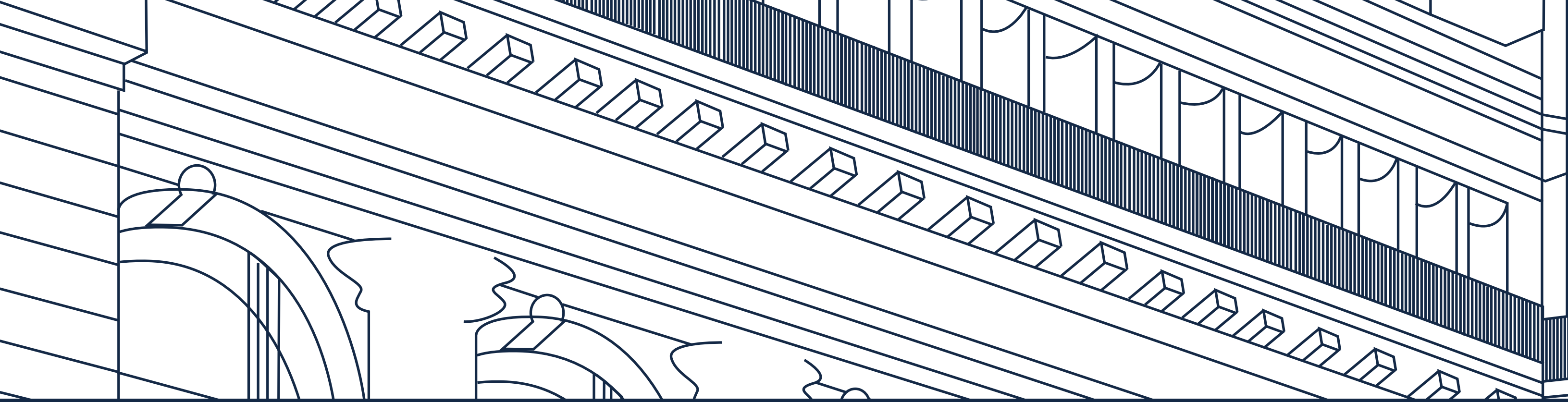

BANCO DE MÉXICO®

Minutes number 97

Meeting of Banco de México's Governing Board on the occasion of the monetary policy decision announced on December 15, 2022

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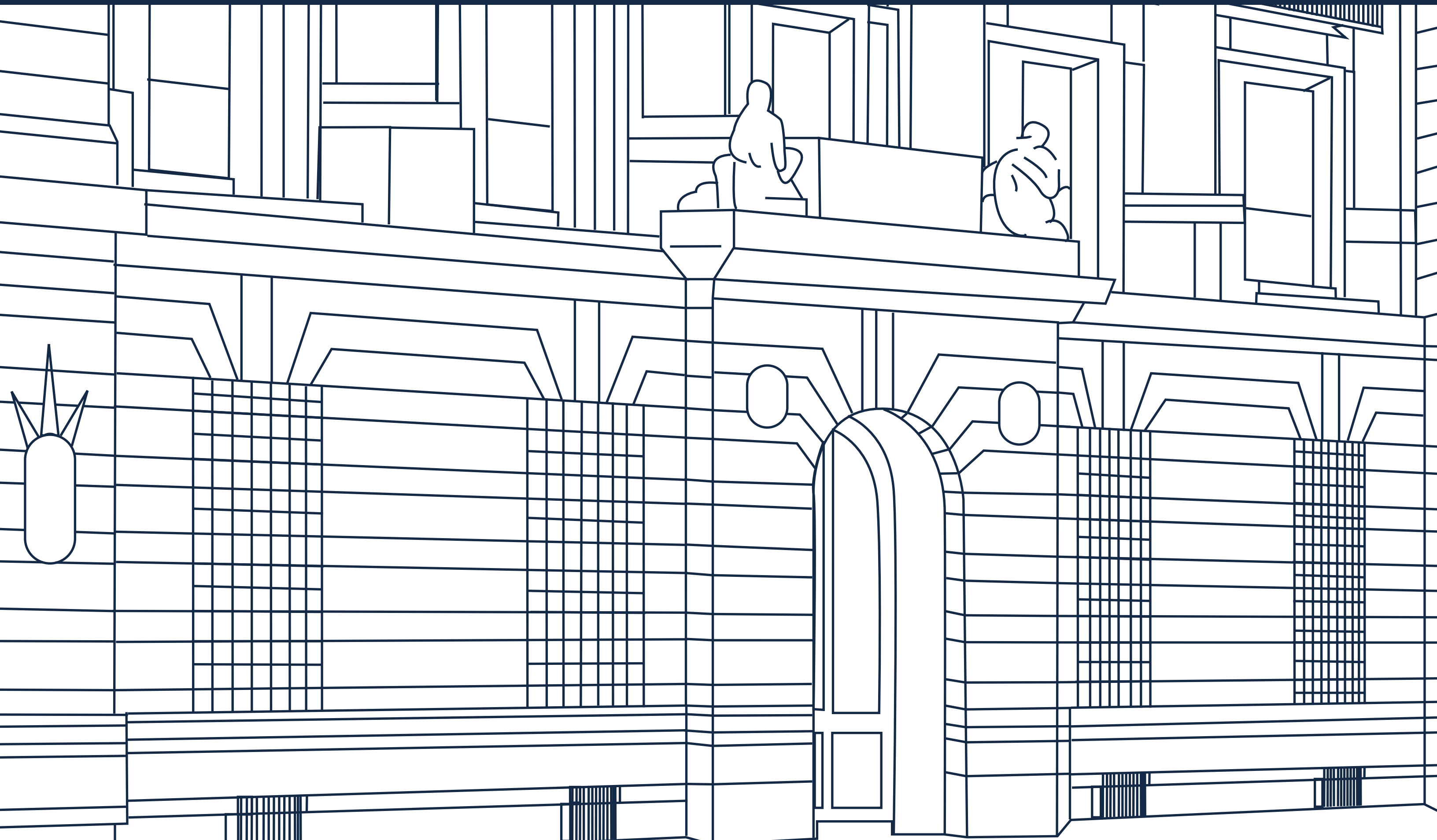

FOREWARNING
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1. PLACE, DATE AND PARTICIPANTS

1.1. Place: Meeting held by virtual means.

1.2. Date of Governing Board meeting: December 14, 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 global economic activity recovered moderately during the third quarter of the year. One member pointed out that this was mainly due to the rebound in the US economy and the reopening of activities in China. However, **some** members pointed out that timely indicators of activity at a global level are in their contraction range. **Some** members warned that there are signs of disturbances in international trade. **Most members highlighted the weakening of certain European economies. Some** members noted that, in the United States, several indicators have deteriorated. They also highlighted the impact of the rebound in the number of infections on the Chinese economy. **Regarding labor markets, most members stated that, in advanced economies, they continued to perform favorably. One** member noted that US job vacancies have trended downwards without this resulting in a higher unemployment rate. However, **another** member pointed out that despite significant wage revisions, the high levels of inflation continue eroding real income.

Most members mentioned that global growth forecasts for 2023 continued deteriorating, due partly to tighter financial conditions and geopolitical tensions. Some members pointed out that the downward revisions were particularly observed in advanced economies. **Among risks to the global economy, most members highlighted those associated with the pandemic, the persistence of inflationary pressures, the intensification of geopolitical tensions, and tighter monetary and financial conditions. Some** members stated that the probability of a global recession in the coming year remains high. However, **one** member noted that it is expected to be mild and short-lived. **Another** member mentioned that the possibility of a significant weakening in global economic activity is latent and uncertainty over whether prevailing conditions will lead to a recession persists. **One** member considered that the balance of risks for world economic activity remains biased to the downside, especially for systemically important economies.

All members highlighted that headline inflation decreased in several economies due to lower pressures on food and energy prices. Most members stated that in some countries the inflationary peak may have already been reached. They pointed out that, in the United States, headline inflation continued decreasing. They noted that pressures on commodity prices and supply chain disruptions have shown signs of easing. One member highlighted that the prices of oil, grains and industrial metals are currently lower than those at the beginning of the military conflict. He/she added that some indicators related to supply chains have already returned to their pre-pandemic levels. He/she added that this has led to a significant decrease in producer price inflation in advanced and emerging economies, which is already beginning to have a favorable impact on headline inflation, and is expected to eventually do so on core inflation. **Nevertheless, most members warned that world inflation remains at elevated levels and above the central banks' targets. They highlighted that the core component continued increasing in several economies. Some** members stated that this was due to the performance of the services component.

Most members stated that a large number of central banks continued raising their reference rates, although some of them are expected to start moderating the pace of their increases. They considered that certain economies are close to ending their hiking cycle, or have already concluded it. One member stated that the implied interest rate trajectory for the next two years for several economies has been adjusted downwards. **Another** member noted the heterogeneity among the expected interest rate trajectories of emerging economies, although he/she noted that most of them imply reference rates above the neutral range. **One** member added that, in some cases, downward adjustments are expected starting in the first quarter of 2023, and also noted that Mexico is one of the few economies where upward adjustments in the reference rate are still foreseen in the coming months. He/she considered that, in other countries, continuing to raise reference rates is justified, as inflation is still increasing and has been affected by accelerated economic growth. Meanwhile, **some** members mentioned that reference rates are expected to remain at high levels for an extended period. **One** member stated that this would be necessary to ensure the convergence of inflation to the target, which is likely to be postponed until 2024, although this scenario is still subject to a high level of uncertainty.

All members highlighted that the Federal Reserve raised the federal funds rate by 50 basis points at its last meeting. Most members noted that said institution slowed the pace of interest rate hikes. They added that it anticipated additional increases. Some members mentioned that there is still uncertainty about the terminal interest rate and the possible start of an easing cycle.

Most members mentioned that international financial conditions remained tight. However, they noted that medium and long-term interest rates have recently declined, which they attributed to prospects of a moderation in the Federal Reserve's monetary tightening. Some members stated that prospects of a sharper economic slowdown also contributed to the above. **One** member considered that the reduction in longer-term interest rates in the United States was due to its favorable inflation figures. **Most members highlighted that stock market indices registered gains. They added that the US dollar depreciated. One** member pointed out that it cannot be ruled out that this currency strengthens given the deterioration in international financial conditions. He/she mentioned that emerging economies continue experiencing outflows in fixed income assets and inflows in equities. **Another** member highlighted the prevailing vulnerabilities and risks for the global financial system given the outlook of tight financial conditions and the high levels of indebtedness. He/she pointed out that, especially in emerging economies, a disorderly adjustment of financial markets could affect their macroeconomic fundamentals and thus deteriorate the inflationary context they are facing.

Economic activity in Mexico

Most members pointed out that, with data as of the third quarter, economic activity in Mexico has already reached its pre-pandemic levels. They stated that growth was driven mainly by the services sector. One member highlighted that this sector was mainly supported by wholesale and retail trade, while the sectors most affected by social distancing have shown a slower recovery. **Some** members noted that the primary sector also registered a favorable performance. **Meanwhile, most members noted that the industrial sector has stagnated somewhat in recent months.** However, **some** members noted a slight recovery in October. **Most members stated that the construction sector has shown sluggishness. Some** members noted that the manufacturing sector has weakened, which contrasts with its previous dynamism. **One** member added that mining as well as the electricity, water and gas sector have also exhibited a fragile performance. **Most members stated that economic activity is expected to have continued recovering during the fourth quarter, although at a slower pace. Some** members pointed out that this moderation is due to the adverse external environment.

On the demand side, most members underlined that consumption continued trending upwards driven by the favorable performance of consumption of services. One member contrasted the growth in consumption of non-durable goods with the decline in consumption of durable and semi-durable goods. **Another** member warned that forward-looking indicators for this variable show mixed signals about its future behavior. He/she added that retail sales and the real wage bill appear to be stagnant. Meanwhile, **one** member noted that the consumer confidence indicator rebounded slightly in November, although it is still below its pre-pandemic level. He/she added that remittances are still high and have accumulated 30 consecutive months of increases.

Most members highlighted that investment shows a lack of dynamism. In particular, they noted the weak performance of construction. One member added that investment in transportation equipment is at levels below those observed prior to the pandemic. **Some** members noted the reduction at the margin in the machinery and equipment component. In this regard, **one** member pointed out that a clear recovery in investment could foster growth and offset the foreseen weakness in external demand. He/she stated that it would be important to create the conditions for the country to take advantage as much as possible of the reconfiguration of some global production chains, which could also ease some inflationary pressures by increasing the country's productive capacity. **Regarding external demand, most members pointed out that exports continued trending upwards. Some** members noted that manufacturing exports continue driving the aggregate demand's dynamism. Nevertheless, **one** member stated that some items show an incipient slowdown. **Another** member noted that shipments to the United States slowed at the margin. **One** member pointed out that the growth of non-automotive manufacturing exports moderated recently. **Another** member mentioned that imports registered a certain lack of dynamism.

Most members agreed that the labor market continues recovering. Some members stated that it has tightened further. **One** member stated that it does not exhibit slack conditions. **Most members noted that unemployment rates remain at low levels. Some** members added that labor participation rates are at levels similar to pre-pandemic ones. **Some** members noted that employment growth has coincided with stagnation in labor participation. **One** member expressed his/her concern about the interruption of the upward trend of women's participation in the labor market, which, in his/her opinion, represents one of the main scars of the pandemic. **Another** member highlighted that, although formal employment remained on a positive trajectory in November, average income and the real wage bill decreased at the margin. **One** member pointed out that different sectors registered nominal wage increases, although he/she noted that real wage growth was moderate and, in some cases, negative. **Another** member warned that the increase in the minimum wage, as well as wage negotiations in other sectors, could weaken employment, especially in a scenario of lower economic activity.

Most members pointed out that slack conditions in the economy are expected to continue diminishing. However, **one** member stated that there is still a significant amount of slack given that during the third quarter GDP remained considerably below its long-term trend trajectory. **Another** member warned about measurement problems in calculating potential GDP.

Inflation in Mexico

All members highlighted that headline inflation continued decreasing in November to 7.80%, due to a reduction in its non-core component. Some members pointed out that it has been below the central bank's forecasts. **One** member highlighted that in the last three months it has also been below analysts' expectations. **Another** member mentioned that, in November, the monthly inflation rate was below its historical average for the first time since December 2021, and therefore, in his/her opinion, pressures at the margin seem to have started to ease. He/she pointed out that, with this figure, inflationary pressures have been trending downwards for five consecutive months. However, **some** members noted that other central trend measures of price changes continue trending upwards, with no sign of reaching an inflection point. **One** member pointed out that the decline in annual headline inflation is the result of a specific group of components and it is not yet generalized, which implies a challenging outlook. However, he/she added that, at the margin, extreme upward variations in some components of headline inflation have started to moderate.

All members mentioned that core inflation maintained its upward trend, reaching 8.51% in November. Some members pointed out that this level had not been reached since August 2000. **Some** members stated that this upward trend has continued for 24 consecutive months. However, **some** members highlighted that the latest core inflation readings have been below analysts' expectations. **One** member added that it was close to Banco de México's forecast and that it has moderated marginally. **Another** member pointed out that core inflation still reflects the effects of the cumulative shocks from the pandemic and the military conflict, which have been deeper and longer lasting than estimated. **One** member expressed concern about estimates of the persistence of core inflation being at their highest levels since 2010.

Regarding the components of core inflation, all members highlighted the increase in merchandise inflation, especially that of food merchandise. One member pointed out that the latter continued being the main source of pressure on prices and registered the highest monthly increase for the month of November since 2008. **Another** member expressed his/her concern about the dynamics of food merchandise and food services, given that these components affect the most vulnerable population to a larger extent. **Some** members highlighted the increase in non-food merchandise inflation registered in November. **One** member highlighted the favorable effect of the "*Buen Fin*" discount sales campaign during the second fortnight of November. **Another** member pointed out that even after eliminating the seasonal effect, the annualized rate of this component is above 6%. **One** member stated that a substantial improvement in the behavior of merchandise prices led to a reduction in the core component's pressures at the margin, relative to its historical average. **Some** members pointed out that the seasonally adjusted and annualized monthly variations of food and non-food merchandise prices have exhibited greater stability, which led to a smaller number of CPI items registering variations higher than 10%. **Meanwhile, most members mentioned that services inflation also increased in November.**

All members highlighted the reduction in non-core inflation. Regarding its components, they emphasized the decline in energy inflation, as well as in that of some agricultural and livestock products. One member pointed out that the favorable performance of these components was due to the correction observed in their international references. **Another** member stated that the annual inflation of this component has been decreasing for three consecutive months. He/she added that the monthly rate of this item remains substantially below its historical average. **One** member mentioned that the monthly variation in November was the sixth lowest for a corresponding month since 1982.

All members agreed that some of the global shocks that have affected inflation have shown signs of easing. Most members highlighted the moderation of supply-related inflationary pressures. One member stated that a necessary condition to reduce the inflationary wave is that global pressures come to an end. In this regard, he/she highlighted the reduction of inflation in the United States and other countries. **Another** member pointed out that, in this context, Mexico stands out from other emerging economies for its relatively lower levels of inflation, especially in the energy and services components and, less markedly, in food and other goods. **One** member indicated that, despite signs of improvement, some prices remain elevated, and that the lagged effects of past increases could be exerting pressure on production costs. **Another** member pointed out that the decline in international energy prices will not be fully reflected in Mexico because of the mechanics of the fiscal incentive on gasoline prices.

Some members mentioned that in the last seven months, producer prices have declined. **One** member pointed out that producer price inflation has a lagged impact on core inflation. **Another** member noted signs of relief in the five reductions exhibited by the latest readings of industrial sector intermediate goods' prices. **Some** members mentioned that there are domestic pressures that are reflected in core inflation dynamics. They highlighted that supercore inflation continued trending upwards. **One** member stated that this could reflect pressures due to lower slack conditions. He/she warned that the prices of non-tradable goods could be affected by the increase in the prices of tradable goods. **Another** member pointed out that the persistence of inflation expectations at high levels shows that observed inflation has acquired an inertia that cannot be explained exclusively by external pressures. He/she added that it is necessary to acknowledge the presence of signs of domestic inflationary pressures, and therefore greater attention should be paid to their measurement and surveillance.

Most members highlighted the decline in short-term inflation expectations. All members noted that medium-term expectations remained stable, although above the target. However, **some** members mentioned that, although expectations for the next four years remain at high levels, these seem to be affected by those for 2023 and 2024, given that if implied expectations for the following 3 to 4 years are estimated, they lay at 3.5%. **One** member pointed out that this suggests that there are no signs of a possible unanchoring. **All members noted that long-term expectations did not show considerable changes either, although they remained at levels above the target. One** member added that their distribution has started to concentrate at around 3.6%. **Another** member warned that, although the deterioration of medium- and long-term expectations has decreased, both could remain at the upper range of the variability interval. **One** member mentioned that both medium- and long-term expectations continued at historically high levels. With respect to expectations drawn from market instruments, **another** member pointed out that long-term expectations remained stable at a level of 3.27%. **One** member stated that the breakeven inflation rate is at levels below those observed in the previous monetary policy decision.

However, **another** member mentioned that the current levels are still high.

Most members pointed out that forecasts for headline inflation were revised downwards for the first two quarters of the horizon, and then marginally upwards until the fourth quarter of 2023, due to a slight increase in the trajectory for core inflation. **Some** members stated that inflation would be close to reaching its peak. **One** member noted that this responds to the fact that various global price indicators have trended downwards. **Some** members pointed out that inflation is foreseen to continue trending downwards over the following quarters. **One** member mentioned that the absence of demand-related pressures stemming from an expansionary fiscal policy will favor a faster convergence of inflation to its target. **Another** member pointed out that the trajectories reflect the monetary policy that has been implemented and the prevision that the effects of the pandemic and the military conflict on inflation will dissipate gradually. However, he/she added that, although the inflationary shocks are anticipated to moderate, there is no certainty as to the pace at which they could dissipate.

Among upward risks to inflation, most members highlighted greater cost-related pressures. One member pointed out the persistence of core inflation at high levels and external inflationary pressures associated with the pandemic and the military conflict. **Another** member highlighted possible demand-related pressures given the higher growth prospects, as well as pressures caused by the avian flu outbreak and weather-related factors. **Most members mentioned that the minimum wage increase for 2023 could affect the inflation forecast.** For this reason, **some** members warned that the central bank should remain vigilant. **One** member stated that the announced increase in the minimum wage is considerable and that, at the margin, it could affect inflation, given that the fraction linked to it within the wage distribution of IMSS-insured workers has practically doubled over the last three years. He/she added that, despite the above, increases to the minimum wage do not seem to have contaminated the dynamics of the rest of wages. **Another** member pointed out that annual wage variations and contractual revisions are not compatible with changes in productivity and that there is a risk that businesses could transfer their higher costs onto consumers. He/she indicated that minimum wage increases seem to be affecting wage negotiations in other sectors of the labor market. He/she added that labor cost pressures seem to derive not only from the incomplete recovery of labor participation, but also from the strong recovery of employment. **One** member noted that statistical estimates consider wage dynamics as the factor exerting the most pressure on inflation during 2022. He/she underlined the pressures that could result from the recently approved increase in the number of paid vacation days.

Regarding downward risks, **another** member mentioned the lower inflationary pressures that could derive from a greater deceleration of the world economy and a better functioning of supply chains. **Most members pointed out that, although some shocks have shown signs of subsiding, the balance of risks remains biased to the upside. One** member stated that, in his/her opinion, it shows a slight improvement. **Another** member considered that there are elements which indicate that this balance has started to be distributed closer around Banco de México's central forecast.

Macrofinancial environment

Most members stated that the Mexican peso continued showing resilience, although with some volatility. Some members highlighted its recent depreciation against the US dollar. **One** member stated that the trading conditions of the currency in terms of its depth and volume have continued improving and exhibited levels close to pre-pandemic ones. Nevertheless, **another** member indicated that the Mexican peso exchange rate benefitted from expectations of a less restrictive monetary policy by the Federal Reserve. **One** member added that Mexico's solid fiscal and external account balances, in addition to the historic inflow of remittances, have also strengthened the peso.

Most members highlighted that medium- and long-term interest rates decreased significantly. One member underlined that the above has also been observed in the yield curve of real interest rate instruments and that government debt market conditions have performed favorably. Meanwhile, **another** member pointed out that the sovereign risk premium has decreased once again. **Some** members acknowledged that the stock market declined marginally. **One** member specified that this was due to contractions in the financial and telecommunication sectors.

Some members noted that the positive performance of financial markets is associated with the preservation of solid macroeconomic fundamentals, such as sound public finances and external accounts at reasonable levels. **One** member pointed out that, as compared to other emerging economies, Mexican bonds are attractive due to their high yields, better accessibility and market infrastructure, and low risk of default. He/she added that this has already been reflected in a gradual reduction in the spread of Mexican long-term bonds relative to Treasury bonds, which incorporates expectations that Banco de México will eventually reduce its interest rate spread relative to that of the Federal Reserve. Nonetheless, he/she argued that the macroeconomic and financial environment overall faces risks, given the high level reached by both local and external interest rates. He/she indicated that it is necessary to remain vigilant to possible vulnerabilities across certain sectors and segments of the Mexican financial system. **Another** member acknowledged that, if the Federal Reserve decides to maintain its reference rate at high levels for a longer time than currently anticipated by markets, it could surprise financial markets and affect both interest rates and the Mexican peso.

Some members agreed that commercial bank credit to firms continued expanding, although its recovery has been gradual. However, **one** member mentioned that, although this type of credit has improved somewhat in its monthly variations, this has not been sufficient for it to return to pre-pandemic levels nor reach a level consistent with its long-term trend. He/she stated that something similar occurs with consumer credit. Nevertheless, **some** members underlined that this segment has continued growing, as well as credit to households in general. **One** member highlighted the increase in mortgage credit. **Another** member stated that commercial banks' aggregate delinquency rate remains at relatively low levels. **One** member noted that, considering the adjustment in interest rates, the sources of financial resources have recently exhibited a reconfiguration in households' asset holdings, since they are opting for acquiring long-term instruments and reducing their liquid assets.

Monetary policy

The Governing Board evaluated the magnitude and diversity of the shocks that have affected inflation and its determinants, along with the evolution of medium- and long-term inflation expectations and the price formation process. It considered the challenges for monetary policy stemming from the tightening of global financial conditions, the environment of uncertainty, the inflationary pressures accumulated as a result of the pandemic and the geopolitical conflict, the possibility of greater effects on inflation, and the monetary policy stance already attained in this hiking cycle. Based on these considerations, the Governing Board decided by majority to raise the target for the overnight interbank interest rate by 50 basis points to 10.50%. With this action, the monetary policy stance adjusts to the trajectory required for inflation to converge to its 3% target within the forecast horizon.

The Board will thoroughly monitor inflationary pressures as well as all factors that have an incidence on the foreseen path for inflation and its expectations. This, in order to set a policy rate that is consistent at all times with both the orderly and sustained convergence of headline inflation and with an adequate adjustment of the economy and financial markets. The Board considers that it will still be necessary to raise the reference rate in its next monetary policy meeting. Subsequently, it will assess if the reference rate needs to be further adjusted as well as the pace of adjustment based on the prevailing conditions.

One member reflected on monetary policy implementation during the current period of inflationary pressures, to assess the approach to be followed in the future. He/she mentioned that during 2021 and most of 2022, despite an uncertain environment, there was no doubt as to the need to attain a restrictive monetary policy stance. He/she pointed out that more forceful measures were adopted as compared to those historically implemented by Banco de México, highlighting the last four 75 basis points increases. He/she stated that, through these actions, the ex-ante real interest rate reached levels above the interval estimated as neutral, and that the nominal reference rate reached a level above observed inflation, placing it at a clearly restrictive level. He/she argued that a delicate balance is being confronted. On the one hand, he/she mentioned the signs of improvement in the inflationary environment, such as the decline in headline inflation and the fact that it has recently been lower than expected. On the other hand, he/she warned that core inflation continues increasing and that the balance of risks remains biased to the upside. He/she added that, with the proposed rate increase, the upward adjustments would shift from 75 basis points to one of 50 basis points, acknowledging the signs of improvement in the inflationary outlook, as well as the cumulative increase in the reference rate during this hiking cycle, whereas continuing to raise the reference rate implies that the environment remains complex and that Banco de México will not be forbearing. He/she considered that, just as in the two previous years, it is difficult to assign probabilities to how different shocks may evolve, and therefore a robust monetary policy is required, suitable under different scenarios. He/she considered that the 50-basis-point upward adjustment proposed during this meeting would be a robust action, as it would place the central bank in an adequate position to adjust the pace of increases in whichever direction is required, considering that abrupt changes in the magnitude of reference rate adjustments, although at times are necessary, could potentially cause financial volatility. He/she added that the proposed adjustment would also take into account the importance of gradualness and data dependence under conditions of uncertainty. He/she added that, looking ahead, both caution and flexibility will be required to adjust the monetary policy stance in line with the scenario that materializes. He/she concluded that further monetary policy tightening and the level that the reference rate reaches will be contingent on incoming data and its assessment.

Another member stated that the restrictive policy stance reached so far justifies a reduction in the pace of tightening. He/she pointed out that Banco de México's inflation forecasts were adjusted marginally, and thus inflation is expected to be close to reaching its peak. However, he/she indicated that the observed pressures that drove inflation to maximum levels in over two decades have been more generalized and persistent than anticipated. He/she indicated that, although the narrative to explain the price dynamics in Mexico has focused on external price-related shocks, such as those related to disruptions in global supply chains and the military conflict in Ukraine, it should also be acknowledged that signals of domestic inflationary pressures are becoming increasingly more evident, mainly those related to consumption. This is evidenced by the fact that, whereas economic activity is barely reaching its pre-pandemic levels, different aggregate consumption indicators are already clearly above those of the reference period. He/she pointed out that, despite the cumulative monetary adjustment of 600 basis points, headline and core inflation remain at very high levels, indicating that the restrictive monetary policy stance will need to be maintained for a longer period, in order to avoid inflation expectations from becoming unanchored and to guarantee the convergence of inflation to its target in the planning horizon. He/she added that the complex and uncertain environment requires maintaining a cautious and firm monetary policy. He/she stated that there is now a greater risk that inflation will decline faster in the United States than in Mexico. He/she argued that this could imply larger increases in Banco de México's reference rate for a longer-than-foreseen period. He/she pointed out that it is essential that the monetary policy statement maintains a firm language and explicitly mentions that a reduction in the pace of upward adjustments does not imply the beginning of an easing cycle. He/she added that, on the contrary, it must communicate that, based on available information, it is still considered necessary to maintain a restrictive monetary policy stance over the planning horizon, and until a decreasing and sustained trajectory of inflation is observed and inflation expectations return to levels close to the 3% target. He/she pointed out that the monetary policy statement must continue mentioning that the reference rate will continue increasing and that the magnitude of upward adjustments will be determined based on available information. He/she stated that far from limiting the room for maneuver in the next monetary policy decisions, such language would contribute to monetary policy's effectiveness and, therefore, minimize the costs of the disinflationary adjustment.

One member considered that raising the policy rate is appropriate in order to prevent second-round effects in the price formation process and the unanchoring of inflation expectations. However, he/she added that, although in the current context a restrictive monetary policy stance is required, it is necessary to reduce the pace of upward adjustments significantly and consider the risks to economic activity and financial stability of implementing an excessively restrictive monetary policy. He/she warned that, in an emerging economy such as Mexico's, the materialization of such risks could affect the price formation process through a more depreciated exchange rate and a deterioration of macroeconomic fundamentals and of productive capacity. He/she stated that the ex-ante real interest rate is unequivocally in restrictive territory. He/she added that it should be taken into account that, given the lag with which monetary policy operates, insofar as inflation expectations decrease, the level of monetary tightening is anticipated to continue increasing automatically as long as monetary easing does not begin. He/she mentioned that, considering the limits of a restrictive monetary policy to control inflation, the level of monetary tightening that has already been reached and the signs of inflationary pressures easing both globally and locally, there is no need to raise the interest rate much further. He/she highlighted that Mexico is one of the few emerging economies where further increases in the monetary policy rate are being considered. He/she stated that it is surprising that more increases are anticipated, considering that: i) inflation has remained contained as compared to other economies; ii) inflation has already started to decline; and iii) domestic inflationary pressures are minimal given that economic activity has not grown at an accelerated pace and has just returned to its pre-pandemic levels. He/she highlighted that, from an international perspective, and based on a domestic risk-management approach, raising the reference rate much further is not required. He/she sustained that, looking ahead, it will be necessary to act with caution depending on the evolution of the economy.

Another member considered it appropriate to slow the pace of upward adjustments as the terminal interest rate of this cycle is closer. He/she noted that it is possible considering: i) the level of monetary tightening that has already been reached; ii) that it is likely that inflation has already reached its peak; iii) that the balance of risks for the trajectory of inflation has slightly improved; iv) that the deterioration of inflation expectations appears to be decreasing; and v) that the anticipated trajectory for inflation has remained stable for the short term. He/she stated that the reduction in the pace of upward adjustments should not be interpreted as monetary easing, but rather as the implementation of less extreme and aggressive, but still firm, adjustments in view of the considerable challenges and mixed signals of relief and deterioration that must be cautiously considered. In this regard, he/she indicated that the 50-basis point increases in previous tightening episodes have been considered as forceful. Thus, he/she argued that further raises are required, given that: i) the core component that responds more to monetary policy remains to the upside; ii) inflation expectations remain high and with the risk of stabilizing at the upper limit of the target range; and iii) domestic pressures which could complicate the convergence of inflation prevail. He/she warned that cyclical conditions, rather than justifying less monetary tightening, should be considered as an element of caution. He/she mentioned that the monetary policy stance reached a degree of tightening that is consistent with the inflationary challenge, and that, looking ahead, an ex-ante real interest rate of around 6% should be gradually reached. He/she indicated that said gradualness will depend on: i) core inflation following a clear downward trend; ii) inflation expectations showing less deterioration, with a lower dispersion, and with a correction of its current upside bias; iii) a consolidation of the expected trajectory for inflation and without it presenting significant adjustments, which would strengthen the central bank's credibility given the consistent errors in the forecast in the recent past; and iv) the room for maneuver offered by the global monetary conditions. He/she pointed out that the weighting of these factors, based on incoming data, will define the reaction function. He/she stated that a 600-basis-point interest rate spread has been maintained between Mexico and the United States, due to the synchronization of the inflationary cycles, and not due to a mechanical relationship. He/she pointed out that the monetary policy stance in both countries has responded to a similar behavior of inflation. He/she added that monetary policy synchronization should continue as long as the trajectories of inflation are similar and there is no certainty as to the levels of the terminal interest rates. He/she stated that sound macroeconomic fundamentals could allow a marginal reduction of the spread in case the inflationary cycles diverge. He/she pointed out that forward guidance should be communicated in a decisive manner and should highlight that the attained terminal rate will be maintained for some, still uncertain, amount of time. He/she underlined that, for this reason, it is necessary to be cautious in determining it. He/she added that neither a monetary easing is to be anticipated over the next months nor that the attained monetary tightening will prevail over the entire horizon in which monetary policy operates.

One member mentioned that there are elements suggesting that the balance of risks for inflation, despite remaining biased to the upside, has started to be distributed closer around Banco de México's central forecast. Among these factors he/she mentioned that: i) inflation has begun registering declining pressures, although it remains at high levels and the core component shows a worrying persistence to the upside; ii) inflation figures have reached levels below those anticipated by specialists, whose expectations have started to decline; iii) the central bank inflation forecasts have been revised marginally and indicate that inflation will continue declining over the following quarters. He/she added that the factors mentioned should be considered in determining the reaction function, taking into account the lag with which monetary policy operates. He/she stated that, for this reason, the pace of rate adjustments should be of a smaller magnitude. He/she added that, if the distribution of 12-month inflation expectations is considered, the corresponding distribution of the ex-ante real interest rate is, entirely in a restrictive territory. He/she argued that the above indicates that the monetary policy stance has consolidated at a sufficiently high level, even under the most pessimistic scenarios. He/she underlined that, with the suggested upward adjustment, the reference rate would continue increasing, despite having already exceeded both observed and expected inflation levels, which would send a signal of the central bank's commitment to guaranteeing the convergence of inflation in accordance with its forecasts. He/he added that the Mexican economy is highly integrated both financially and economically with the rest of the world, and operates under a flexible exchange rate regime, and that for this reason maintaining a fixed relative monetary policy stance could lead to keeping Mexico's price formation process dependent on external factors. Therefore, he/she highlighted that Banco de México's decisions should be consistent with reaching an absolute monetary policy stance that would contribute to the convergence of inflation to its target, regardless of the relative monetary policy stance that this implies. He/she stated that, looking ahead, the ex-ante real interest rate is likely to continue increasing, while, at the same time, a greater tightening derived from the real exchange rate might be observed; and that, therefore, monetary conditions as a whole will remain tight for some time. He/she indicated that, in the future, adjustments to the reference rate will have to be calibrated with caution, considering the monetary policy stance that has already been reached, its transmission mechanisms, and the lags with which monetary policy operates.

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 evolution of medium- and long-term inflation expectations and the price formation process. It considered the challenges for monetary policy stemming from the ongoing tightening of global financial conditions, the environment of uncertainty, the inflationary pressures accumulated as a result of the pandemic and the geopolitical conflict, the possibility of greater effects on inflation, and the monetary policy stance already attained in this hiking cycle. Based on these considerations, the Board decided by majority to raise the target for the overnight interbank interest rate by 50 percentage points to 10.50%. With this action, the monetary policy stance adjusts to the trajectory required for inflation to converge to its 3% target within the forecast horizon.

The Board will thoroughly monitor inflationary pressures as well as all factors that have an incidence on the foreseen path for inflation and its expectations. This, in order to set a policy rate that is consistent at all times, with both the orderly and sustained convergence of headline inflation to the 3% target within the time frame in which monetary policy operates as well as with an adequate adjustment of the economy and financial markets. The Board considers it will still be necessary to raise the reference rate in its next monetary policy meeting. Subsequently, it will assess if the reference rate needs to be further adjusted as well as the pace of adjustments based on the prevailing conditions.

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 10.50%. Gerardo Esquivel voted in favor of increasing the target for the overnight interbank interest rate by 25 basis points to 10.25%.

5. DISSENTING OPINION / VOTE

Vote. Gerardo Esquivel.

The current ex-ante real interest rate is clearly at a restrictive level. Moreover, given the lag under which monetary policy operates, as inflation expectations start decreasing, the restrictive level is foreseen to increase even further. The restrictive policy stance already attained, together with easing inflationary pressures, suggests that further raising the reference rate is unnecessary. The decline in global inflationary pressures is evident. At the local level, inflation dynamics have also started to ease: there are less pressures at the margin, headline inflation reached its peak in August, and producer price inflation has rapidly decreased. The latter will eventually have an incidence on core inflation. Several emerging economies have concluded their hiking cycles or at about to end them with marginal upward adjustments. Mexico is one of the few economies that has still not concluded such cycle. In countries with high levels of inflation or inflation that has been affected by demand-related factors, it would be justified to continue with said policy. However, that is not Mexico's case. For this reason, I believe a 25-basis point increase is appropriate. What is now needed is to allow the already attained restrictive policy stance to operate.

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

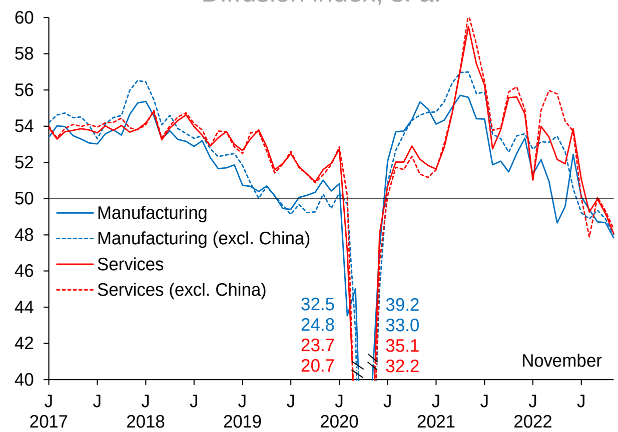
A.1.1. World economic activity

World economic activity recovered slightly during the third quarter of 2022. Available information, however, points to a slowdown during the fourth quarter, as a result of tightening global financial conditions and the adverse economic effects generated by Russia's invasion of Ukraine. Forward-looking indicators such as Purchasing Managers' Indices point to a deterioration of various sectors of the global economy and trade in the short term (Chart 1). In this context, the outlook for 2023 continued deteriorating. Among the most important risks to the global economy are the persistence of inflationary pressures, tighter financial and monetary conditions, worsening geopolitical tensions, and those associated with the pandemic.

In the United States, available indicators suggest that during the fourth quarter of 2022, Gross Domestic Product (GDP) moderated its pace of growth (Chart 2), after having grown at a seasonally adjusted quarterly rate of 0.7% during the third quarter.[1] During the fourth quarter, economic activity would have been driven by personal consumption, business investment, and government spending. This would have been partially offset by the negative contributions of net exports and residential investment.

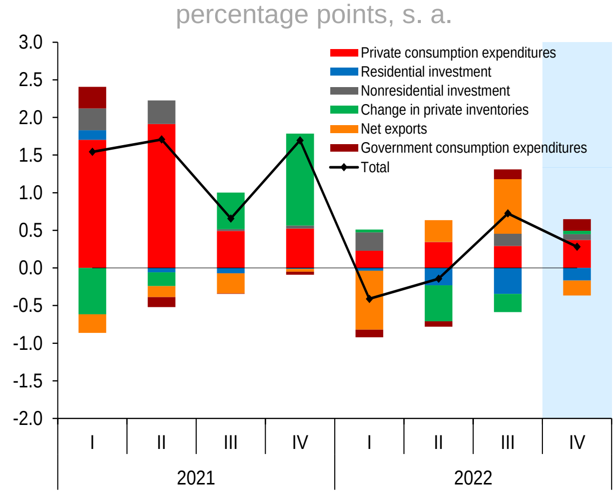
In October, industrial production in the United States contracted at a seasonally adjusted monthly rate of 0.1%. This fall reflected a decline in electricity and gas generation as well as in mining production. Meanwhile, manufacturing activity continued growing at a moderate pace. Nevertheless, forward-looking indicators, such as the Purchasing Managers' Indices, point to a deterioration in this sector. This weakening would be associated with the slowdown in domestic and external demand and with lower business confidence.

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



s. a. / Seasonally adjusted figures.
Source: IHS Markit.

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



a. e./ Seasonally adjusted figures.
Note: The shaded area refers to forecasts of GDPNow for December 2022.
Source: BEA and Blue Chip.

The US labor market continued showing signs of tightening. The non-farm payroll reflected the creation of 263 thousand new jobs in November. This figure was higher than that anticipated by analysts' forecasts. The unemployment rate remained at 3.7% in that same month and wage growth continued at elevated levels. Initial claims for unemployment

[1] Expressed as a seasonally adjusted annualized quarterly rate, the change in US GDP in the third quarter was 2.9%.

insurance remained at relatively stable levels at the beginning of December in relation to those at the beginning of November.

In the euro area, available indicators suggest a contraction in economic activity during the fourth quarter, after the expansion at a seasonally adjusted quarterly rate of 0.3% observed during the previous quarter.[2] The decline in economic activity would mainly reflect the effects of the military conflict in Ukraine, especially through high gas prices and low levels of consumer and business confidence. Tightening financial conditions and a weakening in global demand have also contributed to the deterioration of economic activity. The unemployment rate decreased from 6.6% in September to 6.5% in October. Purchasing Managers' Indices point to a deterioration in manufacturing and services activity in the short term.

In the main emerging economies, available indicators suggest a heterogeneous performance across countries and regions during the fourth quarter of 2022. In Latin America, the economies are expected to grow at a moderate pace, while some of them are anticipated to contract. In Emerging Europe, most economies are expected to contract, mainly reflecting the adverse effects of the military conflict between Russia and Ukraine. In Emerging Asia, the major economies are expected to slow down. In China, timely indicators point to a moderation in economic activity early in the fourth quarter due to restrictions to contain the high number of COVID-19 infections. Although some of these restrictions have recently loosened, there is uncertainty about the evolution of the pandemic and its impact on economic activity in that country.

International commodity prices have registered a mixed behavior with episodes of volatility since Mexico's previous monetary policy decision. In particular, oil prices trended downwards during most of the reporting period due to concerns about the adverse effects that the increase in the number of COVID-19 infections in China could have on the demand for fuel, as well as the G7 agreement on a maximum price for Russian oil traded by sea. Throughout the period, oil prices exhibited volatility due to factors related to expectations of a higher global demand derived from the easing of certain mobility restrictions in some major cities in China. Meanwhile, natural gas reference prices in Europe and the United States generally trended upwards during most of the analyzed period, partly in anticipation of lower temperatures in both regions. However, in the first half of December, prices in the United States registered episodes of volatility due to various changes in temperature forecasts for the winter and uncertainty regarding the reopening of one of the most important natural gas exporting plants in the United States. Meanwhile, most grain prices trended downwards. This was due to the mobility restrictions in China that prevailed during most of the period and the extension of the Black Sea security corridor agreement for grain exports. Finally, the lower demand for industrial metals exerted a downward pressure on industrial metal prices during most of November. Prices rebounded in early December due to better prospects of Chinese demand as some restrictions to contain COVID-19 were relaxed.

A.1.2. Monetary policy and international financial markets

World inflation remains high, due to persistent pressures across a broad range of items' prices. Headline inflation, on the contrary, declined in several economies due to lower pressures on food and energy prices. The easing of supply chain disruptions also contributed to the decline in inflation.

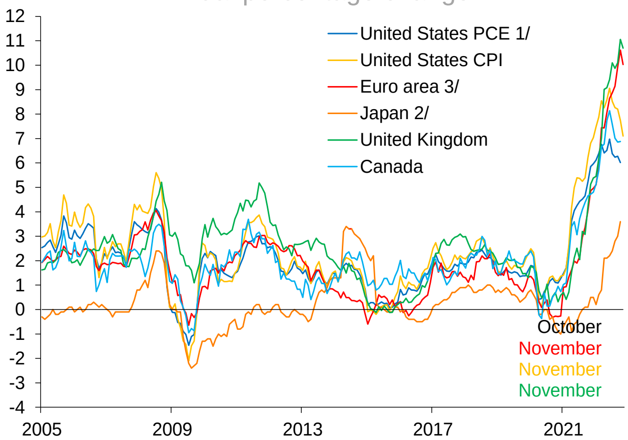
In several advanced economies, annual headline inflation has slightly decreased, largely as a result of a decline in energy inflation (Chart 3). Nevertheless, headline inflation remains significantly above their central banks' targets. Core inflation also remains at high levels, although it has recently declined or remained unchanged in some of these economies, due to a lower inflation of goods. In the United States, annual inflation measured by the consumer price index decreased from 7.7 to 7.1% between October and November, while core inflation went from 6.3 to 6.0% during the same period. Analysts' forecasts for inflation in the main advanced economies remained at high levels for the short term, while for 2023 they foresee a moderation. Meanwhile, longer-term inflation expectations for these economies derived from financial instruments generally exhibited limited adjustments.

In most of the main emerging economies, annual headline inflation declined in its latest readings, partly reflecting a moderation in energy inflation, and, in some cases, food inflation. In most countries, however, core inflation continued increasing.

[2] Expressed as a seasonally adjusted annualized quarterly rate, the change in euro area GDP was 1.3% in the third quarter of 2022.

Inflation remains at high levels and far above their central banks' targets.

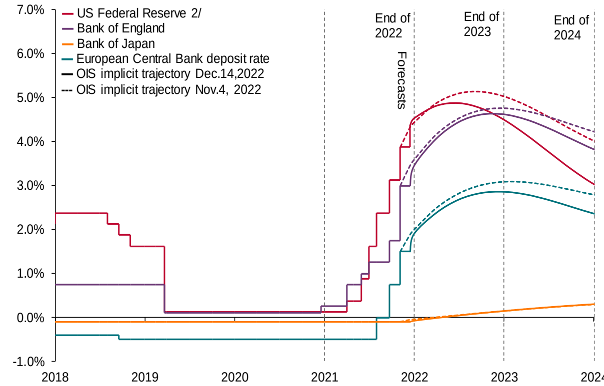
Chart 3
Selected Advanced Economies: Headline Inflation
Annual percentage change



1/ The personal consumption expenditure deflator is used.
2/ Excludes fresh food. This series does not exclude the effect of the increase in the consumption tax in May 2014 and October 2019 nor the effect of the free daycare and preschool program in October 2019.
3/ Preliminary figures up to November 2022.
Source: Bureau of Economic Analysis, Bureau of Labor Statistics, Eurostat, Bank of Japan, Statistics Canada, Office of National Statistics.

In such an environment, a large number of central banks continued raising their reference rates. Some mentioned that they would begin to moderate the pace of adjustments. However, these rates are foreseen to remain at high levels for an extended period. In particular, the US Federal Reserve and the central banks of Sweden and Korea announced smaller increases than those on previous decisions, although they maintain that additional increases are likely to be required in the future. Although the Bank of Canada raised its interest rate in its most recent monetary policy decision, it adjusted its forward guidance, indicating that it will be considering whether the interest rate should be raised further. In contrast, the Reserve Bank of New Zealand accelerated its pace of upward adjustments. For most major advanced economies, expectations drawn from financial instruments foresee a level of interest rates at the end of 2023 close to that previously expected. These expectations foresee that interest rates will remain high for an extended period and suggest that, in some cases, they will start declining by the end of 2023 or in 2024 (Chart 4). As for their asset purchase programs, most central banks in this group of economies continued to gradually reduce their securities' holdings.

Chart 4
Reference Rates and Trajectories Implied in OIS Curves1/
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 (4.25% - 4.50%) is used.
Source: Banco de México with data from Bloomberg,

Delving into the Federal Reserve's most recent decision, the Federal Open Market Committee (FOMC) raised the target range for the federal funds rate by 50 bps, to between 4.25 and 4.50%, after having increased it by 75 basis points four consecutive times. Regarding its balance sheet, the Committee reiterated that it will continue reducing its securities' holdings. It also anticipated that additional increases in the target range will be appropriate in order to achieve a monetary policy stance that is sufficiently restrictive to return inflation to the 2% target. It stated that, when determining the pace of future adjustments to the target range, it will consider the cumulative tightening of monetary policy, the lags with which monetary policy affects economic activity and inflation, and economic and financial developments. The chairman of that institution indicated that when a sufficiently restrictive interest rate level is reached, they will maintain it there until there is confidence that inflation is decreasing in a sustained manner, and that this will take some time. He also reiterated that FOMC members will continue making decisions meeting by meeting, that is, without providing specific guidance, and that the pace of adjustments will depend on economic data. Regarding the update of its economic projections, the Committee's medians for headline and core inflation expectations were revised upwards for almost every year. Median growth expectations for 2022 were revised upwards, from 0.2 to 0.5%, while for 2023 and 2024, they were revised downwards to 0.5 and 1.6%, respectively. Median unemployment expectations for 2022 were revised downwards to

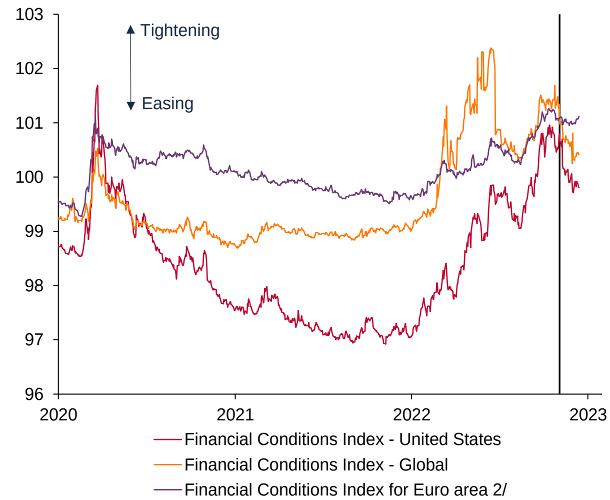
3.7%, and upwards for both 2023 and 2024 (4.6%), as well as for 2025 (4.5%). As for the reference rate, the median of expectations for the end of 2023 increased from 4.6% in September to 5.1% in December, from 3.9 to 4.1% for the end of 2024, and from 2.9 to 3.1% for the end of 2025, while the long-term rate remained unchanged. In this context, the expected trajectory for the federal funds rate implied by financial instruments anticipates a terminal rate close to 5.0% and rates of around 4.5% and 3.0% for the end of 2023 and 2024, respectively.

Regarding the European Central Bank, analysts' forecasts anticipate that at its December 15 meeting it will increase its refinancing, key lending and key deposit rates by 50 bps, to 2.50, 2.75 and 2.00%, respectively. The president of that central bank had stated that at its December meeting they would decide on the key principles for reducing the portfolio associated with its Asset Purchase Program (APP).

In the main emerging economies, most central banks continued raising their reference interest rates. Nevertheless, some central banks, such as those of India and Israel, slowed the pace of upward adjustments. In the case of the central banks of Hungary, Poland, Chile and Brazil, their reference rates were left unchanged. Some of them reiterated that they will keep their interest rates at current levels for a prolonged period in order to ensure the convergence of inflation to their targets. In the case of China, although the central bank kept the interest rate unchanged, it cut the reserve requirement ratio. Meanwhile, Turkey's central bank made an additional 150 bp cut in its interest rate and announced that it decided to end the cycle of cuts that began in August.

In the context described above, since Mexico’s previous monetary policy decision international financial markets registered less tightening (Chart 5). Stock markets in most of the major advanced economies continued posting gains, while emerging markets exhibited mixed results (Chart 6). As for foreign exchange markets, during the reported period the US dollar depreciated against the currencies of advanced economies, after having significantly appreciated in previous months. This was due to expectations of a more moderate pace of interest rate hikes by the Federal Reserve. Most emerging economies' currencies appreciated (Chart 7). In most of the main advanced economies, long-term government bond interest rates decreased during the period, while short-term ones registered mixed adjustments. In most emerging economies, both long-term and short-term interest rates declined. In this context, since Mexico’s previous monetary policy decision, most emerging economies registered cumulative capital inflows to fixed income markets. While some fixed income markets in Emerging Asia, particularly in China, exhibited outflows, the latter registered cumulative capital inflows to equity markets.

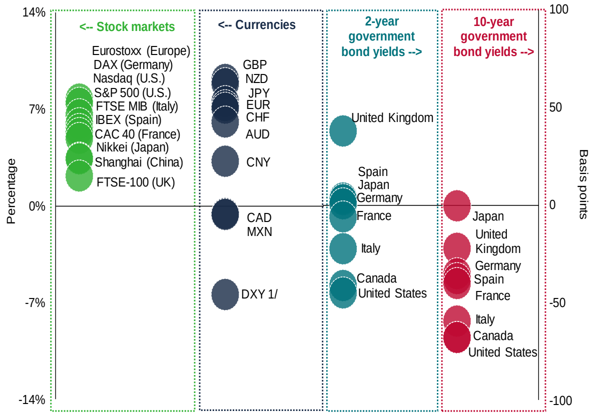
Chart 5
Financial Conditions Index[1/]
Units



1/ The financial conditions index is constructed considering the effect of five variables on economic activity: the reference interest rate, the 10-year government bond, the spread of investment-grade bonds over the government debt bond with equivalent maturity, the ratio of a stock index with 10-year average earnings per share and the trade-weighted exchange rate. Emerging economies include Brazil, Chile, China, Czech Republic, Hungary, India, Indonesia, Israel, Malaysia, Mexico, Philippines, Poland, Romania, South Korea, South Africa, Thailand, and Turkey. The global sample includes G10 countries and emerging economies.
2/ In the case of emerging economies, the financial conditions index considers the CDS as the credit spread component and includes the debt-weighted exchange rate. The vertical black line indicates the last scheduled meeting of Banco de México's Monetary Policy Committee.
Source: Prepared by Banco de México with Bloomberg and Goldman Sachs data.

Chart 6
Change in Selected Financial Indicators from November 4, 2022 to December 14, 2022

Percent; basis points



1/ 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%.
Source: Bloomberg and ICE.

Chart 7
Selected Emerging Economies: Financial Assets Performance as of November 4, 2022

Percent, basis points

Region	Country	Currencies	Equity markets	2-year interest rates	10-year Interest rates	CDS
Latin America	Mexico	-1.15%	-0.19%	-35	-87	-32
	Brazil	-3.71%	-8.70%	125	110	-24
	Chile	7.44%	-0.24%	-204	6	-41
	Colombia	5.84%	-1.17%	-142	-172	-101
	Peru	3.35%	1.21%	-96	-37	-46
Emerging Europe	Russia	-1.12%	0.79%	-19	10	N.A.
	Poland	5.66%	6.82%	-148	-179	-31
	Turkey	-0.42%	17.14%	-366	-73	-110
	Czech Republic	6.11%	-4.05%	-70	-121	-3
	Hungary	2.23%	3.61%	-133	-134	-56
Asia	China	3.18%	4.43%	24	22	-30
	Malaysia	7.25%	2.71%	-10	-32	-26
	India	0.19%	2.02%	-28	-17	-36
	Philippines	5.45%	6.38%	-11	13	-25
	Thailand	7.37%	-0.20%	-2	-45	-29
	Indonesia	0.98%	-4.69%	-87	-53	-37
Africa	South Africa	3.57%	8.08%	8	-15	-37

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.

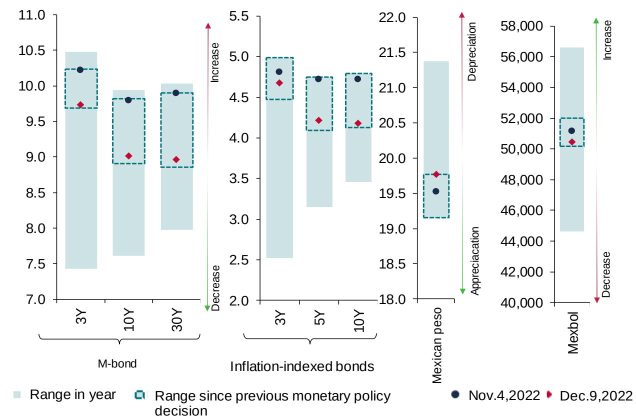
A.2. Current situation of the Mexican economy

A.2.1. Mexican markets

Regarding domestic financial markets, the Mexican peso continued showing resilience, although with volatility, while interest rates registered mostly downward movements (Chart 8), in line with the movements observed in global yield curves.

Chart 8
Mexican Markets' Performance

Percent, MXN/USD and index

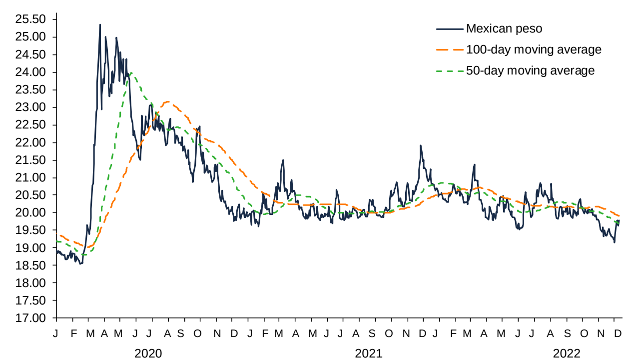


Source: Prepared by Banco de México.

Since Mexico's previous monetary policy decision, the Mexican currency traded in a range of 82 cents, between 19.04 and 19.86 pesos per US dollar, reaching during the period its lowest level since March 2020. However, it ended the period with a depreciation of 1.15% (Chart 9). The above occurred in a context in which trading conditions, both realized and prospective, continued improving.

Chart 9
Mexican Peso Exchange Rate including Moving Averages

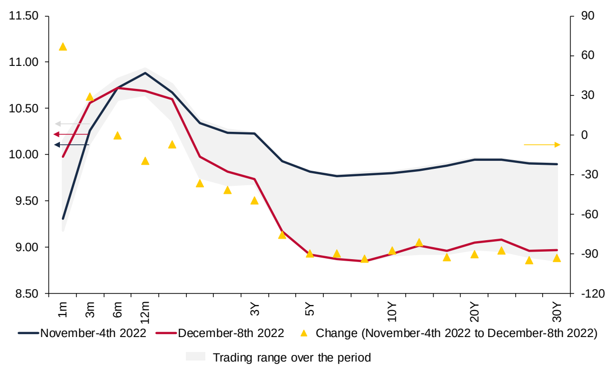
MXN/USD



Source: Prepared by Banco de México.

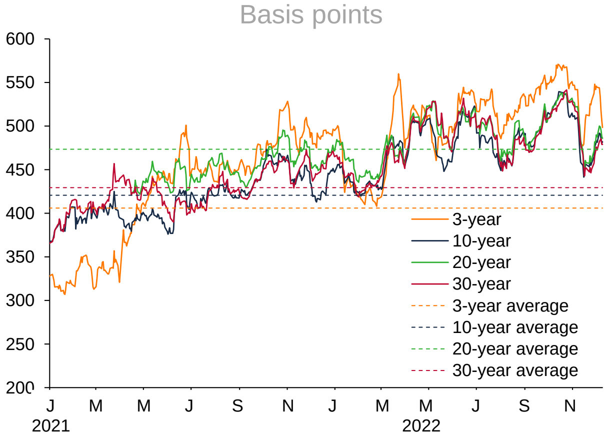
Interest rates on government securities showed a significantly positive performance, with movements of between -49 and 27 basis points in the short-term nodes, while longer-term securities decreased up to 95 basis points (Chart 10). The yield curve of real interest rate instruments increased 162 basis points in the one-year node and decreased up to 55 basis points in the rest of the curve. In this context, breakeven inflation implicit in spreads between nominal and real interest rates of market instruments decreased between 28 and 38 basis points (Chart 11). These movements took place in an environment in which trading conditions showed some stability.

Chart 10
Nominal Yield Curve of Government Securities
Percent, basis points



Source: PIP.

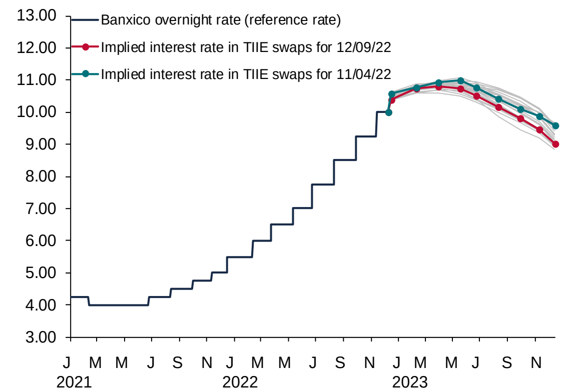
Chart 11
Breakeven Inflation and Inflation Risk Implied in Government Securities' Yields
Basis points



Source: PIP.

Regarding expectations for the path of the monetary policy reference rate, information implicit in the interest rate swaps curve incorporates an increase of 39 basis points for the December decision (Chart 12). Most analysts surveyed by Citibanamex anticipate a 50-basis point increase in the reference rate for December's decision and a rate of 10.38% for the end of 2023.

Chart 12
Interbank Funding Rate Implied in TIIE Swaps
Percent

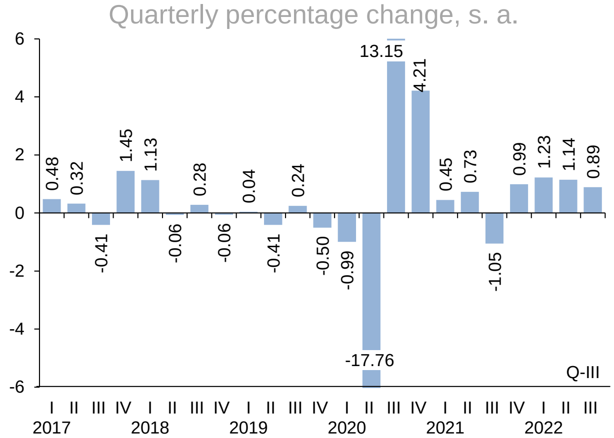


Source: Prepared by Banco de México with Bloomberg data.

A.2.2. Economic activity in Mexico

During the third quarter of 2022, the Mexican economy maintained its pace of recovery (Chart 13), reaching a level similar to that registered in the last quarter of 2019, prior to the health emergency. The economy is expected to have continued recovering during the fourth quarter, albeit at a slower pace.

Chart 13
Gross Domestic Product
Quarterly percentage change, s. a.

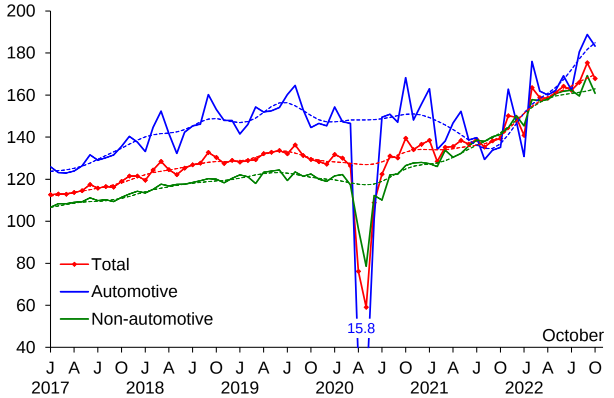


s. a. / Seasonally adjusted figures. The chart's range was adjusted to facilitate its reading.
Source: Mexico's System on National Accounts (SCNM, for its Spanish acronym), INEGI.

Regarding external demand, in October the value of manufacturing exports continued increasing. Both automotive and non-automotive exports have been expanding, although the former have shown a certain deceleration throughout the year (Chart 14).

As for domestic demand, private consumption continued recovering moderately in September, after having declined in May and June. This recovery is attributed to the growth in consumption of goods and services. Gross fixed investment continued showing a weak performance. In September, machinery and equipment partially reversed the improvement registered in August, while investment in construction continued trending downwards.

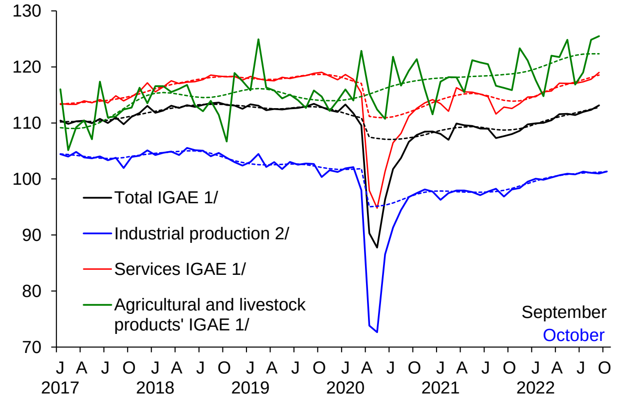
Chart 14
Total Manufacturing Exports
Indices 2013 = 100, s. a.



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.

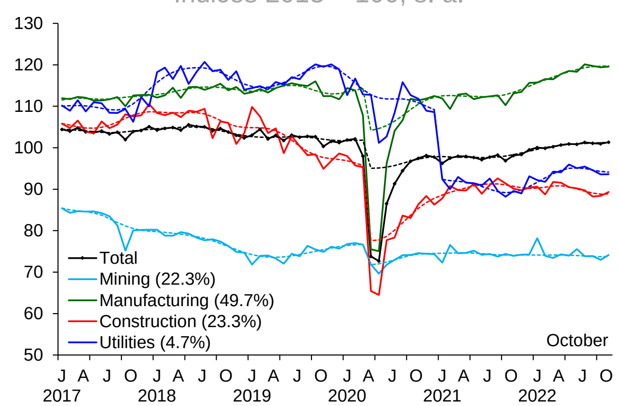
On the production side, at the end of the third quarter, tertiary activities rebounded (Chart 15) and registered increases, mainly in commerce; accommodation and food services; and in transportation and mass media information services. As for industrial production, at the beginning of the fourth quarter, manufacturing remained sluggish, although it ceased decreasing, after two months of contractions. Mining and construction also remained weak (Chart 16).

Chart 15
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 up to September 2022.
2/ Monthly Indicator of Economic Activity (figures up to October 2022).
Source: Mexico's System of National Accounts (SCNM, for its Spanish acronym), INEGI.

Chart 16
Industrial Activity [1/]
Indices 2013 = 100, s. a.

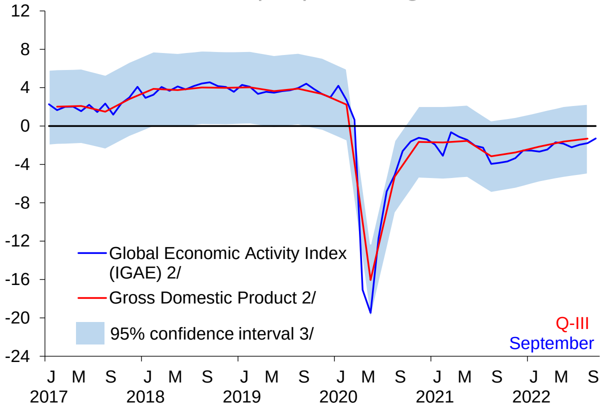


s. a. / Seasonally adjusted and trend series. The former is represented by a solid line and the latter by a dotted line.
1/ Figures in parenthesis correspond to their share in the total in 2013.
Source: Mexico's System of National Accounts (SCNM, for its Spanish acronym), INEGI.

Regarding the cyclical position of the economy, according to the output gap estimate, slack conditions continued decreasing during the third quarter (Chart 17). In October, both national and urban unemployment rates remained at relatively low levels (Chart 18). Based on seasonally adjusted figures, IMSS-insured jobs continued increasing in November, although at a slower rate. Finally, in October, unit labor costs in the manufacturing sector continued trending downwards (Chart 19).

Chart 17
Output Gap Estimates [1/]

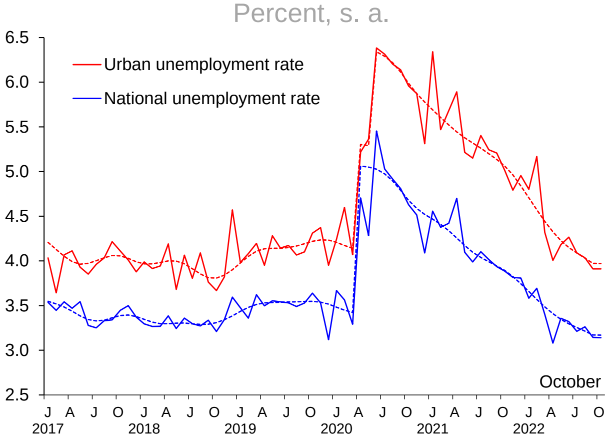
Potential output percentages, s. a.



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 the third quarter of 2022 and IGAE up to September 2022.
3/ Output gap confidence interval calculated with a method of unobserved components.
Source: Prepared by Banco de México with INEGI data.

Chart 18
National and Urban Unemployment Rates

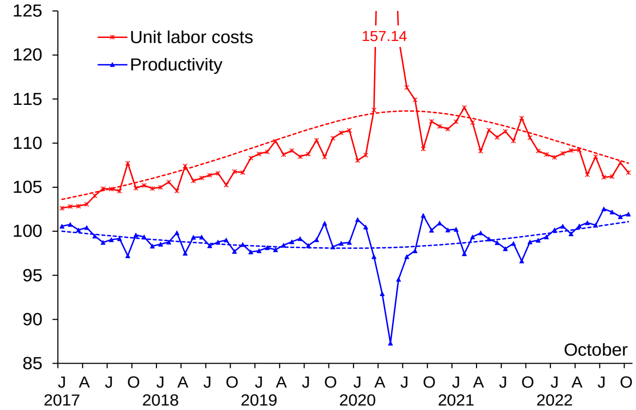
Percent, s. a.



s. a. / Seasonally adjusted 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[N]) from July to date.

Chart 19
Productivity and Unit Labor Costs in the Manufacturing Sector [1/]

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.

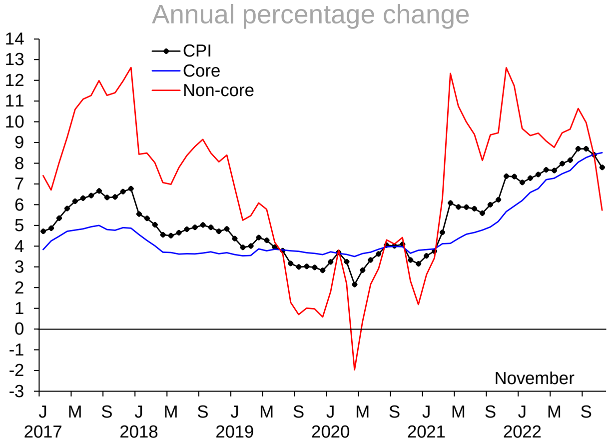
In October 2022, domestic financing to firms registered a positive real annual variation for the fourth consecutive month. Bank credit to firms continued recovering gradually, exhibiting a positive real annual variation for the sixth consecutive month. This occurred in a context in which the demand for corporate credit continued recovering and lending conditions remained tight compared to those prevailing at the beginning of the pandemic. These conditions, however, had been easing for smaller firms between the second half of 2021 and the second quarter of 2022. Net corporate debt issuance in the domestic market continued increasing in October, in contrast with the negative flows observed during the first half of the year. As for credit to households, commercial bank housing portfolio continued expanding. In turn, bank consumer credit continued increasing at a real annual rate, as a result of the dynamism of payroll credit, credit cards, and personal loans. This has taken place in a context in which household demand for credit has continued to increase. Mortgage lending and consumer credit conditions remained relatively stable during the third quarter of the year.

In October, interest rates on bank credit to firms were at levels above those observed at the end of 2019. Corporate credit intermediation margins did not show significant changes with respect to the previous month and overall are at levels lower than those observed in February 2020. Interest rates on mortgages have increased as of July, after having remained at levels around their historical lows since August 2020. In July-August 2022, credit card interest rates increased with respect to the previous bimester, while those of payroll loans registered a similar level. As for portfolio quality, in October 2022, corporate loan delinquency rates were similar to those observed in the previous month and continued at low levels. Finally, consumer portfolio delinquency rates did not show significant changes, thus remaining at levels lower than those registered prior to the onset of the pandemic.

A.2.3. Development of inflation and inflation outlook

Between October and November 2022, annual headline inflation decreased from 8.41 to 7.80% (Chart 20 and Table 1). This result is explained by the reduction in non-core inflation, given that core inflation continued increasing.

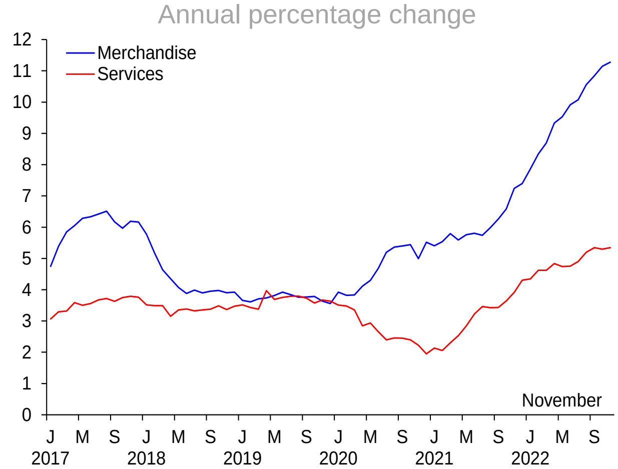
Chart 20
Consumer Price Index
Annual percentage change



Source: Banco de México and INEGI.

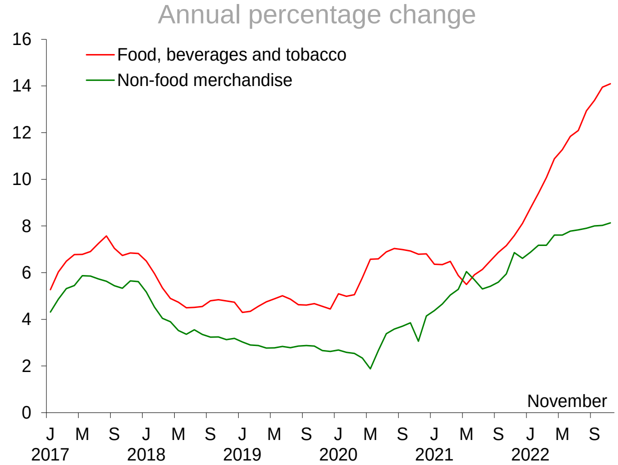
Between October and November 2022, annual core inflation rose from 8.42 to 8.51%. In an environment of high global demand and greater wage variations, core inflation continued to be affected by the still high costs of different commodities, which continued exerting pressure on the production costs of different goods and services. In particular, annual merchandise inflation increased from 11.15 to 11.28% during the same period (Chart 21). The annual variation of food merchandise prices, which was already at high levels, continued increasing, from 13.95 to 14.09% during the same period (Chart 22). This behavior continued to reflect the high levels of international references for food commodities, as well as the lagged effects of their previous increases. Annual inflation of non-food merchandise rose from 8.03 to 8.13% during the same period. Annual services inflation increased from 5.30 to 5.35% in the same months, pressured by the greater operating costs of businesses to prevent contagions, the increase in input prices, as well as by higher wage costs. Regarding services other than education and housing, the high inflation of food services continued to stand out.

Chart 21
Merchandise and Services Core Price Sub-index
Annual percentage change



Source: Banco de México and INEGI.

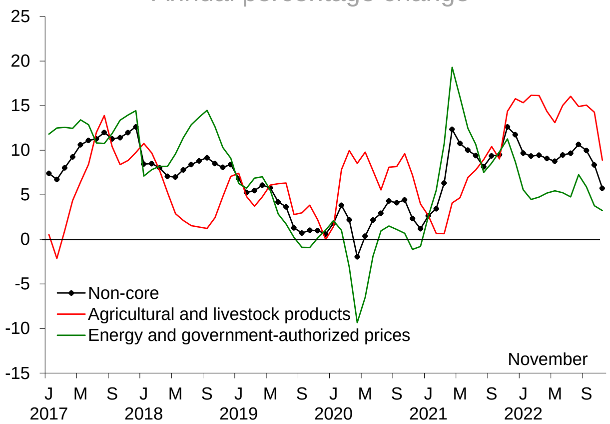
Chart 22
Merchandise Core Price Sub-index
Annual percentage change



Source: Banco de México and INEGI.

Between October and November 2022, annual non-core inflation decreased from 8.36 to 5.73% (Chart 23 and Table 1). This behavior was due to the fall from 14.25 to 8.89% in the annual inflation of agricultural and livestock products, which was driven by a reduction from 12.63 to 3.44% in the inflation of fruits and vegetables. The fall from 3.10% to 2.29% in annual energy inflation, mainly attributed to a reduction from -16.54% to -17.29% in the annual variation of L.P. gas prices, also stood out.

Chart 23
Non-core Price Sub-index
Annual percentage change



Source: Banco de México and INEGI.

Regarding inflation expectations drawn from the survey conducted by Banco de México among private sector specialists, between October and November the median for headline inflation for the end of 2022 decreased from 8.50 to 8.36%, while that for core inflation rose from 8.29 to 8.37%. The median of headline inflation expectations for the end of 2023 was revised from 5.09 to 5.07%, while that for core inflation increased from 5.01 to 5.06%. The median of headline inflation expectations for the medium term remained at 4.00%. The median of headline inflation expectations for the long term (5 to 8 years) remained at 3.60% and for core inflation continued at 3.55%. Finally, compensation for inflation and inflationary risk decreased, although it continues at high levels. Within it, expectations implied by market instruments continued increasing, while the inflation risk premium decreased, although it remains at high levels.

Inflation is still projected to converge to the 3% target during the third quarter of 2024. These projections are subject to risks. On the upside: i) persistence of core inflation at high levels; ii) external inflationary pressures associated with the pandemic; iii) pressures on agricultural and livestock product prices and on energy prices due to the ongoing geopolitical conflict; iv) exchange rate depreciation; and v) greater cost-related pressures. On the downside: i) a greater-than-anticipated slowdown of the world economy; ii) a decline in the intensity of the geopolitical conflict; iii) a better functioning of supply chains; iv) a lower pass-through of some cost-related pressures; and v) a larger-than-anticipated effect from the Federal Government's measures to fight elevated prices. Although some shocks show signs of subsiding, 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	September 2022	October 2022	November 2022
CPI	**8.70**	**8.41**	**7.80**
Core	**8.28**	**8.42**	**8.51**
Merchandise	**10.84**	**11.15**	**11.28**
Food, beverages and tobacco	13.38	13.95	14.09
Non-food merchandise	8.00	8.03	8.13
Services	**5.35**	**5.30**	**5.35**
Housing	3.15	3.14	3.11
Education (tuitions)	4.49	4.49	4.49
Other services	7.44	7.33	7.45
Non-core	**9.96**	**8.36**	**5.73**
Agricultural and livestock products	**15.05**	**14.25**	**8.89**
Fruits and vegetables	14.18	12.63	3.44
Livestock products	15.79	15.61	13.79
Energy and government-authorized prices	**5.88**	**3.77**	**3.23**
Energy products	6.16	3.10	2.29
Government-authorized prices	5.23	5.42	5.61

Source: INEGI.

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