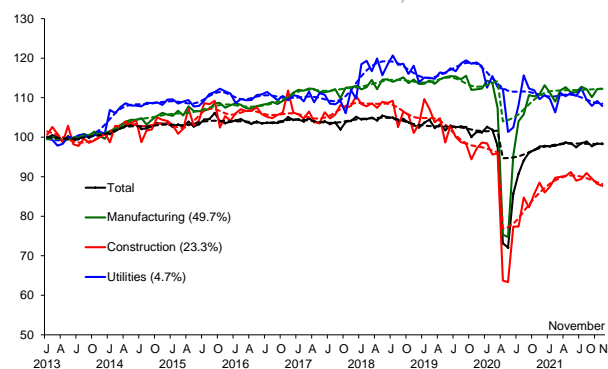
On the production side, during the last quarter of 2021, economic activity as a whole continued to exhibit weakness, although preliminary information suggests some reactivation in the last two months of 2021 (Chart 14). Industrial activity registered modest growth, primarily due to the performance of manufacturing, while construction exhibited weakness (Chart 15). Meanwhile, tertiary activities maintained a heterogeneous behavior across sectors. Particularly, in the October-November bimester, positive contributions to growth were observed in transportation and mass media information services, and in temporary lodging, food and beverage preparation services. In contrast, financial and real estate services, government activities, and commerce made a negative contribution to growth. Professional, corporate and business support services continued to contribute negatively to the quarterly variation of tertiary activities.

**Chart 14**  
Global Indicator of Economic Activity  
Indices 2013 = 100, s. e.



s. a. / Seasonally adjusted and trend series. The former is represented by a solid line and the latter by a dotted line.  
1/ Figures for September 2021.  
2/ Figures for October 2021, 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.

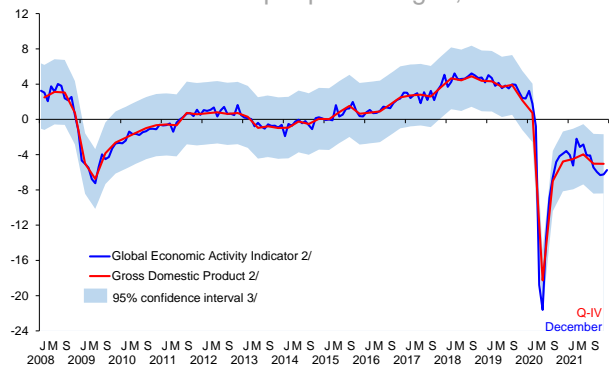


s. a. / Seasonally adjusted and trend series. The former is represented by a solid line and the latter by a dotted line.  
1/ Figures in parenthesis correspond to their share in the total in 2013.  
Source: Mexico's System of National Accounts (SCNM, for its Spanish acronym), INEGI.

Regarding the economy's cyclical position, slack conditions remained significantly ample during the fourth quarter (Chart 16). At the end of 2021, various labor market indicators registered a mixed performance. Particularly, the labor force participation rate and the employment-to-working age population ratio increased for the third consecutive month, while the national and urban unemployment rates increased at the margin, remaining at levels above those registered in February 2020 (Chart 17). At the beginning of 2022, the creation of IMSS-insured jobs continued increasing with seasonally adjusted figures. Finally, in November, unit labor costs in the manufacturing sector registered two consecutive declines at the

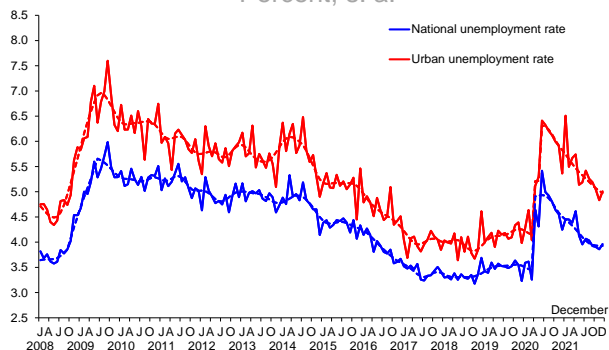
margin, although they remained above the level reported prior to the health emergency (Chart 18).

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



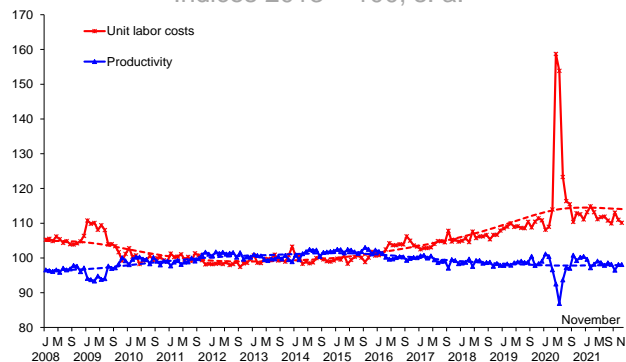
s. a. / Calculations based on seasonally adjusted figures.  
 1/ Output gap estimated with a tail-corrected Hodrick-Prescott filter; see Banco de México (2009), "Inflation Report, April-June 2009", p.74.  
 2/ GDP figures up to Q4 2021, and IGAE figures up to December 2021.  
 3/ Output gap confidence 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 (ENOEN) 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 December 2021, domestic financing to companies continued moderating its contraction in real terms at an annual rate. This was observed for both large-sized companies, which registered an increase in their credit balances at the margin, and for small-sized companies, whose portfolio has tended to expand over the last six months. Corporate credit demand continued to recover, while lending conditions remained relatively stable in 2021, and therefore remain tight. Meanwhile, during the fourth quarter of 2021, net corporate debt issuance in the domestic market showed low dynamism. In terms of credit to households, the housing portfolio continued to increase, although at a slower pace in the last quarter of last year compared to the rest of that year. At the same time, outstanding consumer bank loan portfolio reduced its contraction at an annual rate for the ninth consecutive month. The sustained dynamism of payroll loans and the increase in the balance of the credit card portfolio since September 2021 stand out. This, in a context in which household demand for credit has gradually recovered. As for household lending conditions, they remained stable in both housing and consumer portfolios in general, after having loosened in the payroll and credit card segments in previous quarters.

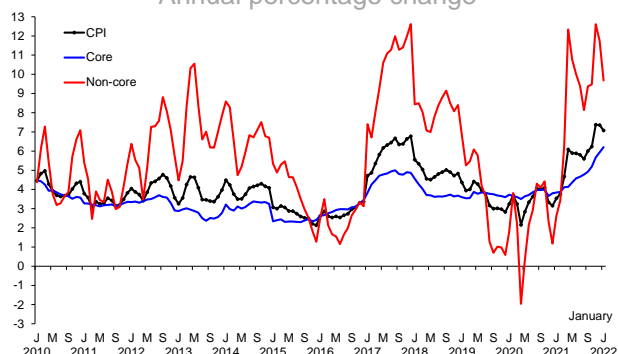
Interest rates on bank credit to firms have followed the dynamics of the bank funding rate. At the end of 2021, corporate credit intermediation margins, except for issuers, returned to levels similar to those observed before the pandemic. At the same time, housing loan interest rates remained at levels around their historic lows. Meanwhile, in October 2021,

credit card and personal loan interest rates registered a similar level to that observed during the third quarter of that year. Thus, consumer credit intermediation margins remained at levels higher than those observed before the pandemic. As for portfolio quality, the corporate loan delinquency rate declined in December and remained at low levels. Mortgage loan delinquency decreased for the fourth consecutive month and remained at low levels. Finally, consumer portfolio delinquency rates continued trending downwards, achieving levels lower than those recorded prior to the onset of the pandemic; nevertheless, they remain at high levels.

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

Between November 2021 and January 2022, annual headline inflation went from 7.37 to 7.07% (Chart 19 and Table 1). This result is explained by a reduction of 70 basis points in the contribution of the non-core component to headline inflation that was partially offset by an increase of 40 basis points in the core component's contribution.

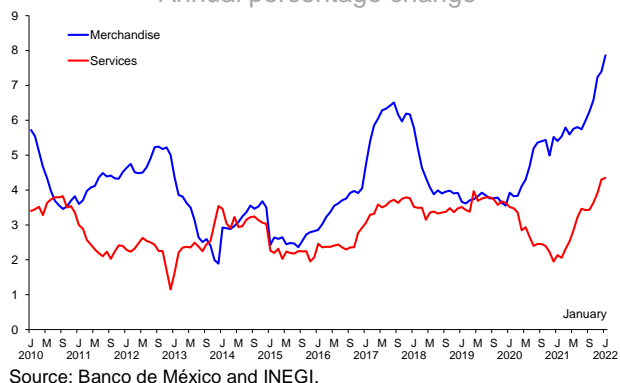
**Chart 19**  
Consumer Price Index  
Annual percentage change



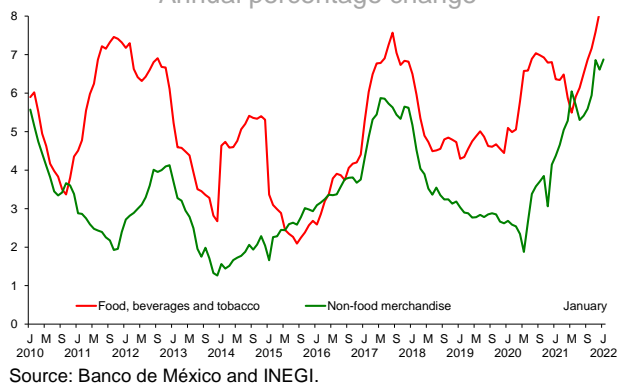
Annual core inflation continued rising, pressured by higher merchandise and services inflation. After having increased in every month of 2021, core inflation rose again in January 2022, accumulating 14 consecutive months of increases. In particular, between November 2021 and January 2022, this indicator rose from 5.67 to 6.21%. Annual merchandise inflation increased from 7.24 to 7.86% in the referred dates (Chart 20), pressured by the slow resumption of distribution channels, the increase in production costs, and the reallocation of spending to merchandise in the context of the pandemic. These effects appear to have extended themselves with the emergence of the new variant of

the COVID-19 virus. In turn, during the referred periods, annual food merchandise inflation was 7.59 and 8.76%, respectively, while that of non-food merchandise was 6.86 and 6.88%, in the same order (Chart 21). Annual services inflation rose from 3.92 to 4.35% in the same period, driven by the reopening of service activities and the increased demand they face, which had been contained for several months, and which has also been favored by progress in the vaccination campaigns. In this regard, between November 2021 and January 2022, the annual variation of services other than education and housing registered levels of 5.60 and 6.23%, respectively.

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



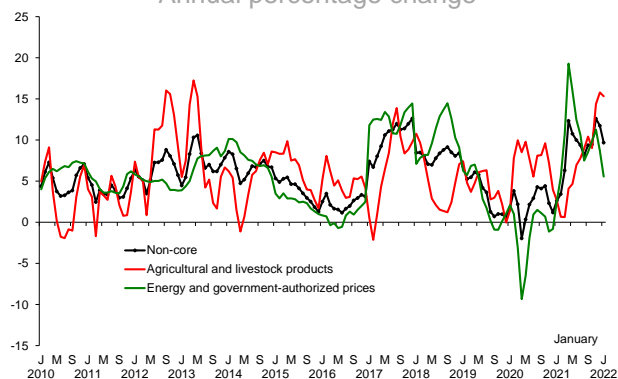
**Chart 21**  
Merchandise Core Price Sub-index  
Annual percentage change



Between November 2021 and January 2022, annual non-core inflation fell from 12.61 to 9.68% (Chart 22 and Table 1). This result reflected the fall from 15.41 to 6.75% in annual energy inflation during the same period. This was mainly due to the reduction in the annual variation of L.P. gas prices, which went from 23.97 to -3.15%, and, to a lesser extent, in gasoline prices, which registered levels of 15.35 and 10.20% during the referred period. Annual agricultural and

livestock product inflation rose from 14.36 to 15.32%, driven by higher annual variations in the prices of both fruits and vegetables and livestock products.

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



Source: Banco de México and INEGI.

As for inflation expectations drawn from Banco de México's Survey among Private Sector Forecasters, between November and January, the median for headline inflation for the end of 2022 increased from 4.03 to 4.27%, while that for the core component went from 3.83 to 4.29%. At the same time, the median of headline inflation expectations for the end

of 2023 was adjusted from 3.60 to 3.76%, while that for core inflation increased from 3.55 to 3.60%. On the other hand, the median of headline inflation expectations for the medium term decreased slightly from 3.68 to 3.64%, while that for core inflation remained at 3.60%. Those corresponding to long-term expectations remained around 3.50%. Finally, compensation for inflation and inflationary risk registered volatility and remains at high levels. Expectations implicit in market instruments continued trending upwards, while the inflation risk premium remains at high levels.

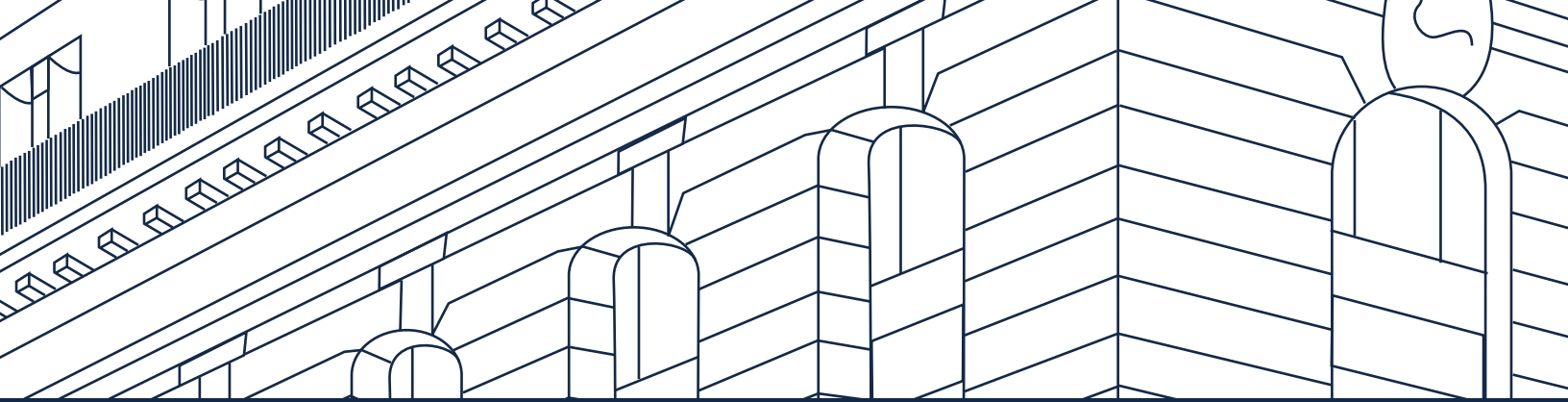
The annual variations of headline and core inflation are expected to converge to the 3% target towards the end of the forecast horizon. These projections are subject to risks. On the upside: i) external inflationary pressures; ii) cost-related pressures; iii) persistence of core inflation at high levels; iv) exchange rate depreciation; and v) increases in both agricultural and livestock product and energy prices. On the downside: i) a greater-than-expected effect from the negative output gap; ii) social distancing measures; and iii) exchange rate appreciation. The balance of risks for the trajectory of inflation within the forecast horizon remains biased to the upside.

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

Item	November 2021	December 2021	January 2022
<b>CPI</b>	<b>7.37</b>	<b>7.36</b>	<b>7.07</b>
<b>Core</b>	<b>5.67</b>	<b>5.94</b>	<b>6.21</b>
<b>Merchandise</b>	<b>7.24</b>	<b>7.40</b>	<b>7.86</b>
Food, beverages and tobacco	7.59	8.11	8.76
Non-food merchandise	6.86	6.61	6.88
<b>Services</b>	<b>3.92</b>	<b>4.30</b>	<b>4.35</b>
Housing	2.46	2.54	2.61
Education (tuitions)	2.09	2.09	2.73
Other services	5.60	6.35	6.23
<b>Non-core</b>	<b>12.61</b>	<b>11.74</b>	<b>9.68</b>
<b>Agricultural and livestock products</b>	<b>14.36</b>	<b>15.78</b>	<b>15.32</b>
Fruits and vegetables	17.80	21.73	18.44
Livestock products	11.44	11.11	12.87
<b>Energy and government-authorized prices</b>	<b>11.26</b>	<b>8.68</b>	<b>5.56</b>
Energy products	15.41	11.50	6.75
Government-authorized prices	1.97	2.30	2.74

Source: INEGI.





BANCO DE MÉXICO®

Document published on February 24, 2022

