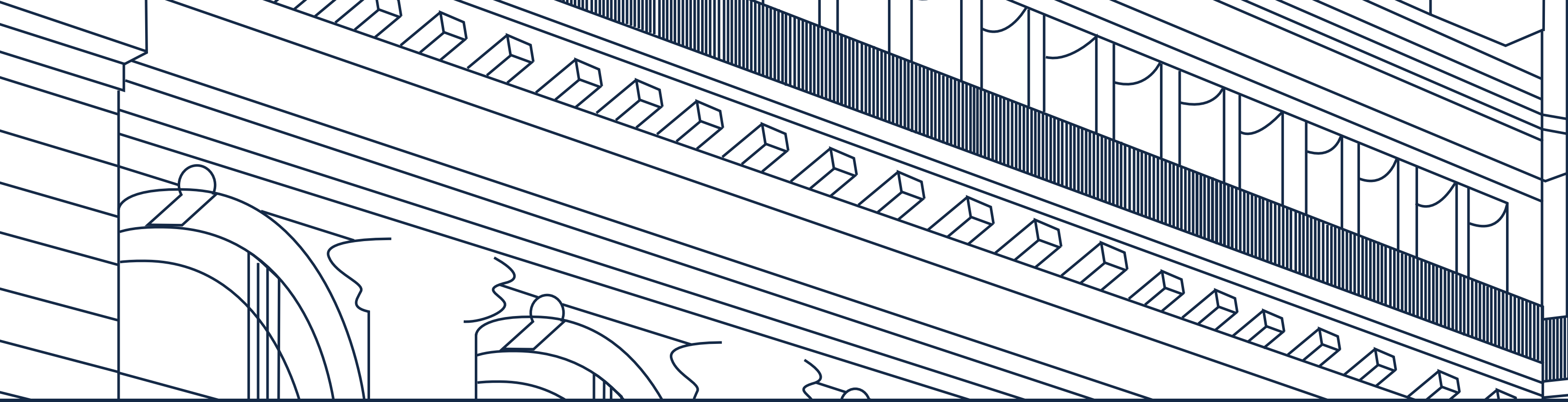
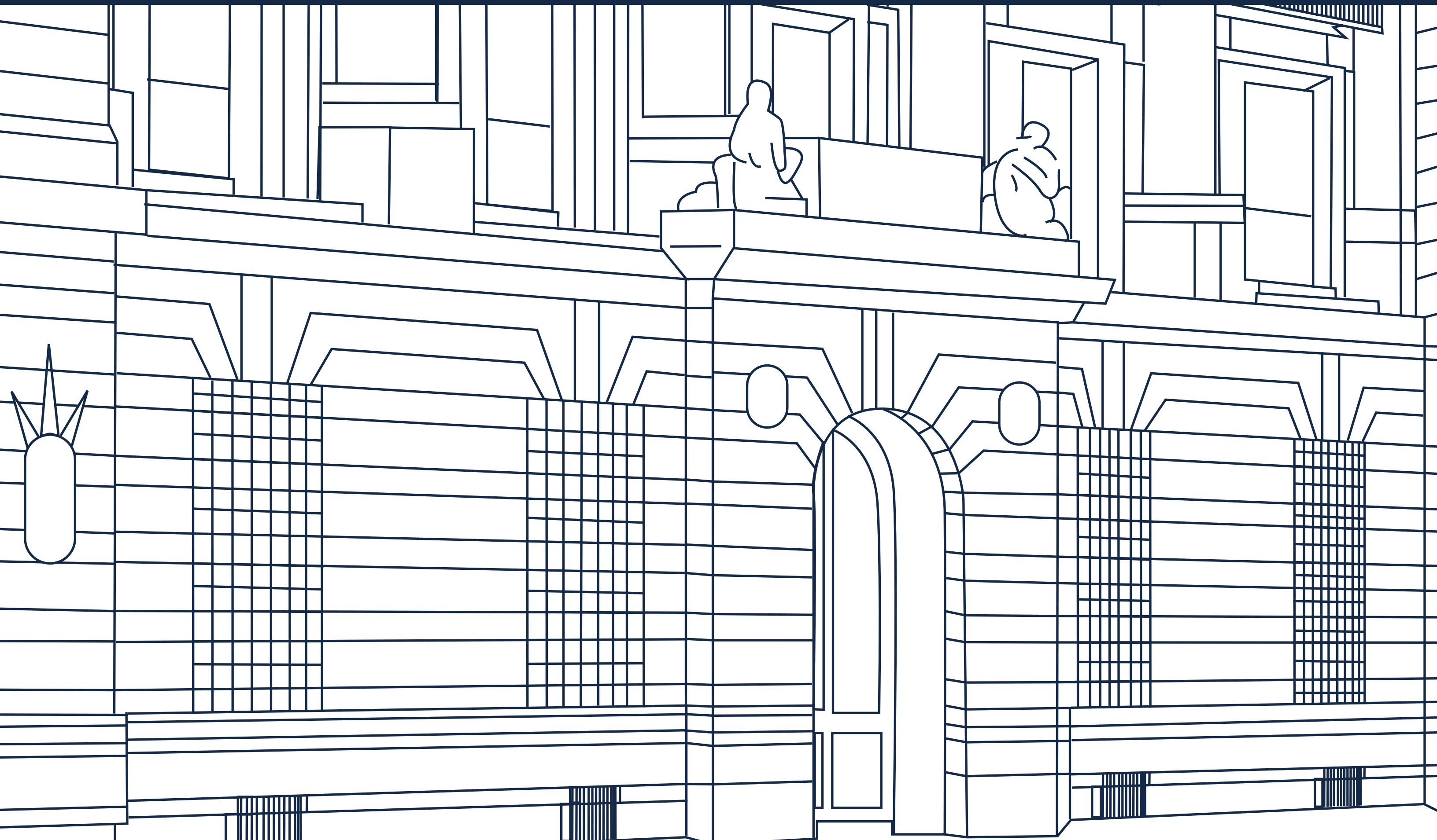


BANCO DE MÉXICO®

Minutes number 96

Meeting of Banco de México's Governing Board on the occasion of the monetary policy decision announced on November 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: November 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.
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 a moderate recovery of the global economy is expected during the third quarter. They noted that this is partly due to the reopening of activities in China. Some members mentioned, as an additional factor, the rebound in the US economy. **One** member attributed this rebound to an increase in exports, and pointed out that domestic demand continued to decelerate. **Nevertheless, most members highlighted the weakening of the European economies. Regarding labor markets, they stated that in advanced economies they continued showing strength.** However, **one** member noted a gradual reduction in the tightness of the US labor market, given the slight decrease in the vacancy-to-unemployment ratio and a moderation in the dynamism of non-farm payrolls. **Another** member stated that despite the significant wage increases, households' purchasing power continues to be eroded by high inflation.

Most members mentioned that global growth forecasts for 2023 continued to deteriorate. They highlighted that according to forward-looking indicators, there are signs of disturbances to international trade. Some members added that forward-looking indicators for manufacturing and services show weakness. **One** member argued that the global economic slowdown is the result of global monetary tightening, lower fiscal stimulus, and shocks derived from the conflict in Ukraine. **Some** members pointed out that a slowdown in fixed capital investment in the United States is foreseen. **One** member said that the real estate sector is already showing a significant weakening and noted that personal savings are at their lowest levels since 2015, which in his/her view may suggest a reduction in aggregate demand in the future. **Among the risks to the global economy, most members highlighted those associated with the pandemic, geopolitical tensions, and tighter financial conditions. One** member mentioned that the probability of a global recession increased. **Some** members considered that the balance of risks for world economic activity remains biased to the downside.

All members highlighted that pressures on commodity prices and disruptions in supply chains have shown signs of mitigation. One member pointed out that the above can be observed in indexes that measure supply-chain pressures, in pending orders, in delivery times, in input prices and freight shipments. **Most members noted that in certain economies headline inflation decreased. One** member mentioned that in some countries the inflation peak may have already been observed. **However, most members warned that world inflation remains high and above the central banks' targets. Some** members noted that pressures on core inflation persist. In this regard, **one** member pointed out the divergence across regions. He/she noted that there are economies where domestic inflationary processes have remained isolated from global pressures, some others where inflation continues rising, and others where it has started to decline. He/she considered that, although the declines in headline inflation have not yet passed through to the core component, they are relevant, as the level of headline inflation matters for second-round effects and the persistence of the inflation index components. He/she added that producer price indices, which usually precede core inflation dynamics, have improved in various economies. He/she concluded that, looking ahead, lower inflationary pressures are expected. **Some** members stated that convergence towards the central banks' targets is still anticipated to take place between the end of 2023 and 2024. Nevertheless, **one** member warned that upside risks and uncertainty about the future evolution of global inflation persist.

Most members stated that a large number of central banks continued raising their reference rates, some of them in a smaller-than-expected magnitude. They considered that in some economies it is possible that the pace of upward adjustments will moderate. Some members noted that certain central banks continued making large adjustments to their interest rates. **Some** members pointed out that certain Latin American central banks announced the end of their hiking cycles or are expected to reach it soon. In this context, **one** member reflected on the assessment of risks that central banks are facing: on the one hand, the risk of prematurely halting the tightening process, causing inflation to become more entrenched and more difficult to fight against, and, on the other hand, the risk that an excessive tightening will significantly affect economic activity or generate financial instability. **Most members mentioned that reference rates are expected to remain elevated for an extended period.**

Regarding the Federal Reserve, all members stated that, in its most recent decision, it raised the federal funds rate by 75 basis points. Most members considered that said institution could slow down its pace of adjustments in the near future. Some members stated that it announced that future increases will depend on the accumulated monetary tightening, the lags through which monetary policy operates, and on the evolution of the economy and financial markets. **Some** members added that the chairman of said institution stated that they now foresee a higher terminal rate than previously anticipated. **One** member stated that he also mentioned that they will maintain a restrictive policy stance for a prolonged period. **Another** member added that he pointed out that they will follow a data-dependent approach.

Most members mentioned that interest rates increased around the world and that financial conditions remained tight. Some members highlighted that financial markets continued showing volatility. **One** member noted that those of emerging economies continued registering some deterioration. He/she warned about the risks of a possible excessive monetary tightening and a global recession for international financial markets. **Some** members underlined the deterioration of liquidity conditions in fixed income markets. **Most members noted a certain improvement in stock markets. Some** members mentioned that this was due to better-than-anticipated corporate earnings reports. **One** member stated that an additional factor was the perception that interest rates may have reached their peak levels. **Most members highlighted the strength of the US dollar.** However, **one** member pointed out that it depreciated at the margin. Nonetheless, he /she considered that, in a context of tight global financial conditions, the US dollar's strength could lead to: i) a higher servicing cost for debt denominated in that currency; ii) a higher pass-through of external inflationary pressures; iii) capital outflows from emerging economies due to lower risk appetite; and iv) greater risks to financial stability.

Economic activity in Mexico

Most members highlighted that, according to timely information, the Mexican economy continued recovering during the third quarter. Some members stated that it exhibited a rate of expansion similar to that of the previous two quarters**. Most members pointed out that said rate was higher than expected. Some** members noted that economic activity has practically returned to its pre-pandemic levels.

Most members stated that the three main economic sectors contributed to the recovery. However, they indicated that the recovery continues to be heterogeneous. One member noted that approximately 18% of sector activity is still more than 5% behind its pre-pandemic levels. **Some** members warned that the Mexican economy will continue facing an environment of economic weakness and high global uncertainty. **One** member added that the forecast of a moderation in economic activity in the last quarter of the year is maintained, although potentially smaller than previously expected.

On the production side, most members highlighted the favorable performance of the manufacturing sector. One member pointed out that it has been supported by increased automotive production. **Another** member warned that the construction sector has trended downwards in recent months. **Most members noted that tertiary activities continue showing dynamism. One** member stated that this was observed especially in services that are more closely linked to manufacturing activities. He/she added that the sectors more associated with in-person activities exhibited lower dynamism.

On the demand side, most members noted that private consumption showed a reactivation in August. Some members highlighted the boost in consumption of domestic goods and services. As for the determinants of consumption, **some** members mentioned that remittances remain at high levels. **One** member pointed out that they have accumulated 29 months of increases at an annual rate, although they show some signs of deceleration. **Another** member noted that the real wage bill also remains at high levels. In contrast, **some** members stated that the consumer confidence index is below pre-pandemic levels. **Most members mentioned that gross fixed investment has shown weakness. Some** members highlighted the stagnation of investment in construction. However, **some** members noted the improvement in the transportation equipment category. As for external demand, **some** members highlighted the good performance of exports, mainly of the automotive sector.

Most members pointed out that unemployment rates are at low levels. One member mentioned that formal employment has maintained a positive trend. In this context, he/she considered that the labor market continued performing adequately, and **another** member that it continues showing strength. However, **one** member noted that the recovery of this market somewhat stagnated in the third quarter. **Some** members pointed out that indicators such as the labor participation rate are still at levels lower than those observed prior to the pandemic. **One** member indicated that, up to the second quarter of 2022, the employment rate in the informal sector was above 28% and with a slight upward trend. In this regard, **another** member mentioned that there are mixed signals regarding the performance of the labor market.

Most members considered that slack conditions in the economy continued decreasing. One member noted that the output gap estimate is not statistically different from zero. However, **another** member stated that slack conditions still remain wide, given that the GDP of the third quarter of the year is still far below its long-term trend. He/she stated that slack is mainly due to the evolution of investment, as well as consumption, which, despite having surpassed its pre-pandemic levels, continues lagging behind its trend trajectory. **One** member argued that given the problems in measuring potential GDP, the output gap could be smaller than estimated.

Inflation in Mexico

All members highlighted that, in October, headline inflation declined to 8.41%. Most members stated that this was due to a decrease in the non-core component. In this regard, **one** member mentioned that the reduction in headline inflation did not occur for the appropriate reasons. **Some** members pointed out that this decrease was due to the behavior of specific prices. He/she added that just over 40% of CPI items still register annual variations higher than 10%, which suggests generalized pressures. **Some** members stated that, in October, headline inflation was below Banco de México's forecasts. **One** member added that this was also observed with the September figure. **Another** member underlined that inflation has surprised to the downside relative to analysts' expectations. **One** member pointed out that there have been four consecutive fortnights of decreases in annual inflation. He/she noted that in October the annualized monthly rate was slightly above its historical average. He/she added that this indicates that pressures have eased with respect to those observed in the first half of the year. Nevertheless, **another** member considered that headline and core inflation continue to be affected by the accumulated pressures associated with both the pandemic and the military conflict.

All members pointed out that core inflation continued trending upwards, reaching 8.42% in October. Most members highlighted that it has been increasing for 23 months. One member emphasized the historically high levels of inflation reached by this sub-index. **Another** member argued that it still does not show clear signs of having reached a peak. **Some** members mentioned that it continues facing considerable pressures. **One** member stated that the core component excluding processed foods registered a significantly lower and more stable annual inflation than that of the traditional core component.

All members highlighted that food merchandise inflation is the one facing the greatest pressures. One member stated that it has registered double-digit annual variations during the last eight months. **Some** members expressed their concern that it continues increasing and that more than 70% of its items register annualized seasonally adjusted monthly variations higher than 10%. **One** member indicated that non-food merchandise also continues facing pressures. Regarding services prices, **some** members noted that they are responding to an increase in demand due to greater mobility. **One** emphasized that this upward trend is expected to continue for the following months. As an additional factor, **another** member mentioned the higher operating costs. **Most members warned that food**

services prices are being subject to pressures. One member pointed out that among non-tradable goods these are the ones that have increased the most. **Some** members stated that pressures on food merchandise prices have passed-through onto food services prices. **One** member pointed out that these two items account for more than half of the variation in the core component. He/she indicated that significant pressures are also observed in tourism services. **Some** members noted that services inflation decreased at the margin. **One** member pointed out that this was due to a lower variation in telecommunications prices. **Another** member noted that the education and housing components have behaved similarly to what was observed prior to the pandemic.

All members stated that non-core inflation declined. Most members mentioned that this was due to the behavior of L.P. gas prices. Some members noted that, in October, monthly non-core inflation reached historically low levels. **One** member pointed out that pressures on this component have remained low and stable for several months. Nevertheless, **another** member expressed his/her concern that the favorable evolution of this component is attributed mainly to the lower annual price increases of a specific energy item, which are partly explained by a base effect. **Some** members added that agricultural and livestock product prices registered smaller variations at the margin. **One** member warned that their inflation remains at double-digit levels.

All members agreed that some of the shocks that have affected inflation have shown signs of easing and pointed out the lower pressures on supply chains. However, **one** member stated that this has not been reflected in Mexico's core inflation. **Some** members noted the decline in producer price inflation. **One** member highlighted that this reduction was of 300 basis points between June and October. He/she stated that this will eventually help core inflation to start declining. **Another** member pointed out that this decrease was particularly observed in the prices of intermediate goods in the industrial sector, whose annual inflation has accumulated four consecutive declines. He/she stated that in order for the inflationary problem to start to be resolved, external pressures, especially in the United States, must diminish. However, he/she warned that Mexico's price pressures will not ease immediately due to growing domestic pressures, such as those derived from minimum wage increases. He/she mentioned that there is also an inertia of increases in the prices of non-tradable goods that will not be easy to control. He/she considered that there are some mixed signals of lower external pressures and increasing domestic pressures. **One** member stated that there are additional cost pressures stemming from labor markets, associated with the dynamism of employment and the high rate of growth of nominal wages, which is inconsistent with the inflation target. **Another** member added that commodity prices still remain at high levels and are exerting pressure on various production costs.

Most members highlighted that short-term inflation expectations increased. However, **one** member mentioned that those for the next 12 months decreased slightly in October. **All members noted the upward adjustment in inflation expectations for the medium term. Some** members pointed out that their dispersion has increased. **One** member stated that this indicates that there is progressively less consensus regarding a certain level. He/she pointed out that, in contrast to previous episodes, where the increase in short-term expectations did not pass-through onto longer-term ones, inflation expectations for the next four years have now reached the upper bound of the variability range. He/she mentioned that it would seem that inflationary expectations are more sensitive to upside inflation surprises. He/she pointed out that the above could be signs of a greater risk of unanchoring of inflation expectations. **As for long-term expectations, most members noted that they remained stable, although above the target. One** member stated that, for the core component, they increased between August and October. **Some** members noted that the distribution of longer-term expectations has become biased to values higher than the median. **Regarding expectations drawn from market instruments, all members stated that they continued increasing. One** noted that the higher breakeven inflation rate indicates that there is great uncertainty about the future of inflation. **Another** member mentioned that long-term inflation expectations lay at 3.25%.

Most members highlighted that for the short term, forecasts for headline inflation were revised marginally downwards, while those for core inflation were revised slightly upwards. Some members pointed out that for the first time in several months the forecast for headline inflation was not adjusted upwards. **One** member stated that this indicates that the balance of risks is starting to be more consistent with central forecasts. However, **some** members remarked that inflation has not yet reached an inflection point. Meanwhile, **some** members considered it is likely to have reached its inflection point during the third quarter of the year.

They foresaw that a downward trajectory of inflation is likely to materialize in subsequent months. **One** member noted that core inflation is expected to continue rising over the next months, reaching a peak in the fourth quarter of the year.

With respect to upward risks to inflation, most members highlighted the persistence of the core component at high levels. One member mentioned the persisting risk that the pandemic and the geopolitical conflict will continue exerting pressure on prices of different goods and services. He/she added that episodes of exchange rate depreciation, caused by possible bouts of volatility in international financial markets, cannot be ruled out. **Another** member stated that, given that the output gap could be smaller than estimated, demand-related pressures are likely to be present.

Most members warned that greater pressures could be observed, given the increase in costs associated with hiring conditions and wage revisions. One member pointed out that revisions to contractual wages remain high, especially in the private sector, as they attained 8.2% in September, as compared to 4.5% registered in the public sector ones. He/she highlighted that said increases were higher than those observed in August, in a context in which the global labor productivity indicator has trended downwards for eight consecutive quarters. He/she stated that increases to the minimum wage expected for the next two years, lower labor productivity, and the high inflation levels foreseen for 2023 would pose an even greater challenge for tackling inflation. **Another** member pointed out that, in his/her opinion, there are no widespread wage-related pressures, and that they are rather circumscribed and reflect the heterogeneous economic recovery. He/she considered that, so far, no wage-price spiral is observed, given that, contrary to historical records, growth of real wages has currently been lower than price increases. He/she pointed out that some studies of international institutions suggest that wage-price dynamics, such as the currently observed, have not necessarily led to a wage-price spiral, but rather to the recovery of real wages once inflation starts to decline. He/she added that the largest wage increases are currently observed in sectors where salaries are more linked to the minimum wage, therefore said increments correspond to factors unrelated to the formation of inflation expectations. He/she concluded that, although there is no conclusive evidence that this type of pressures are being faced, it is important to continue monitoring the dynamics between inflation and wages.

Regarding risks to the downside, **one** member mentioned the lower inflationary pressures that could derive from a greater-than-anticipated deceleration of the global economy and from the resolution of disruptions in production and distribution chains. **Most members pointed out that the balance of risks for the foreseen inflation trajectory remains biased to the upside. One** member mentioned that the balance remains considerably biased to the upside, as no change in trend has occurred. **Another** member noted that both observed and expected inflation determinants have started to be distributed closer around Banco de México's central scenario.

Macrofinancial environment

Most members highlighted that the Mexican peso has appreciated and showed more resilience than other currencies. They emphasized its orderly behavior in an uncertain and volatile international environment, characterized by greater risk aversion. They pointed out that the resilience of the Mexican peso has been associated with the country's sound macroeconomic fundamentals. Some members mentioned as additional factors the relatively high levels of the volatility-adjusted interest rate spread between Mexico and the United States. **One** member stated that this spread reflects the monetary policy actions implemented by Banco de México. He/she added that the above does not mean that there is a target for the exchange rate level. He/she pointed out that an economy with free capital mobility cannot simultaneously have an exchange rate target and an independent monetary policy. He/she emphasized that, by following a monetary policy focused on price stability, operating under a flexible exchange rate regime, the exchange rate must continue to work as a shock absorber for the economy.

Most members pointed out that short-term interest rates of government bonds increased, while medium- and long-term rates registered limited adjustments. One member stated that the short-term increases respond to the reference rate's hiking cycle, while medium- and long-term rates showed some volatility, in line with the dynamics of rates at the global level. **Another** member mentioned that the yield curve of real interest rate instruments registered significant increases, especially for short-term nodes. He/she highlighted that Mexico's financial conditions index continues reflecting tightness, due to persistent pressures in the debt market, sovereign risk, inflation, and economic growth. **One** member added that default risk premia decreased, in contrast to what was observed in other emerging economies. **Some** members highlighted the stock market gains, generated by the positive quarterly data reported by firms.

Regarding commercial bank credit to firms, **one** member pointed out that it continued recovering gradually during the third quarter, with an improvement in firms' demand, although lending conditions remained tight. He/she added that consumer credit continues with a positive trend in real terms, although a slower pace is anticipated in view of the foreseen economic slowdown. He/she underlined that banks' loan delinquency rates have been declining.

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 also considered the increasing challenges for monetary policy stemming from the ongoing tightening of global financial conditions, the environment of significant 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 75 basis points to 10.00%. The Governing Board members added 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.

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. In its next meetings, the Board will assess the magnitude of upward adjustments to the reference rate based on the prevailing conditions.

One member stated that, since the last monetary policy meeting, the Mexican economy has continued facing a complex and uncertain environment, characterized by deep, generalized, and persistent inflationary pressures, as well as by tight monetary and financial conditions at the global level. He/she highlighted that, given the deep and persistent inflationary shocks, a tight monetary policy stance is required in order to contain inflation and to help it begin decreasing towards the central bank's target. He/she pointed out that, in terms of the absolute monetary policy stance, a 75 basis-point increase in the reference rate would allow the ex-ante real interest rate to reach a level that is unequivocally in restrictive territory. He/she noted that it would send a clear message regarding the central bank's commitment to fulfill its primary mandate of price stability. He/she added that, since core inflation has not started to decrease yet and the balance of risks for inflation is biased to the upside, monetary policy needs to be tightened further than it already has been. In terms of the relative monetary policy stance, he/she pointed out that a 75 basis-point increase would maintain the reference rate spread between Mexico and the United States at 600 basis points. In this regard, he/she stated that Mexico is a small and open economy with a high level of financial and commercial integration with the United States and, therefore, it is normal for the Federal Reserve's actions to have repercussions on the Mexican economy. In this regard, he/she stated that the central bank conducts its monetary policy considering all inflation determinants and its expectations, including the actions taken by the Federal Reserve. He/she argued that both Mexico and the United States face significant inflationary pressures and are undergoing a cycle of monetary tightening, which does not imply that Banco de México mechanically follows the steps taken by the Federal Reserve. He/she considered that, although increases in long-term inflation expectations have been moderate, it is important to monitor that these do not continue being revised upwards, as it would make it difficult to achieve the primary mandate. Looking ahead, he/she considered that it would be important to further increase the reference rate in order to maintain inflation expectations anchored and to enable the reduction of inflation to its target. He/she added that the magnitude of future upward adjustments to the reference rate will depend on the prevailing economic conditions, considering the increases that have already been implemented in this hiking cycle and that the monetary policy stance is already in restrictive territory.

Another member stated that the upward trend in the core sub-index and the increasing pressures it faces make the monetary policy outlook more complex. He/she mentioned that, despite the significant adjustments in the monetary policy stance, no inflection point has been observed in the inflation trend yet. He/she argued that, on the one hand, there are high and persistent inflation levels with a balance of risks biased to the upside, and, on the other hand, economic activity registers more dynamism than expected, with an output gap that continues narrowing. He/she added that inflationary pressures related to the labor market are observed as well. He/she underlined that all of the above occurs in an international context that has become significantly more adverse. With regard to the deterioration of inflation expectations, he/she expressed concern that they are above the inflation target, given that this can pose risks to Banco de México's credibility. He/she considered that it is essential to communicate that the reference rate will continue increasing and that the magnitude of the upward adjustments will be determined based on available information, in order to achieve the convergence of inflation to its target. He/she stated that this would not limit the room for maneuver in the next monetary policy decisions, and could contribute to monetary policy effectiveness and, therefore, to minimize the disinflationary adjustment costs. He/she argued that sending a timely, clear and forceful signal is the only path to reducing the risk of an unanchoring of inflation expectations and to prevent the inertia of the inflationary process from becoming entrenched. He/she cautioned that, if this type of scenario were to materialize, it would be extremely costly in the medium and long terms. He/she expressed that all of the above more than ever requires adherence to the primary mandate and doing what is needed to enable the convergence of inflation to its target in the foreseen time frame, and to mitigate the deterioration of the price formation process and the upward revisions in expectations. He/she added that easing the conditions will not be possible until inflation starts to follow a clear and sustained downward trajectory and expectations return to levels close to the 3% target. He/she highlighted that, based on available information, it will be necessary to maintain a restrictive monetary policy stance throughout the planning horizon, which, in his/her opinion, should be communicated explicitly.

One member considered it important to reduce the pace of upward adjustments given the balance of risks associated with monetary policy decisions, and to signal that the terminal interest rate level may soon be reached. He/she estimated that the recently observed strength of the Mexican peso provides an opportunity to do so. He/she expressed that, on the one hand, there is a risk that the implemented monetary tightening is insufficient, which would lead to a more persistent inflationary process that would be costly to revert, and, on the other hand, there is a risk of implementing an excessive tightening, which would affect financial and macroeconomic stability. He/she added that a high financial cost can affect firms, financial institutions and governments with high leverage, and would deteriorate the economic and employment growth outlook, which could increase risk premia. In this regard, he/she noted that different institutions have warned about the risks associated with an excessive tightening of global financial conditions. He/she cautioned that, considering the increases that have been implemented, the risk of an excessive tightening has increased, given that: i) the ex-ante real interest rate, at 4%, is in a clearly restrictive territory; and ii) if an ex-ante real interest rate between 5 and 5.5% were to be attained, it would be well above the estimated neutral interest rate, which would affect consumption, investment and credit. In contrast, he/she considered that the risk of an insufficient tightening has diminished, as a result of the reduction in different inflationary pressures worldwide, the recent decrease in producer price inflation, and the interest rate increases implemented during this cycle. He/she argued that, considering the described disjunctive, although the hiking cycle has to continue, it is necessary to reduce the pace of adjustment, calibrate adequately the next policy decisions, and lower the probability of the described risks materializing. He/she added that, even if the pace of upward adjustments is reduced, it could be possible to shorten or lengthen the cycle, if necessary. However, in his/her opinion, maintaining the current pace would considerably increase the risk of an excessive tightening, with a final interest rate that would be too high. He/she added that this decision would signal that the end of the cycle is still distant, which could negatively affect inflation expectations. He/she stated that monetary policy operates with a lag, and thus its effects will be more evident over the following months. Therefore, he/she considered that the upward cycle should end even before a significant reduction in inflation is observed. He/she argued that, to the extent that the central bank communicates that the policy stance is now restrictive enough, inflation expectations should begin to decrease, leading to additional increases in the ex-ante real interest rate and to a greater tightening of financial conditions.

Another member considered it necessary to continue consolidating a restrictive monetary policy, at the same rate as in the previous decision, in view of: i) the upward trend in core inflation; ii) the deterioration of inflation expectations; iii) a balance of risks for inflation that is considerably biased to the upside; and iv) an inflation forecast that anticipates a distant convergence to the target. He/she argued that reducing the pace of upward adjustments should only be considered if the inflationary outlook improves, specifically for its core component. He/she mentioned that the economy's cyclical conditions do not justify relaxing the efforts to control inflation. He/she considered the deterioration of inflation expectations worrying, given that it suggests their possible unanchoring, which would weaken the main mechanism of monetary policy transmission. He/she stated that further increases in inflation expectations require greater efforts in adjusting the ex-ante real interest rate. He/she mentioned that a level of 6% or higher for said interest rate would be desirable as its final level, conditional on the evolution of data, particularly long-term inflation expectations. He/she pointed out that, to determine the final interest rate, previous monetary cycles should not be taken as a reference, as the inflation level is currently higher and its dynamics are more complex. He/she mentioned that the final interest rate should be determined with caution, as it could be the reference that would prevail over a long period of time. He/she stated that the interest rate spread should be maintained at least at 600 basis points with respect to the United States, and thus the adjustments to the federal funds rate must continue to be the floor. He/she argued that this is a well-founded decision and not an automatic reaction. He/she highlighted that said spread is justified, not by the behavior of economic cycles of México and the United States, which do not coincide, but by the synchronization of the inflationary cycles across both countries, characterized by a significant upward trend of the core component. He/she added that it will only be possible to decouple from the Federal Reserve when the inflationary dynamics diverge or when there is certainty regarding the Federal Reserve's final interest rate. He/she added that a high spread would help to address: i) the increasing external uncertainty; ii) the risk of recession; iii) the tightening of global financial conditions; iv) the risk of an idiosyncratic shock derived from trade negotiations with the United States; and v) external inflationary pressures, which have been mitigated by the favorable performance of the Mexican peso. He/she pointed out that the inflationary outlook reveals mixed signals, and for said reason it is important to have clarity as to how these will be incorporated in the reaction function and in the monetary cycle outlook. He/she added that the forward guidance should be as explicit as possible, and should be carefully communicated and emphasize that this does not imply a commitment. He/she stated that, considering the available information, it should be communicated that the upward cycle has not ended yet, although there is the possibility of reducing the pace of adjustment. He/she warned that when the interest rate reaches its final point, it will remain at that level for some time, until inflation begins following a clear downward trend and the balance of risks improves. He/she pointed out that communicating this forward guidance message decisively would reinforce the central bank's credibility.

One member considered it necessary to continue tightening monetary policy for the following reasons: i) headline inflation remains high and its convergence to the target poses significant challenges; ii) core inflation maintains an upward trend and must be contained to allow headline inflation to converge to its target; iii) inflation expectations have continued to deteriorate, which has made it difficult for the real interest rate to increase proportionally to the implemented nominal interest rate adjustments; and iv) it is necessary to consolidate a more equilibrated balance of risks for inflation. He/she mentioned that a 75 basis-point increase would prevent the inflationary process from becoming entrenched and from affecting the price formation process in the medium term. In this regard, he/she noted that the recent increases in the reference rate have been greater than those observed in previous upward cycles, in both nominal and real terms. He/she indicated that, despite the shocks that have been observed, this has allowed the ex-ante real interest rate to achieve clearly restrictive levels and the nominal rate to reach levels above both observed and expected inflation, which will contribute to the process of convergence of inflation. He/she added that monetary conditions that affect the Mexican economy via the real interest rate and the real exchange rate overall show greater astringency as compared to other similar economies, which would also suggest that the monetary policy stance is consistent with the convergence of inflation to its target. As to the relative monetary policy stance, he/she underlined that a synchronization of the monetary cycles between Mexico and the United States is conditional to the type of shocks being confronted, and thus is not mechanical, nor and end in and of itself. Looking ahead, he/she considered it important to monitor the evolution of the cyclical conditions of both economies. As for the next monetary policy decisions, he/she sustained that, given the high uncertainty regarding the inflationary shocks, it is necessary to maintain the required flexibility in each decision. Therefore, he/she argued that, at this moment, rather than providing a specific guide about the terminal level of the rate, a monetary policy stance that is consistent with a decrease in inflationary pressures, with an improvement in inflation expectations, and with inflation's convergence, must be consolidated. He/she pointed out that these elements will be key to determine the adequate absolute, and consequently, relative, monetary policy stances.

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 also considered the increasing challenges for monetary policy stemming from the ongoing tightening of global financial conditions, the environment of significant 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 75 basis points to 10.00%. With this action, the monetary policy stance adjusts to the trajectory required for inflation to converge to its 3% target within the forecast horizon.

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. In its next meetings, the Board will assess the magnitude of the upward adjustments to the reference rate 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 75 basis points to 10.00%. Gerardo Esquivel voted in favor of increasing the target for the overnight interbank interest rate by 50 basis points to 9.75%.

5. DISSENTING OPINION / VOTE

Vote. Gerardo Esquivel.

I consider it necessary to start reducing the pace of the hiking cycle. This would signal that we are nearing the cycle's terminal rate and would also be consistent with the current balance of risks. We are facing two possible risks: an insufficient tightening (which could translate into persistent, costly-to-revert inflation) and an excessive tightening that would affect macroeconomic and financial stability. As the reference rate has been raised, the former risk has decreased, while the latter one has increased. The former, because external inflationary pressures have started to subside and because the ex-ante real interest rate already exceeds its neutral level considerably. It does not seem necessary to tighten much more. What is required is to allow the restrictive monetary policy stance that has been attained, and which works with a lagged effect, to continue operating. It is important to point out that the proposed increase would imply a decoupling from the Federal Reserve and a reduction of the interest rate spread with the United States. It is argued that, in order to prevent foreign exchange and financial instability, the abovementioned must be avoided. However, recently, the Mexican peso has appreciated significantly against the US dollar and other currencies. This represents an ideal opportunity to implement the referred adjustment with a minimal risk.

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

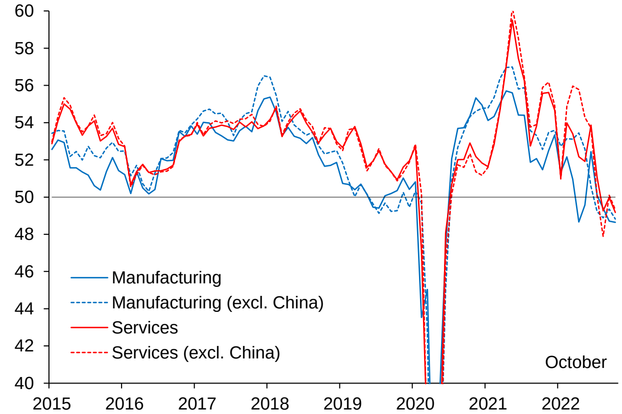
A.1.1. World economic activity

During the third quarter of 2022, global economic activity was heterogeneous across countries. Available indicators anticipate a moderate expansion in that quarter with respect to the previous one, mainly reflecting the reopening of economic activity in China and a rebound in US growth. Other economies, nevertheless, are estimated to show a moderation in their pace of activity. In addition, prospects for the global economy in 2023 have continued to deteriorate. Forward-looking indicators like the Purchasing Managers' Indices point to a deterioration in the short term in various sectors of global economic activity (Chart 1), as well as a slower pace of world trade. The latter, in an environment of tighter global financial conditions to contain the high levels of inflation, as well as negative economic effects in different regions and sectors derived from Russia's invasion of Ukraine.

World inflation remains high and risks to the upside persist, although pressures on commodity prices and supply chain disruptions have shown signs of easing. Core inflation, however, continued rising in most cases, reflecting price increases across a broad range of items. Financial conditions remained tight. In this environment, a large number of central banks continued raising their reference rates. Some of them, like those of Australia, Canada and Norway, announced raises that were lower than anticipated and lower than in previous policy decisions, although they foresee that it is likely that further upward adjustments could be necessary. Reference rates are thus expected to remain at high levels for a prolonged period.

Among the most important risks to global economic activity growth are those associated with the COVID-19 pandemic, prolonged inflationary pressures, worsening geopolitical tensions, and tighter monetary and financial conditions.

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



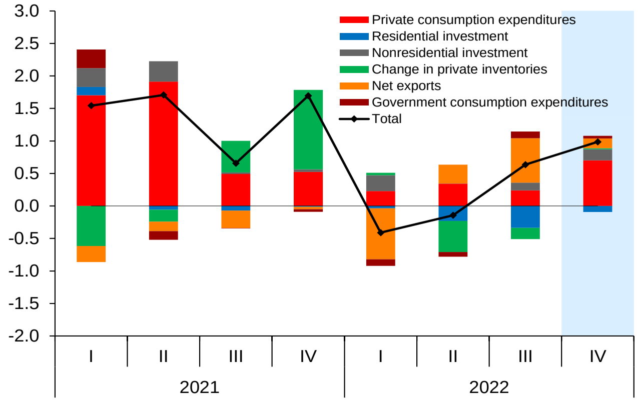
s. a. / Seasonally adjusted figures.
Source: IHS Markit.

In the United States, Gross Domestic Product (GDP) rebounded in the third quarter of 2022, growing at a seasonally adjusted quarterly rate of 0.6%, after having contracted 0.4% and 0.1% in the first and second quarters of the year, respectively.[1] This rebound was driven mainly by net exports. Personal consumption continued registering a positive contribution, although it lost dynamism due to the tightening of financial conditions and the decline in real wages. Residential and structural investment and changes in inventories contributed negatively to GDP growth (Chart 2).

US industrial production expanded 0.4% at a seasonally adjusted monthly rate in September, after having contracted 0.1% in August. This rebound reflected growth in mining and manufacturing production during the month. However, Purchasing Managers' Indices suggest that, looking ahead, the manufacturing sector will be constrained by a slowdown in domestic and external demand, as well as by a deterioration in business confidence.

[1] Expressed as a seasonally adjusted annualized quarterly rate, the change in US GDP in the third quarter was 2.6%, -0.6% in the second quarter, and -1.6% in the first quarter.

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 of November 9, 2022.
Source: BEA and GDPNow (Federal Reserve Bank of Atlanta).

The US labor market continued showing signs of tightening. Non-farm payrolls registered a monthly average creation of 288 thousand new jobs during September and October. The most notable increases were in leisure and hospitality, health and professional services. The unemployment rate remained at low levels, standing at 3.7% in October, while the vacancy rate remained high. Wage growth has slowed slightly, although it remains at elevated levels.

In the euro area, GDP growth was 0.2% at a seasonally adjusted quarterly rate, after having registered 0.8% growth in the second quarter of 2022.[2] The slowdown in economic activity reflected the tightening of financial conditions in the region and the effects of the military conflict in Ukraine on gas supply and inflation. The latter has resulted in lower household purchasing power, higher costs for firms, and in a deterioration of consumer and business confidence. The unemployment rate declined from 6.7% in August to 6.6% in September. The Purchasing Managers' Indices point to a deterioration in the short term in both manufacturing and services activity due to the aforementioned factors.

The main emerging economies performed with a high degree of heterogeneity that was more evident in Emerging Europe and Latin America. These economies have been affected differently by tightening financial conditions, the COVID-19 pandemic, the military conflict between Russia and Ukraine, and the changes in commodity prices. In the case of China, during the third quarter, GDP growth showed some improvement as compared to the previous quarter, following the lifting of mobility restrictions to contain COVID-19 infections in that country. However, other indicators, such as the Purchasing Managers' Indexes point to a weakening of said economy in an environment where the "zero COVID-19" policy continues and the deterioration of the real estate sector persists.[3]

Since México’s previous monetary policy decision, international commodity prices registered mixed results, with episodes of volatility. Oil prices rose at the beginning of October with the announcement of the agreement between the Organization of Petroleum Exporting Countries and other producers to significantly reduce oil production. Subsequently, prices trended downwards temporarily due to risks of a global economic recession and its implications for energy demand. Recently, this trend was partially reversed due to the uncertainty surrounding oil supply worldwide in the coming months. Meanwhile, natural gas reference prices in Europe decreased significantly as warmer-than-expected weather contributed to a decline in demand. Imports of liquefied natural gas have allowed to store higher levels of said fuel. In the United States, there was also a sharp decline in natural gas prices as increased production has allowed inventories to be refilled. Industrial metal prices registered bouts of volatility during the period. This was due to concerns about the slowdown in world economic activity and the recent upsurge in cases of COVID-19 in China. The prices of most grains remained relatively stable. Wheat prices trended downwards due to concerns about a slowdown in world economic activity and its effect on the demand for grains. At the end of October, uncertainty regarding compliance with the Black Sea security corridor agreement on grain exports has generated volatility.

A.1.2. Monetary policy and international financial markets

World inflation remained high and at levels unseen in decades in some of the world's major economies. This has continued to reflect price pressures in a wide range of items, as a result of the ongoing imbalance between the recovery of demand and supply in different markets. It has also responded to the high

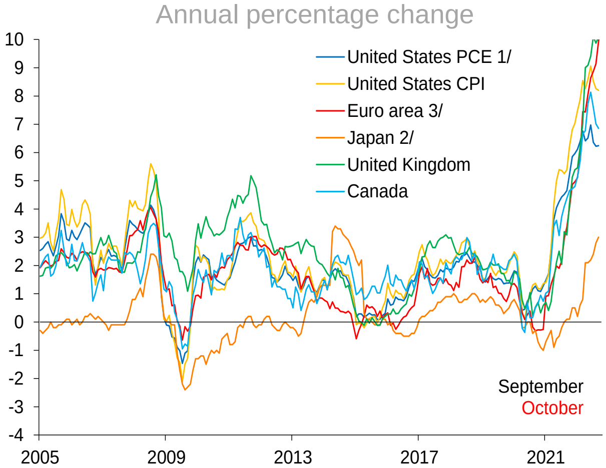
[2] Expressed as a seasonally adjusted annualized quarterly rate, the change in euro area GDP was 0.7% in the third quarter of 2022 and 3.3% in the second quarter.

[3] Expressed as an annual rate, the change in China's GDP was 0.4% in the second quarter of 2022 and 3.9% in the third quarter.

world reference prices of food and energy. Pressures on commodity prices and disruptions in global supply chains, on the other hand, have shown signs of easing.

In some of the major advanced economies, the recent moderation in energy inflation has been reflected in a decline in headline inflation. However, in most of these economies, headline inflation remains significantly above their central banks' targets, while core inflation has continued rising (Chart 3). In the United States, headline inflation as measured by the consumer price index decreased slightly from an annual rate of 8.3% in August to 8.2% in September, although it still remains at a high level. This decline mainly reflected a reduction in energy and food inflation. Meanwhile, core inflation rose from 6.3 to 6.6%, reaching its highest level since 1982. Inflation measured by the personal consumption expenditure deflator remained unchanged at 6.2% annually between August and September, while inflation of its core component rose from 4.9 to 5.1% during the same period. Analysts' short-term inflation expectations remain at high levels, while for most of the major advanced economies, longer-term inflation expectations derived from financial instruments registered limited movements.

Chart 3
Selected Advanced Economies: Headline Inflation
Annual percentage change

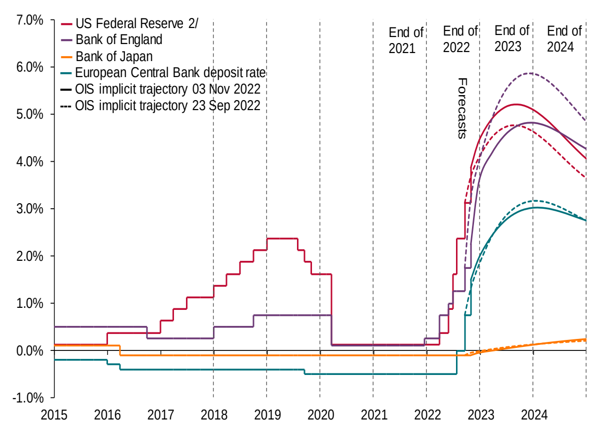


1/ The personal consumption expenditure deflator is used.
2/ Excludes fresh food. This series does not exclude the effect of the increase in the consumption tax in May 2014 and October 2019 nor the effect of the free daycare and preschool program in October 2019.
3/ Preliminary figures up to October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

In a large number of the main emerging economies, headline inflation continued increasing and remained significantly above their central banks' targets. However, in recent readings, inflation declined in some economies. The rise in inflation in some countries continues to be explained, in general, by higher energy and food prices, as well as by higher core inflation. In some economies, inflation has also been affected by the depreciation of their currencies. Although in some cases headline inflation has been reduced due to moderation in energy prices, it remains at elevated levels.

In the environment described above, the central banks of most of the major advanced economies have continued raising their reference rates. Some of them, such as those of Australia, Canada and Norway, recently announced interest rate hikes that were lower than expected and below those registered in previous decisions. They also anticipated that additional hikes are likely to be required. Regarding their asset purchase programs, most central banks in advanced economies continued to gradually reduce their securities holdings. Looking ahead, expectations drawn from financial instruments foresee that their reference rates will remain at high levels for an extended period (Chart 4).

Chart 4
Reference Rates and Trajectories Implied in OIS Curves[1/]
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 (3.00% - 3.25%) is used.
Source: Banco de México with data from Bloomberg,

Among the recent monetary policy decisions of the main advanced economies' central banks, the following stand out:

i) At its November meeting, the Federal Reserve raised the target range for the federal funds rate by 75 bps for the fourth consecutive time, placing it between 3.75 and 4.00%. The Federal Open Market Committee (FOMC) stated that, in determining the pace of future increases in 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 Committee anticipated that successive increases in the target range will be appropriate in order to achieve a monetary policy stance that is sufficiently restrictive to return inflation to 2% over time. However, the chairman of that institution pointed out that, as the interest rate approaches a level that is sufficiently restrictive to bring inflation towards its target, it will be appropriate to slow down the pace of increases. In this regard, he added that the time to slow the pace of hikes may come as soon as the next meeting or the next one after that. He mentioned that, while there is significant uncertainty as to which interest rate level will be sufficiently restrictive, there is still some way to go, and that the data available since their previous meeting suggested that the rate level the Committee may reach will be higher than previously expected. Regarding its balance sheet, the Committee reiterated that it will continue to reduce its securities holdings. In this context, the expected trajectory for the federal funds rate implicit in financial instruments registered an upward adjustment during the reference period, reflecting a reference interest rate level of around 4.4 and 5.0% for the end of 2022 and 2023, respectively.

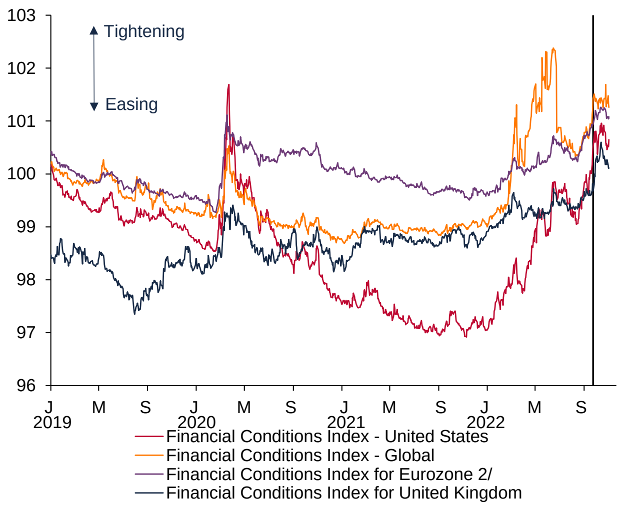
ii) At its October meeting, the European Central Bank increased its refinancing, key lending and key deposit rates by 75 basis points to 2.00, 2.25 and 1.50%, respectively. It indicated that the Governing Council has made substantial progress in withdrawing its monetary stimulus and reiterated that it expects to raise its reference rates further. It highlighted that it will continue with its approach of taking decisions meeting by meeting, that is, without following a predetermined path. As to its Asset Purchase Program (APP), the president of that institution pointed out that in December they will decide on the key principles for its reduction. In addition, the Governing Council decided to amend the terms and conditions of the third series of targeted longer-term refinancing operations (TLTRO III) to be consistent with the process of monetary policy normalization and to strengthen the transmission of increases in policy rates to banks' lending conditions. Finally, it also decided to change the remuneration of credit institutions' minimum reserves from the interest rate on the ECB's main refinancing operations to the interest rate on the deposit facility in order to better align this remuneration with money market rates.

iii) In its November meeting, the Bank of England increased its reference interest rate by 75 basis points to 3.00%. It indicated that, although it is possible that additional increases may be required, they will reach a lower peak level than that expected by financial markets. As for its balance sheet, it began the sale of UK government bonds from its Asset Purchase Facility (APF), after having delayed it in September. Prior to that meeting, it made temporary purchases of nominal and inflation-linked long-term government bonds that ended in mid-October and introduced a temporary expanded collateral repo facility (TECRF) that would end on November 10, among other measures. This was in response to the volatility in financial markets caused by the announcement of a package of economic measures that generated uncertainty about their impact on the country's public balance sheet.

In the main emerging economies, most central banks also continued raising their reference interest rates. Meanwhile, some central banks left their interest rates unchanged in their most recent decisions. Such was the case of Poland, the Czech Republic, Ukraine, Hungary and Brazil. Several have suggested that they will keep their interest rates at current levels for an extended period in order to ensure the convergence of inflation to their targets. In the case of Brazil, they added that they will not hesitate to resume the tightening cycle if the disinflationary process does not evolve as expected. In contrast, Turkey's central bank made an additional interest rate cut of 150 basis points.

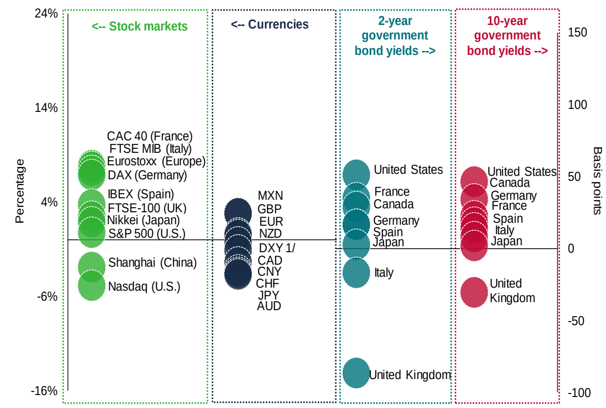
In the environment described above, since the last monetary policy decision in Mexico international financial markets registered lower risk aversion, although financial conditions remained tight (Chart 5). In particular, the equity markets of most of the major advanced and emerging economies showed a recovery after having declined between August and September. In foreign exchange markets, although the US dollar has shown a correction in recent weeks, after the strong appreciation of previous months, it has remained at high levels against most of the currencies of advanced and emerging economies. Meanwhile, the yen continued weakening, in an environment of greater divergence of the Bank of Japan's monetary policy with respect to the rest of the advanced economies. Interest rates on both short- and long-term government bonds in most major advanced economies registered volatility (Chart 6). In the United Kingdom, government bond rates decreased following the new government's announcement of the suspension of certain fiscal measures proposed by the previous government. In emerging economies, interest rates exhibited a heterogeneous behavior, with recent decreases in some cases (Chart 7). In this context, since Mexico's previous monetary policy decision, emerging economies registered capital outflows, particularly from fixed-income 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 September 23, 2022 to November 3, 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 from September 26, 2022 to November 4, 2022
Percent, basis points

Region	Country	Currencies	Equity markets	2-year interest rates	10-year interest rates	CDS
Latin America	Mexico	4.08%	12.07%	-1	4	-34
	Brazil	6.20%	7.13%	-8	-25	-27
	Chile	5.97%	0.34%	-8	-41	-2
	Colombia	-11.69%	9.23%	127	166	51
	Peru	-0.97%	12.40%	54	-23	-2
Emerging Europe	Russia	-6.43%	11.51%	147	185	N.D.
	Poland	3.52%	10.48%	144	147	-5
	Turkey	-0.92%	28.77%	89	16	-149
	Czech Republic	2.96%	5.84%	28	55	12
	Hungary	3.38%	9.77%	60	97	42
Asia	China	-1.01%	0.64%	0	0	0
	Malaysia	-3.14%	1.79%	3	-3	-8
	India	-0.99%	6.66%	12	11	-3
	Philippines	-0.12%	-1.18%	34	15	-13
	Thailand	0.82%	0.31%	-4	-2	2
	Indonesia	-4.03%	-1.15%	121	9	-18
Africa	South Africa	-0.16%	6.83%	-7	-15	-33

Note: An upward adjustment indicates currency appreciation. Interest rates correspond to swap rates at th3 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.

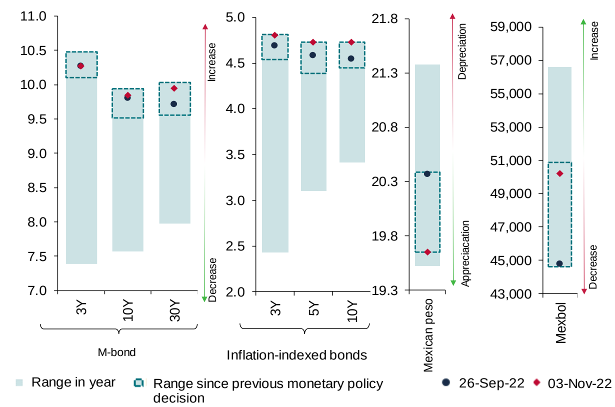
A.2. Current situation of the Mexican economy

A.2.1. Mexican markets

Regarding domestic markets, in the international context described above, since Mexico's previous monetary policy decision the Mexican peso appreciated against the dollar, while short-term interest rates increased and medium- and long-term ones registered limited adjustments (Chart 8). The above took place in an environment involving some episodes of volatility in which an atmosphere of caution prevails due to uncertainty related to the evolution of inflation and the future actions of central banks, particularly the Federal Reserve.

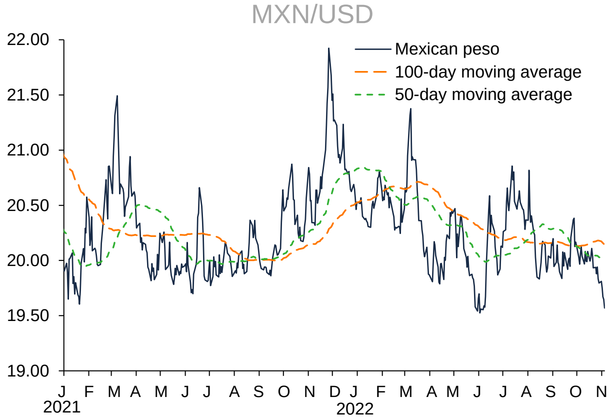
The Mexican peso fluctuated between 19.46 and 20.38 pesos per dollar, ending the reference period since Mexico's previous monetary policy decision with an appreciation of 4.08% and showing greater resilience than other currencies (Chart 9). This occurred in a context in which both realized and prospective trading conditions improved.

Chart 8
Mexican Markets' Performance
Percent, MXN/USD and index



Source: Prepared by Banco de México.

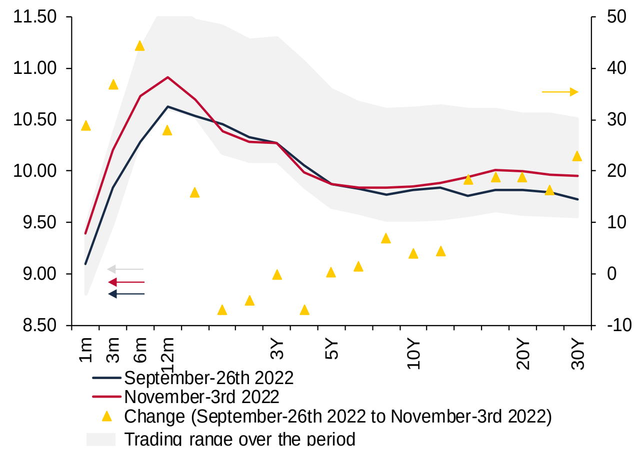
Chart 9
Mexican Peso Exchange Rate
MXN/USD



Source: Prepared by Banco de México.

Since Mexico's previous monetary policy decision, interest rates on government securities registered mixed results (Chart 10), with increases of up to 27 basis points in the short term and mixed results in the medium- and long-term nodes of the yield curve. The yield curve for real interest rate instruments registered increases of 86 basis points in the one-year node and of between 11 and 19 basis points in the rest of the curve. Breakeven inflation implicit in the spreads between nominal and real interest rates of market instruments registered differentiated movements, with decreases of up to 12 basis points in the short and medium term and increases of up to 5 basis points in the long term (Chart 11). These movements took place in an environment in which trading conditions improved with respect to the previous period.

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



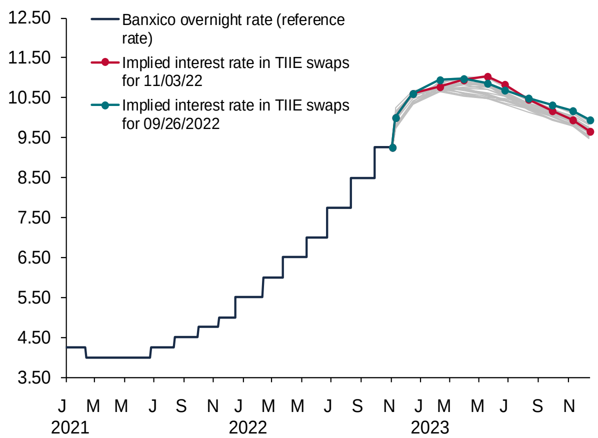
Source: PIP.

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

Source: PIP.

Regarding expectations for the monetary policy reference rate, information implicit in the interest rate swap curve incorporates an increase of 75 basis points for the November decision, while for the end of 2022 it points to a rate close to 10.62% (Chart 12). Most analysts surveyed by Citibanamex anticipate that the reference rate will be raised 75 basis points in the November decision, while for the end of 2022 they anticipate a rate of 10.50%.

Chart 12
Interbank Funding Rate Implied in TIIE Swaps
Percent



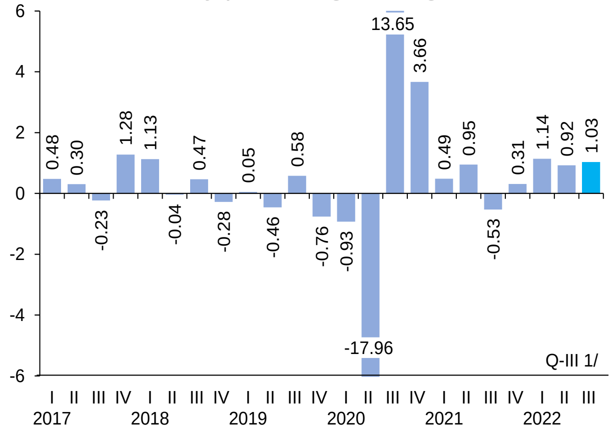
Source: Prepared by Banco de México with Bloomberg data.

A.2.2. Economic activity in Mexico

According to Mexico's GDP flash estimate published by INEGI, during the third quarter of 2022 economic activity maintained a pace of growth similar to that of the two previous quarters and continued recovering (Chart 13). GDP would thus have reached a level similar to that reported in the last quarter of 2019, period prior to the health emergency.

.

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

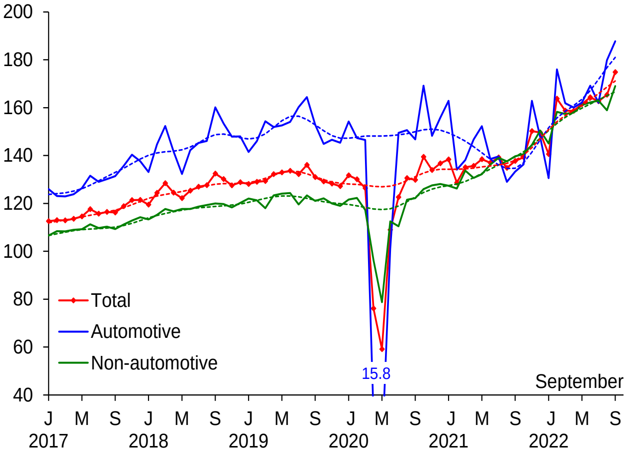


s. a. / Seasonally adjusted figures.
1/ The Q3-2022 figure corresponds to GDP's quarterly flash estimate by INEGI.
Source: Mexico's System on National Accounts (SCNM, for its Spanish acronym), INEGI.

Regarding external demand, during July-September, the average value of manufacturing exports with seasonally adjusted figures continued increasing. This was due to the improvement in both automotive and non-automotive exports (Chart 14).[4] On the domestic demand side, in August private consumption reactivated slightly, after having remained sluggish in previous months, reflecting the rebound in the consumption of services. In contrast, the consumption of goods continued exhibiting a weak performance. Gross fixed investment remained sluggish, although in August it slightly expanded. It stands out that the dynamism shown by machinery and equipment has been offset by the downward trend in construction.

[4] Refers to the value of merchandise exports in current dollars.

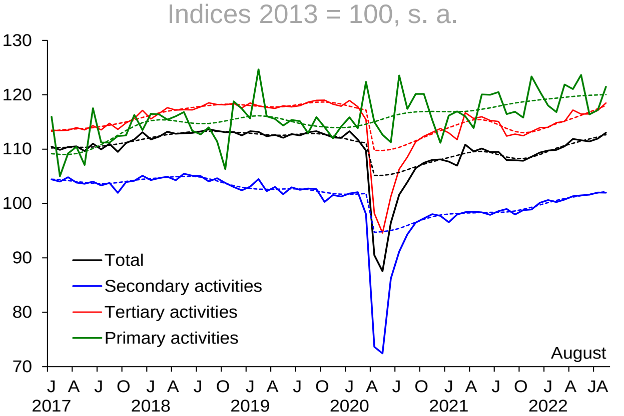
Chart 14
Total Manufacturing Exports
Indices 2013 = 100, s. a.



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.

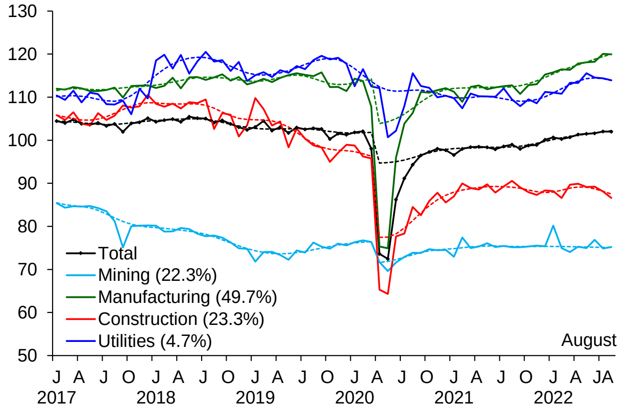
On the production side, industrial activity stopped growing in August (Chart 15). In particular, manufacturing activities declined slightly, while construction continued trending downwards and mining exhibited a lack of dynamism (Chart 16). There was a significant rebound in tertiary activities in August. The improvement in accommodation and food services stood out, in a context in which COVID-19 cases have decreased.

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

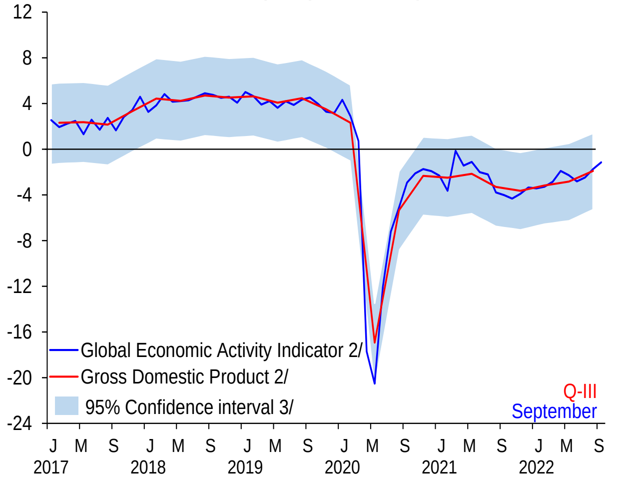
Chart 16
Industrial Activity [1/]
Indices 2013 = 100, s. a.



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.

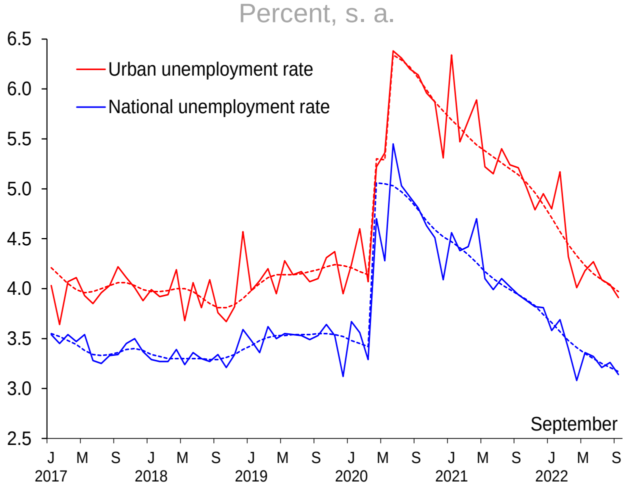
Regarding the cyclical position of the economy, slack conditions continued decreasing during the third quarter of 2022. Based on timely information, the negative output gap narrowed in its point estimate (Chart 17). In September, both the national and urban unemployment rates remained at low levels and even decreased in their monthly comparison (Chart 18). This took place in a context in which the employment rate among working age population increased marginally and the labor participation rate exhibited a level similar to that of the previous month. Based on seasonally adjusted figures, in September and October, IMSS-insured jobs continued exhibiting dynamism. Finally, in August, unit labor costs in the manufacturing sector decreased at the margin for the second consecutive month (Chart 19).

Chart 17
Output Gap Estimates 1/
Excluding Oil Industry 4/
Potential output percentages, s. a.



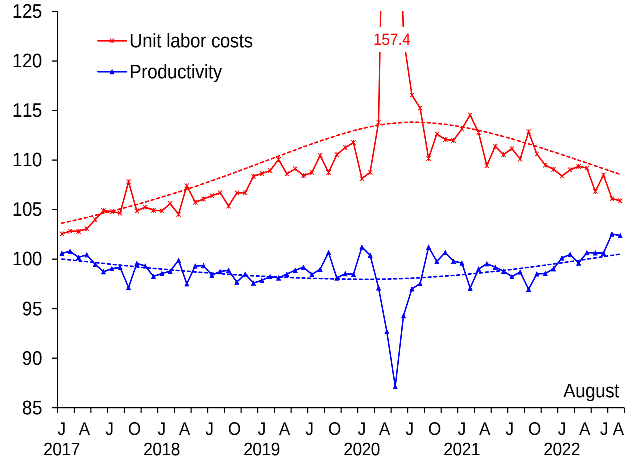
s. a. / Calculations based on seasonally adjusted figures.
1/ Output gap estimated with a tail-corrected Hodrick-Prescott filter; see Banco de México (2009), "Inflation Report, April-June 2009", p.74.
2/ GDP figures up to the third quarter of 2022 and IGAE up to September 2022.
3/ Output gap confidence interval calculated with a method of unobserved components.
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 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.

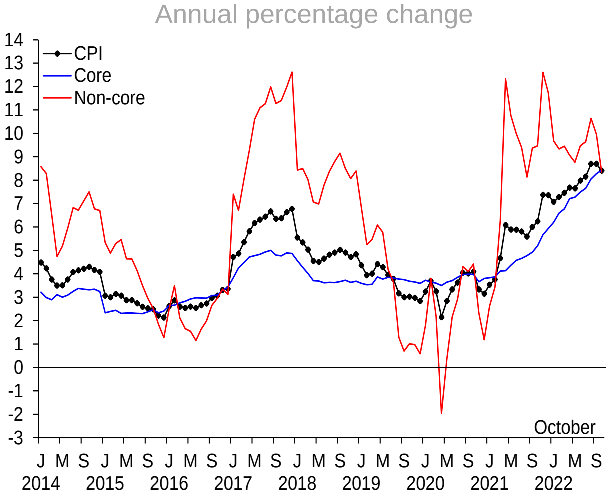
In September 2022, domestic financing to firms registered a positive real annual variation for the third consecutive month. Bank credit to firms continued recovering gradually, exhibiting a positive real annual variation for the fifth consecutive month. This, in a context in which the demand for corporate credit continued recovering and lending conditions remained tight compared to those prevailing at the beginning of the pandemic. These, 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 increased during the third quarter, in contrast with the negative flow observed in the first half of the year. As for credit to households, commercial bank housing portfolio maintained its pace of growth. In turn, bank consumer credit continued increasing in real annual terms, mainly as a result of the sustained dynamism of payroll credit, credit cards, and personal loans. This has taken place in a context in which household demand for credit has continued increasing. Mortgage lending and consumer credit conditions remained relatively stable during the third quarter of the year.

In September, interest rates on bank credit to firms were at levels above those observed prior to the pandemic. Corporate credit intermediation margins did not show significant changes with respect to the previous month and overall are at levels lower than those observed prior to the pandemic. Interest rates on mortgages increased during the third quarter, after having remained at levels around their historic lows since August 2020. In May-June 2022, credit card interest rates registered levels similar to those observed in the previous bimester. As for portfolio quality, in September 2022, corporate loan delinquency rates decreased, while those of mortgages were similar to those of the previous month. In both segments, they remain 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 September and October 2022, annual headline inflation decreased from 8.70 to 8.41% (Chart 20 and Table 1). This result is explained by the reduction in non-core inflation, given that core inflation continued to increase.

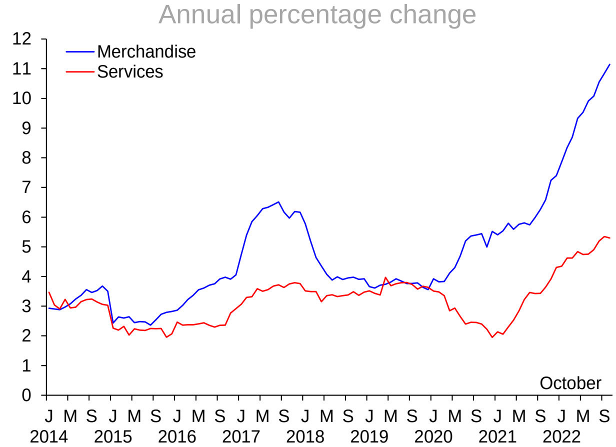
Chart 20
Consumer Price Index
Annual percentage change



Source: Banco de México and INEGI.

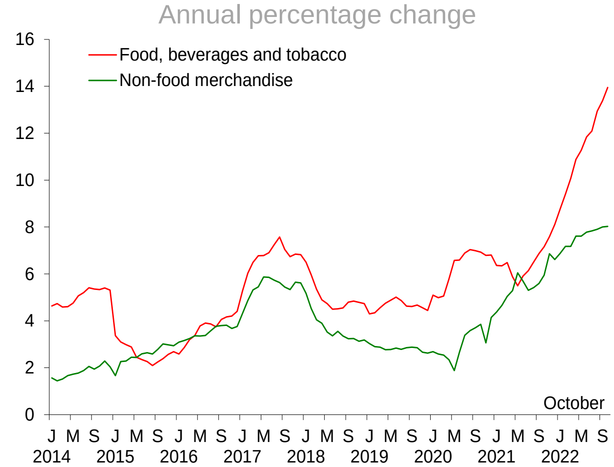
Between September and October 2022, annual core inflation increased from 8.28 to 8.42%, thus continuing the upward trend that it has shown since December 2020. Although certain improvements have been observed in the operation of global production and supply chains, in addition to some reduction in commodity prices, core inflation levels remain high. In an environment of elevated global demand, the aforementioned factors continue to exert pressure on the prices of goods and services (Chart 21). In particular, annual inflation of merchandises increased from 10.84 to 11.15% during the same period. Within it, the lagged effects of price increases in food commodities continued driving annual inflation of food merchandises, which went from 13.38 to 13.95%. Annual inflation of non-food merchandises also remained under pressure, registering levels of 8.00 and 8.03% during the same period (Chart 22). Annual services inflation went from 5.35 to 5.30%, mainly as a result of the reduction in the annual variation of telecommunication services, since those of food services, which were already at high levels, continued increasing.

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



Source: Banco de México and INEGI.

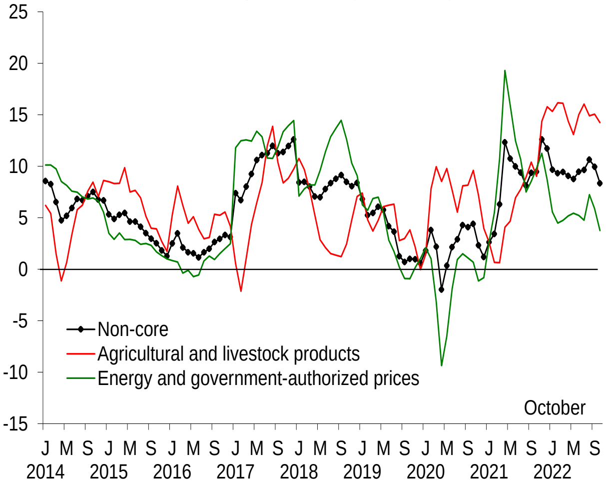
Chart 22
Merchandise Core Price Sub-index
Annual percentage change



Source: Banco de México and INEGI.

Between September and October 2022, annual non-core inflation decreased from 9.96 to 8.36% (Chart 23 and Table 1). This was mainly due to the fall from 6.16 to 3.10% in annual energy inflation. This reflects the lower annual variation in L.P. gas prices, which went from -2.60 to -16.54%. Annual agricultural and livestock product inflation remained at high levels, registering 15.05 and 14.25%, respectively, during the same period.

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



Source: Banco de México and INEGI.

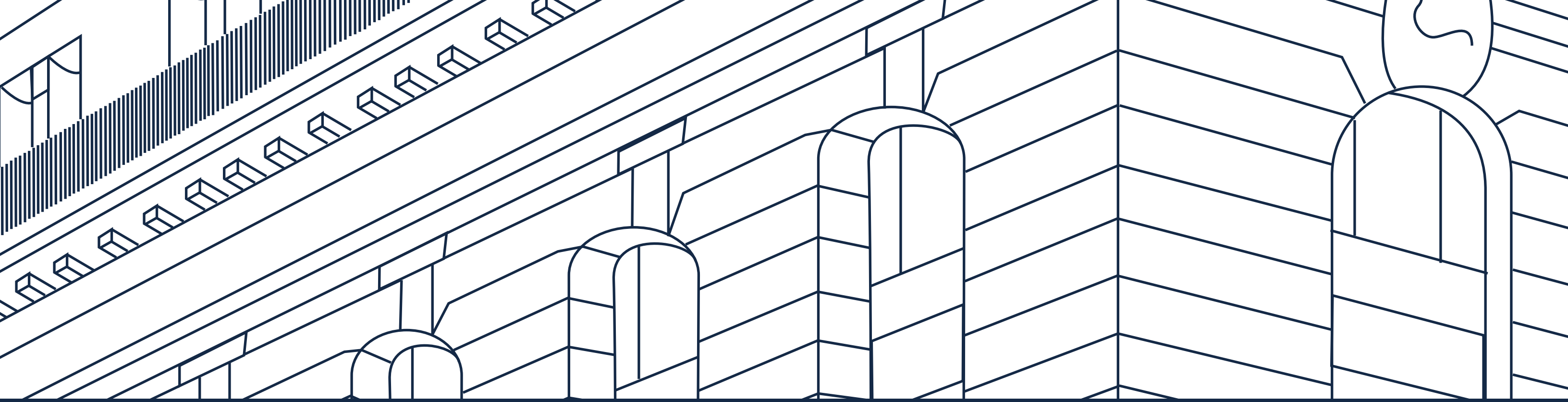
Regarding inflation expectations drawn from the survey conducted by Banco de México among private sector specialists, between August and October the median for headline inflation for the end of 2022 increased from 8.13 to 8.50%, while that for core inflation rose from 7.67 to 8.29%. The median of headline inflation expectations for the end of 2023 was revised from 4.66 to 5.09%, while that for core inflation increased from 4.44 to 5.01%. The median of headline inflation expectations for the medium term increased from 3.85 to 4.00%, while that for core inflation was adjusted from 3.80 to 4.00%. The median of headline inflation expectations for the long term (5 to 8 years) remained at 3.60% and for core inflation increased from 3.50 to 3.55%. Finally, compensation for inflation and inflationary risk increased and remains at high levels. This was due to increases in both expectations implied by market instruments and the inflation risk premium, which remains at high levels.

Inflation is still foreseen to converge to the 3% target in 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) greater pressures on agricultural and livestock product prices and on energy prices due to the ongoing geopolitical conflict; iv) exchange rate depreciation; and v) 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 effect from some cost-related pressures; and v) a larger-than-anticipated effect from the Federal Government's measures to fight elevated prices. Although some shocks have shown signs of subsiding, the balance of risks that might have an incidence on the trajectory of inflation within the forecast horizon remains biased to the upside.

Table 1
Consumer Price Index and Components
Annual percentage change

Item	August 2022	September 2022	October 2022
CPI	**8.70**	**8.70**	**8.41**
Core	**8.05**	**8.28**	**8.42**
Merchandise	**10.55**	**10.84**	**11.15**
Food, beverages and tobacco	12.94	13.38	13.95
Non-food merchandise	7.90	8.00	8.03
Services	**5.19**	**5.35**	**5.30**
Housing	3.12	3.15	3.14
Education (tuitions)	3.68	4.49	4.49
Other services	7.31	7.44	7.33
Non-core	**10.65**	**9.96**	**8.36**
Agricultural and livestock products	**14.90**	**15.05**	**14.25**
Fruits and vegetables	15.18	14.18	12.63
Livestock products	14.68	15.79	15.61
Energy and government-authorized prices	**7.25**	**5.88**	**3.77**
Energy products	8.14	6.16	3.10
Government-authorized prices	5.19	5.23	5.42

Source: INEGI.



BANCO DE MÉXICO®

Document published on November 24, 2022