



### Minutes number 92

Meeting of Banco de México's Governing Board on the occasion of the monetary policy decision announced on May 12, 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:** May 11, 2022.

### 1.3. Participants:

Victoria Rodríguez, Governor.
Galia Borja, Deputy Governor.
Irene Espinosa, Deputy Governor.
Gerardo Esquivel, Deputy Governor.
Jonathan Heath, Deputy Governor.

Rogelio Eduardo Ramírez, Secretary of Finance and Public Credit.

Gabriel Yorio, Undersecretary of Finance and Public Credit.

Elías Villanueva, Secretary of the Governing Board.

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

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

### International environment

Most members stated that, during the first quarter of the year, global economic activity grew at a lower-than-anticipated rate. They considered that the lower dynamism was mainly caused by disruptions in supply chains, partly as a result of recent mobility restrictions in China, and by the economic repercussions resulting from the geopolitical conflict between Russia Ukraine. One member added the lower economic stimuli compared to the previous year. He/she stated that the degree of heterogeneity in the recovery between advanced and emerging economies has increased. He/she indicated that the United States, despite undergoing a slowdown, shows a strong domestic demand, with a favorable performance in industrial production. He/she noted that some indicators related to supply chains, such as lead times and backorders, have shown some improvement at the margin, although there is still limited certainty about a definite solution to bottlenecks.

In this context, most members pointed out that the outlook for global economic growth has recently been revised downwards. One member indicated that a significant moderation in economic activity is expected in the euro area, the United Kingdom, China, and the United States, as well as greater negative effects in emerging economies and in commodity-importing economies. **Some** members considered that the main global risks are those associated with the pandemic, longer-lasting inflationary pressures, worsening geopolitical tensions, and a further tightening of monetary and financial conditions. One member warned that the high levels of public and private debt reduce the global economy's room for maneuver against new shocks. Another member stated that the balance of risks for global economic growth is biased to the downside and subject to unusually high uncertainty.

All members highlighted the impact of the geopolitical conflict on world inflation. Most members noted that the latter continued being pressured by bottlenecks in production, the recovery of demand, and the high levels of food and energy prices. They noted that, in some cases, inflation reached its highest level in decades. One member pointed out that the conflict has involved disruptions in global trade that have reduced the supply of various commodities, with several countries implementing export restrictions on certain food products. **Another** member stated that its effect on commodity prices is detrimental to households' incomes. undermines investors' confidence, and increases uncertainty in general. He/she noted that the pressures derived from the conflict have mainly affected price dynamics in the euro area, while in the United States there has been additional pressure from the services and housing sectors. Meanwhile, **one** member noted that various indicators reflect that the supply constraints attributable to the pandemic have started to ease. Among these, he/she mentioned the New York Federal Reserve's Global Supply Chain Pressure Index and the recent stability in sea freight rates. **Some** members highlighted that, in the United States, inflation, as measured by the personal consumption expenditure deflator, increased to 6.6% in March. One member pointed out that most price sub-indices registered inflation close to 4%. another member highlighted the Meanwhile,

pressures associated with energy and food components.

Most members stated that in most economies, inflation expectations have been revised upwards for 2022 and 2023, and that these are above the target of their respective central banks. One member emphasized that this may represent an obstacle to the convergence of inflation to their respective targets. Another member noted that futures' curves suggest that commodity prices will remain on an upward trend. He/she pointed out the deterioration of short- and medium-term inflation expectations in a context of a solid recovery in labor markets.

Most members stated that a large number of central banks continued raising their reference rates. All members mentioned that in its latest monetary policy decision, the Federal Reserve raised the target range for the federal funds rate by 50 basis points and anticipated future adjustments. Most members pointed out that, starting in June, said central bank will begin reducing its balance sheet. One member stated that, if the pace of adjustments anticipated by markets materializes, in 2023 the United States would have a rate above the level estimated as neutral. Another member indicated that given expectations of a further monetary tightening, shortterm interest rates in the United States increased, with a flattening of the yield curve. Regarding emerging economies, one member mentioned that, although they have started to reduce the stimulus, the pace of normalization has been heterogeneous due to differences in economic recovery and inflation dynamics. He/she noted that Chile and Brazil, which have undergone a stronger economic recovery, have had to rapidly implement tighter monetary policy stances than their peers, while Mexico has made more moderate adjustments because it provided less monetary stimulus during the pandemic. Another member noted that, given the elevated inflation levels and the risk of expectations becoming unanchored, emerging economies central banks' decision to accelerate monetary tightening reflects their priority to control inflation. Looking ahead, most members highlighted expectations of a faster withdrawal of monetary stimulus worldwide.

Most members noted that global financial conditions tightened further, with an increase in interest rates, a stronger US dollar and declines in stock market indexes, in a context of higher volatility and risk aversion. One member pointed out that this was partly the result of a faster

normalization of the monetary policy stance in the United States. He/she added that the latter, together with the uncertainty associated with the military conflict, was reflected in an increase in practically all nodes of the US yield curve and in a correction of more than 11% in its main stock market index. Another member stated that the dollar appreciated reaching levels unseen since 2003, which contrasts with the historical depreciation of counterparty currencies, and was accompanied by an increase in implied volatility of currency options. As for financial markets of emerging economies, he/she mentioned that there were capital outflows in fixed-income markets and inflows in equity markets. **One** member stated that default risk premia have increased moderately in these economies, as a result of higher funding costs worldwide and lower risk appetite. He/she indicated that looking ahead, emerging markets will continue to be affected by the outlook for their inflation and economic growth, as well as by advanced economies' monetary policy. Another member pointed out that the outlook of a faster tightening by the Federal Reserve implies risks for global financial markets, which could affect to a greater extent those economies with insufficiently sound macroeconomic fundamentals. One member stated that episodes of volatility in US Treasury and mortgage-backed securities' markets cannot be ruled out, with possible contagion effects on the rest of the financial system. Another member mentioned that, looking ahead, due to the potential risks that this unprecedented adjustment may imply, attention must be given to the possible impact on the price formation process and on the stability of the financial system.

### Economic activity in Mexico

members stated preliminary Most that information suggests that economic activity rebounded in the first quarter of 2022, driven by both secondary and tertiary activities. Some members mentioned that said reactivation took place in a complex environment, where factors such as the rise in infections caused by the Omicron variant, the persistence of some disruptions in global supply chains, and the military conflict between Russia and Ukraine, stood out, **One** member pointed out that economic activity grew 0.9% during the first quarter, after having registered variations of -0.7 and 0.0% in the two previous quarters. Another member noted that Mexico's economic recovery is still incomplete.

On the supply side, most members noted that industrial production continued recovering, supported by the favorable performance of the

manufacturing sector. One member added that mining also contributed to the recovery, while construction has shown little dynamism. Some members pointed out that the automotive sector still remains somewhat affected. However, one member mentioned that the technical shutdowns of some car makers are becoming fewer and more plant-specific, which has allowed light vehicle production to perform better than last year. Most members noted that there was a reactivation in the services sector albeit with heterogeneity. One member pointed out that this sector has recovered as a result of the reopening of activities and the increase in mobility. However, he/she stated that there are still opportunities for growth in some services such as lodging, food preparation and leisure. Another member recalled that the primary sector fell at the margin.

On the demand side, most members highlighted that consumption has shown a significant recovery, exceeding its pre-pandemic levels in February. Some members noted that there is still a differentiated recoverv among consumption components. One member underlined consumption of goods is at relatively high levels, while consumption of services still needs to close the gap that was opened due to the health emergency. Another member said that a recovery has been observed, particularly in consumer non-durable goods. Most members noted that various indicators of the determinants of consumption remain at high levels. However, one member highlighted that these have decelerated at the margin, and thus that it will be important to continue monitoring their evolution. Meanwhile. members underlined that investment continues showing a lack of dynamism, mainly due to the construction sector's poor performance. One member highlighted that the deterioration of investment precedes the beginning of the adjustment in the reference rate. Another member pointed out that, although gross fixed investment rebounded in January, it declined again in February. One member pointed out that investment in machinery and equipment has registered significant growth in recent months. Regarding the foreign sector, most members noted the good performance of **exports. Some** members highlighted the dynamism of non-automotive manufacturing exports. One member pointed out that their growth is due to an increase in both the price and volume of exports. Another member highlighted the ongoing recovery of automotive exports.

Regarding the labor market, most members highlighted the progress observed in several indicators, although negative effects persist. They stated that both unemployment and underemployment rates remained downward trend during March. One member added that national and urban unemployment rates decreased to 3.5 and 4.4%, respectively, nearing their pre-pandemic levels. He/she pointed out that the above was observed in a context in which the labor participation rate decreased slightly during the first quarter of the year and the employment rate among the working age population registered levels similar to those observed at the end of 2021. Another member mentioned that IMSS-insured jobs continued increasing and that job posting rates remain on a positive trend. He/she stated that the favorable performance of employment indicators has contributed to slightly reduce labor market slack, although total employment still remains significantly below its pre-pandemic trajectory. One member mentioned that nominal wage revisions for IMSSinsured workers reached a double-digit annual increase, the highest in more than two decades. He/she added that wage revisions in the private sector reached a historical rate of 8.2%. Meanwhile, member highlighted that women's another participation rate, in particular, continues showing a lag with respect to that observed prior to the pandemic.

Most members agreed that ample slack conditions remain, although they narrowed in relation to the previous quarter. Some members mentioned that economic slack continues showing differences among sectors. One member indicated that while in other emerging economies GDP is already above its pre-pandemic level, in Mexico it is still below that level and significantly below the level it would have reached had it continued on its pre-pandemic trajectory. He/she noted that this means there is still room for further economic growth in 2022. Meanwhile, another member mentioned that it is complicated to measure the level of economic slack in the current environment.

Most members highlighted that the environment remains uncertain. One member stated that the global economic slowdown this year, particularly in the United States, would be the greatest risk for an economic contraction in Mexico. Another member mentioned that, although the pandemic has diminished notably in the country, the risks to growth have increased due to the uncertainty caused by the conflict in Eastern Europe and its effects on the global economy. He/she considered that the balance

of risks to growth remains biased to the downside. In this context, **one** member pointed out that the growth outlook for 2022 and 2023 has deteriorated due to forecasts of lower domestic oil production, as well as a weaker performance of industrial activity in the United States.

### Inflation in Mexico

Most members indicated that in April headline and core inflation registered annual rates of 7.68 and 7.22%, respectively. They noted that this has been their highest level since January 2001. **Some** members pointed out that this was the result of the behavior of the core component, while they added that it was partially offset by a reduction in the non-core one. Most members stated that the pressures associated with the geopolitical conflict have been added to the shocks that have affected inflation throughout the emergency. Some members pointed out that the conflict has pushed commodity prices further upwards. Some members highlighted that the adverse effects have been more evident on livestock products and on food merchandise. One member underlined the large weight of said products in the consumer basket. Another member forewarned that the disruptions in supply chains have extended the imbalances between supply and demand. One member stated that shocks on inflation are part of a global phenomenon and that incipient signals of mitigation in global and local supply restrictions have already started to be observed. Most members mentioned that inflationary pressures have been generalized and persistent. Some members pointed out that 43% of the CPI items registered annualized seasonally-adjusted monthly increases above 10%. One member added that 82% of cities registered an annual inflation of between 7 and 10%.

**Some** members mentioned that the behavior of core inflation mainly responded to the increase in food and non-food merchandise prices. One member noted that core inflation has been increasing for over a year. Another member added that its annualized monthly rate has followed an upward trend, shifting from 3% in January 2021 to 8.56% in April 2022. He/she underlined that said increase indicates that domestic consumption recovery has been added to external inflationary pressures. One member pointed out that merchandise inflation has reflected disruptions in production and distribution chains, as well as the increase in international energy and food prices. He/she added that annual inflation of food and non-food merchandise registered high levels in April. Some members stated that services inflation has increased as a result of greater mobility and the recovery of demand for services. **One** member mentioned the higher operating costs of businesses and higher energy and food prices, and pointed out their impact on transportation and food service prices.

Some members mentioned that, despite its decline in April, non-core inflation remains at high levels. Some members noted that its reduction has been favored by the fossil fuels price policies. One member stated that the favorable performance of the non-core component is attributed to the lower inflation of agricultural and livestock products, which was partially offset by a higher inflation of energy products. However, another member noted that inflation of agricultural and livestock products remains at high levels, as a result of the additional price increases of inputs such as fertilizers and grains.

All members stated that inflation expectations for 2022 and 2023 have increased considerably. One member added that headline inflation expectations for the end of 2022 are at 6.75%, having registered a 250-basis point increase so far this year. He/she added that said expectations have been revised more rapidly than during other inflationary episodes. Some members underlined that expectations for the end of 2023 are above the upper limit of the variability interval. Some members pointed out that inflation expectations for the next 12 months are at levels close to 5%. One member forewarned that they had not reached those levels since 2009. Another member highlighted that they have increased by 64 basis points since February.

Most members noted that medium-term expectations have increased. They noted that long-term expectations have been revised marginally, to a level of 3.55%. They underlined that they had not reached said level since they began to be measured. One member stated that this represents a warning of the risk of them becoming unanchored. Another member argued that long-term expectations have remained stable, although at levels above the target. Some members noted that expectations measured by compensation for inflation and inflationary risk of 10-year bonds remain at high levels. One member added that inflation expectations drawn from market instruments have increased and that the inflation risk premium registered its highest level in April, although it remains at levels similar to those observed during other stress periods. Another member pointed out that inflation expectations drawn from market instruments for the 6- to 10-year average remain at 3.14%.

Most members stated that, in view of greaterthan-anticipated pressures on inflation, forecasts for headline and core inflation were revised upwards up to the second and the third of 2023, quarters respectively, although convergence to the 3% target during the first quarter of 2024 is maintained. One member highlighted that the upward revision took place even after incorporating the impact of the Policy Program to Fight Inflation and High Prices. Another member noted that, considering the recent dynamics of core inflation, it can be inferred that it is about to reach its peak and that it could soon begin a downward trend. One member underlined that, so far, there have been eleven consecutive monetary policy decisions in which the central bank has revised the inflation forecast upwards, either for a particular time frame or for the entire forecast horizon. He/she highlighted that this is not exclusive to the central bank's projections. He/she pointed out that monetary authorities in other countries and market analysts have also adjusted their forecasts to the upside, which reflects the high degree of uncertainty that has prevailed. Another member stated that the convergence of inflation to its target faces significant risks.

Among upward risks to inflation, all members mentioned the greater pressures on agricultural and livestock product prices and energy prices, due to the geopolitical conflict. Most members mentioned the persistence of core inflation at high levels and external inflationary pressures associated with the pandemic. Some members added the cost-related pressures associated with wage revisions, which could be passed through to consumer prices. One member added an exchange rate depreciation, due to possible bouts of volatility in international financial markets. He/she mentioned that, although the military conflict has already started to exert pressure on inflation, the scope, duration and magnitude of possible shocks derived from it are still unknown. He/she also indicated that there is no certainty as to the time required to regularize supply chains. Another member pointed out the possible continuation of droughts, which would affect agricultural products' prices. He/she considered that the pressures caused by the conflict in Ukraine could potentially affect the formation of inflation expectations due to their greater effect on households and families. One member stated that, although the shock to commodity prices associated with the military conflict poses a significant risk,

historically it tends to be solved through higher supply when global markets operate adequately. member warned about inflationary pressures. He/she stated that uncertainty in measuring economic slack makes it difficult to anticipate possible price pressures in certain sectors that are recovering. One member pointed out that a high and persistent inflation could contaminate the price formation process. He/she added that different indicators, such as the upward revision in analysts and markets' expectations, and minimum wage revisions that exceed labor productivity growth, suggest that this is already happening. He/she added that the fact that inflation has not stopped accelerating and is affecting an increasing number of goods and services is a cause for concern.

Regarding downside risks to inflation, some members mentioned a better functioning of supply chains, as a result of the control of the pandemic. One member added: i) a decline in the intensity of the military conflict; ii) that, given the slack conditions in the economy, cost-related pressures and hiring conditions do not exert pressure on prices; and iii) a higher-than-expected effect of the Policy Program to Fight Inflation and High Prices. Some members considered that said program will have moderate effects on inflation. One member stated that the different measures included in the program go in the right direction as they seek to improve conditions on the supply side, and that they have the potential to affect the price formation process and inflation expectations. He/she estimated that the program could contribute to reduce inflationary pressures at the margin. On the other hand, he/she argued that a number of factors point to a moderation of world inflation in 2022, such as less expansionary policy stances by most governments and central banks worldwide, as well as signs of a mitigation of pressures on supply chains.

Most members stated that the balance of risks for the trajectory of inflation within the forecast horizon remains biased to the upside and has continued deteriorating. One member pointed out that this is due to the possibility that the effects of the geopolitical conflict are greater or longer-lasting than previously estimated. Some members highlighted an environment of greater uncertainty for inflation.

### Macrofinancial environment

Regarding domestic financial markets, most members highlighted that the exchange rate remained relatively stable. They underlined the performance of the Mexican peso despite the strength of the US dollar and tighter financial conditions. They emphasized that the Mexican peso remains the second currency with the highest volatility-adjusted interest rate spread relative to the United States. Some members considered that the favorable performance of the currency is attributed to the sound macroeconomic fundamentals, such as fiscal discipline and a prudent monetary policy. One member added that it is also due to the moderate deficit in the current account. He/she stated that, from a medium-term perspective, the performance and the relative low volatility of the Mexican peso sets it apart from other emerging economy currencies. Another member pointed out that, in this favorable context, analysts kept their exchange rate outlook practically unchanged.

Most members mentioned that interest rates increased in line with global trends. Some members noted that practically all nodes of the yield curve increased, with up to 100 basis points increments in the longer-term ones. Meanwhile, one member stated that the real yield curve also registered generalized increases, albeit of a lower magnitude, given the greater demand for instruments that offer protection against inflation. He/she mentioned that there was an outflow of M-Bonos held by foreign investors and an inflow of resources channeled to Udibonos seeking to mitigate the risk of higher inflation. Some members pointed out that the stock market fell by 11%. One member mentioned that default premia increased by over 40 basis points. Regarding the evolution of credit, another member stated that commercial banks' financing to businesses continued performing poorly. He/she mentioned that, while businesses' demand for credit has started to reactivate, lending standards have somewhat deteriorated, as a reflection of supplyrelated constraints. Some members warned that the Federal Reserve's monetary policy represents a significant challenge as well for the stability of the financial system. One member indicated that, if the risk of the Federal Reserve undergoing a faster tightening cycle materializes, the Mexican peso will follow a more depreciated trajectory. Another member warned that Mexico, like other economies facing high risks and with a high degree of financial and commercial integration to the external sector, must maintain solid macroeconomic policy stance at all times.

### Monetary policy

The Governing Board evaluated the magnitude and diversity of the shocks that have affected inflation and its determinants, along with the risk of medium- and long-term inflation expectations

and price formation becoming contaminated. Most members also considered the increasing challenges posed by the ongoing tightening of global monetary and financial conditions, the environment of significant uncertainty, and greater inflationary pressures associated with the geopolitical conflict, the resurgence of COVID-19 cases in China, and the possibility of inflation being affected by additional pressures. Based on these considerations, the majority voted for raising the target for the overnight interbank interest rate by 50 basis points to 7.00%. The Board highlighted that, with this action, the monetary policy stance adjusts to the trajectory required for inflation to converge to its 3% target within the forecast horizon.

The Governing Board stated that for the next monetary policy decisions, it will monitor inflationary pressures thoroughly as well as all factors that have an incidence on the foreseen path for inflation and its expectations. The latter, in order to set a policy rate that is consistent at all times with 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. Most members added that, given the growing complexity in the environment for inflation and its expectations, taking more forceful measures to attain the inflation target may be considered.

One member pointed out that the strengthening of monetary policy contributes to: i) preventing secondround effects given the new supply-related shocks; ii) maintaining financial stability, considering the increase in the Federal Reserve's federal funds rate; and iii) helping the interest rate move closer to a level considered as neutral. He/she warned that inflation is high and thus it is critical to make adequate decisions to lower it. He/she also stated that said actions should be taken efficiently, with the least possible costs for society. He/she listed the factors that should be considered when defining an adequate trajectory for the interest rate under the current upward cycle. He/she pointed out that, above all, inflation is a global phenomenon, and that for this reason inflation in Mexico will decrease insofar as world inflation also declines. He/she noted that the second factor is that there was little monetary stimulus granted in 2020 and it began to be withdrawn in advance in 2021, and, therefore, unlike other countries, Mexico does not have a problem of excess demand. He/she mentioned that the recovery could continue without

generating further inflationary pressures, while the monetary policy stance transitions to a neutral level. He/she underlined that, at the beginning of 2022, the ex-ante real interest rate was among the highest in the world, which has already started to affect credit, durable goods consumption, and investment. He/she considered that the room to raise the policy rate without affecting economic activity is rather limited. Therefore, he/she stated that it is important to continue the cycle of increases prudently and avoiding an excessive tightening. He/she mentioned that a third factor is that excessive monetary tightening entails higher financial costs for the economy as a whole. He/she warned that an increase in default risk premia is already being observed in emerging economies, which would indicate the limits of a restrictive monetary policy in consolidating macroeconomic stability. Finally, he/she considered it not advisable to raise the reference rate at a faster pace than the Federal Reserve. He/she highlighted that the volatilityadjusted interest rate spread relative to the United States is among the highest in emerging economies. He/she pointed out that both economies are subject to the same global shocks and that Mexico has already made progress in normalizing its monetary policy stance. In addition, Mexico did not adopt an expansionary fiscal policy stance during the pandemic. For all of the above, he/she stated that it is unnecessary and even imprudent to adopt a pace of rate increases above that of the Federal Reserve. He/she mentioned that, looking ahead, conditions might emerge to even start reducing such spread, given the solid macroeconomic fundamentals, the favorable evolution of the Mexican peso, and the relative monetary policy stance.

**Another member** highlighted that headline inflation is still at high levels and considered highly worrisome that core inflation, the component that most reacts to monetary policy actions, continues trending upwards. He/she warned about: i) the Federal Reserve's more restrictive monetary policy tightening affecting price formation and financial system stability; ii) uncertainty regarding the continuation of the geopolitical conflict; and iii) mobility restrictions in China and their impact on global supply chains. He/she warned that although the reference rate has increased by 250 basis points since the beginning of the current cycle, the real ex-ante rate has increased in a smaller proportion, and currently stands around the lower limit of the neutral range. He/she highlighted that, in past monetary cycles with nominal interest rate levels similar to the current ones, the exante real interest rate increased in a similar magnitude as the nominal interest rate and stood

slightly above the neutral interest rate. However, he/she mentioned that, in the current cycle, the reference rate increases have only been able to compensate for the upward adjustment in inflation expectations and have been less effective in making the ex-ante real interest rate increase to at least its neutral level. He/she underlined that considering the unprecedented context, in which the duration and magnitude of the shocks are different from other inflationary episodes, it is imperative to act decisively to ensure that inflation returns to its target within the forecast horizon. He/she emphasized the importance of monetary policy operating with predictability in order to influence an orderly formation of expectations, and therefore the central bank's communication should clearly convey that it will consider taking more forceful measures in the next monetary policy decisions, and that it might be necessary for the ex-ante real interest rate to reach a level higher than the neutral rate. He/she also pointed out that it is essential to consolidate a robust approach that provides absolute certainty about the central bank's commitment to its constitutional mandate, which mitigates the risk of possible second-round effects on prices, while also ensures the anchoring of inflation expectations to avoid longer-term expectations from becoming contaminated.

One member mentioned that despite accumulating an increase of 250 basis points in the reference rate, the real ex-ante short-term rate stands at 1.7%. slightly below the lower threshold of the estimated range for the neutral rate. He/she noted that if inflation expectations for the next 12 months stand at 4.7% and the upper limit of the neutral range is estimated to be 3.4% in real terms, the reference rate would need to be above 8% and possibly at levels above 9%. The challenge is to establish an ideal trajectory, in terms of timing and pace of adjustment, to be able to attain such level. He/she stated that, since the adoption of the interbank interest rate as an operational target in 2008, only in 9 out of 25 occasions, the target rate has been raised by 50 basis points, and never by 75 basis points, although there has never been such a complex outlook for inflation as the current one. He/she pointed out that raising the rate by 75 basis points would send a stronger message of commitment to the central bank's primary objective. This measure would further dissipate any doubts regarding central bank autonomy, and would restate the institution's moral obligation with the most vulnerable population. Moreover, this would imply reaching the neutral zone more rapidly, would help to offset the deterioration of medium-term expectations, would have a greater

effect on anchoring long-term expectations, and would provide a stronger relative monetary policy stance to face increases in risk aversion. However, he/she noted that it would surprise both markets and analysts, making it difficult to forecast the reference rate's trajectory and distorting the interpretation of the reaction function. He/she added that such an increase would suggest lower sensibility regarding cyclical conditions in the economy. It could also mark a new pace of adjustment, difficult to reduce in the context of high inflation, a very restrictive cycle by the Federal Reserve, and cycle of monetary adjustments in Mexico that will last for quite some time. A faster pace of adjustment might result in an excessively high terminal rate for the sound development of the economy and financial markets. Meanwhile, he/she noted that a 50 basis-point increase is discounted by markets and analysts, sends a message of commitment to the primary mandate, and is consistent with the narrative of gradual adjustments. It also allows time to communicate the possibility of increases in the pace of monetary tightening. He/she added that, with this decision, the nominal rate curve would maintain its current structure, confirming markets' expectations, while a 75 basis-point increase would lead to a flattening of the yield curve. He/she mentioned that the current spread of 600 basis points has so far favored the exchange rate. However, he/she considered that an increase of 50 basis points could be perceived as an insufficient increase in the ex-ante real interest rate in the short term, given the lagged effect with which monetary policy operates and the difficult inflationary context currently faced. Furthermore, it does not provide the relative monetary policy stance with additional space to face a disruption in financial markets. This decision also does not hasten the transition of the absolute policy stance to a more restrictive range, given the deterioration of inflation expectations. He/she pointed out that the current decision should be communicated with a more restrictive tone. categorically signaling the willingness to act more forcefully in the future if forecasts of convergence to the target do not materialize.

Another member stated that since the previous monetary policy decision, inflation has continued accelerating. He/she pointed out that in addition to further surprises and shocks, monetary policy adjustments have been insufficient to counter the deterioration of price formation and have had a limited impact on the real interest rate, which remains below the required level. He/she considered that monetary policy has fallen "behind the curve" and that, in the current situation, a 50 basis-point increase is insufficient to guarantee the convergence

of inflation within the forecast horizon. Also, the key role of monetary policy is to act decisively and in a timely manner to curb inflationary inertia and avoid more severe rate increases in the future, and for this reason he/she pointed out that it is time to raise the rate of adjustment of monetary policy by 75 basis points. He/she stated that this action is consistent with the commitment to make the necessary adjustments to comply with the central bank's primary mandate. He/she added that given the high uncertainty surrounding the ongoing various shocks, the most prudent course of action is to act sooner rather than later. He/she highlighted that the expectation that markets have internalized about the current and subsequent monetary policy decisions should be assessed. He/she stated that although most analysts expect an increase of 50 basis points, three analysts consider the possibility of 75 basis points, and expectations derived from market instruments indicate a higher implicit rate by the end of the year. He/she mentioned that a surprise on the side of prudence -with a larger increase- is not necessarily bad news, but shows a central bank whose priority is to control inflation. He/she mentioned that the decision should strengthen both the exchange rate and the expectations channels. He/she recalled that the latter is one of the most important and that complacency in the face of the observed adjustments warns about the possibility of them starting to become unanchored, which would imply high costs for society. He/she indicated that a more rapid monetary tightening by the Federal Reserve could affect the exchange rate and impose challenges for monetary policy. Therefore, he/she added that it is also essential to maintain conditions for a resilient exchange rate. He/she argued that this decision should validate the Governing Board's commitment to taking appropriate decisions and should clearly communicate the deterioration of the economic conditions.

One member stated that monetary policy in Mexico faces a significantly complex environment. He/she mentioned that given the social and economic costs generated by inflation, which affect to a greater extent the lower-income population, it is essential for monetary policy to foster an environment of low and stable inflation. He/she highlighted that the high levels of inflation, the persistence of the effects of the shocks derived from the pandemic, and the difficulties arising from the military conflict in Ukraine, imply an environment that poses a high risk of contamination of the price formation process. He/she that inflation expectations continue recalled increasing, and although the output gap is estimated to be wide, the labor market has continued

recovering and various cost-related pressures are observed. He/she added that the outlook for international monetary and financial conditions faces circumstances unseen in decades, which could have a significant impact on domestic financial markets, including the foreign exchange market. He/she argued that it is thus essential to continue adjusting the monetary policy stance in Mexico, in order for inflation expectations to remain anchored and, therefore, the price formation process to be consistent with the primary objective. He/she added that the central bank needs to consider more decisive actions, because, if it does not take the necessary measures, longer-term inflation expectations could be affected by both the high levels of inflation and the duration of the shocks that have affected them, as well as by the continuous revisions to the forecasts. He/she warned that an un-anchoring of expectations must be avoided by taking forceful actions. He/she stated that the willingness to make full use of the tools to make inflation converge to its target should be restated in the central bank's communication. He/she considered it necessary to acknowledge the profound change in global economic and geopolitical conditions, and that an appropriate monetary policy stance could be significantly more astringent than in other circumstances. He/she pointed out that extraordinary conditions, such as those being faced, may require extraordinary actions. He/she argued that it is imperative to communicate the central bank's determination to attain convergence of inflation to the target within the forecast horizon, and the willingness to redouble efforts if necessary. All of the above will contribute to induce orderly conditions in the foreign exchange and fixed income markets in the prevailing environment of higher inflation at a global level.

#### 3. MONETARY POLICY DECISION

The Governing Board evaluated the magnitude and diversity of the shocks that have affected inflation and its determinants, along with the risk of mediumand long-term inflation expectations and price formation becoming contaminated. It also considered the increasing challenges posed by the ongoing of global monetary and financial tiahtenina conditions. the environment of significant uncertainty, and greater inflationary pressures associated with the geopolitical conflict and with the resurgence of COVID-19 cases in China, as well as the possibility of inflation being affected by additional pressures. Based on these considerations, the Board decided by majority to raise the target for the overnight interbank interest rate by 50 basis points to 7.00%. With this action, the monetary policy stance adjusts to the trajectory required for inflation to converge to its 3% target within the forecast horizon.

For the next monetary policy decisions, the Governing Board will monitor thoroughly inflationary pressures as well as all factors that have an incidence on the foreseen path for inflation and its expectations. The latter, in order to set a policy rate that is consistent at all times with the trajectory needed to facilitate the orderly and sustained convergence of headline inflation to the 3% target within the time frame in which monetary policy operates as well as an adequate adjustment of the economy and financial markets. Given the growing complexity in the environment for inflation and its expectations, taking more forceful measures to attain the inflation target may be considered.

### 4. VOTING

Victoria Rodríguez, Galia Borja, Gerardo Esquivel, and Jonathan Heath voted in favor of increasing the target for the overnight interbank interest rate by 50 basis points to 7.00%. Irene Espinosa voted in favor of increasing the target for the overnight interbank interest rate by 75 basis points to 7.25%.

### 5. DISSENTING OPINIONS/ VOTES

### Vote. Irene Espinosa

Given the intensification of inflationary pressures, our forecasts for headline inflation have been revised upwards for the next five quarters, thus accumulating eleven consecutive decisions in which forecasts have been adjusted to the upside for either part or the entire forecast horizon. Long-term inflation expectations have also been adjusted marginally above 3.5% for the first time since they began to be estimated. The faster-than-expected increase in inflation has limited the effect of the monetary policy adjustments implemented in recent months on the real interest rate, which remains below the level required to attain convergence to the 3% target. In light of these results, an environment of greater uncertainty, highly adverse external conditions, and a balance of risks for inflation that has worsened and is biased upwards, it is essential to act decisively, forcefully, and in a timely manner. Increasing the pace of monetary tightening to 75 basis points is necessary to attain convergence to the target within the forecast horizon and to reinforce credibility in the central bank's commitment to its primary mandate of maintaining price stability.

#### **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 first quarter of the year, global economic activity grew at a lower-than-anticipated rate, due to the resurgence of COVID-19 in some countries, the persistence of disruptions in supply chains as a result of the reimposition of mobility restrictions in some regions of China, and the economic consequences of the Russia-Ukraine conflict. Economic activity has been affected heterogeneously across countries. depending on the trade relationship with Russia and Ukraine and the exposure of each country to the increase in commodity prices, factors that have intensified the divergences that had been occurring due to the effects of the pandemic and the disruptions in supply chains. The negative effects of these new shocks have been reflected in a significant decrease in Purchasing Managers' Indices. particularly in countries such as Russia and China. with the component of future production anticipating a more generalized reduction across sectors and countries (Chart 1).

World inflation continued increasing, pressured by bottlenecks, the recovery of demand, and the high food and energy prices. Thus, in most advanced and emerging economies, inflation remained above their respective central banks' targets. As a result, a large number of central banks in emerging economies continued raising their reference rates. The increase in world inflation continues generating expectations of a faster reduction of monetary stimulus worldwide. Financial conditions tightened further, with interest rates rising and the US dollar strengthening, in a context of greater risk aversion.

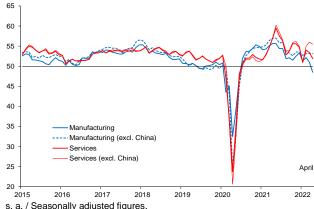
Global risks include those associated with the pandemic, longer-lasting inflationary pressures,

1 Expressed as a seasonally adjusted quarterly annualized rate, US GDP grew at a rate of 6.9% during the fourth quarter of 2021 and -1.4% during the first quarter of 2022.

worsening geopolitical tensions, and further tightening of monetary and financial conditions.

Chart 1
Global: Purchasing Managers' Index:
Production Component

Diffusion index, s. a.

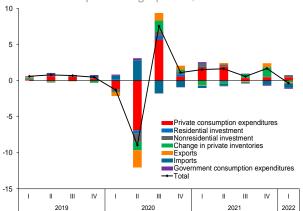


s. a. / Seasonally adjusted figures. Source: IHS Markit.

In the United States, economic activity contracted during the first quarter of the year at a seasonally adjusted quarterly rate of 0.4%, after having grown at a rate of 1.7% during the previous quarter (Chart 2).¹ The fall in GDP reflects a negative contribution of inventory investment, public spending and net exports, the latter resulting from a sharp increase in imports and a contraction in exports. This contrasts with the greater dynamism of private sector domestic demand, led by consumer expenditure, especially in durable goods, and of non-residential investment, particularly in machinery and equipment.

## Chart 2 US Real GDP and Components

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



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

US industrial production increased at a monthly rate of 0.9% in March, after having grown in the same magnitude during February. This recovery was mainly explained by a 1.7% increase in mining due to the increase in oil and gas extraction. The generation of gas and electricity for domestic consumption expanded at a monthly rate of 0.4% in response to the higher demand for heating due to the temperatures registered. manufacturing activity, it grew 0.9% in March, after having increased 1.2% during February, although it continues to be affected by bottlenecks and the shortage of semiconductors. The manufacturing Purchasing Managers' Index suggests that expansion will persist, although it will continue to be limited by disruptions in supply chains.

US labor market conditions continued improving in March and April, thus remaining extremely tight. The non-farm payroll increased by 428,000 jobs per month on average, after having increased by 714,000 jobs in February, reflecting, primarily, the growth of the sector of entertainment, recreation and art, temporary accommodation and food preparation activities, and, to a lesser extent, of professional, corporate and business support services, education and health, and manufacturing. The unemployment rate decreased from 3.8% in February to 3.6% in April. In addition, the demand for workers remains strong and, although the labor participation rate has been recovering, labor supply remains weak. The vacancy

rate remains high and wage growth continues at high levels.

In the euro area, economic activity moderated its pace of expansion slightly during the first quarter of the year by growing at a seasonally adjusted quarterly rate of 0.2%, after registering growth of 0.3% during the fourth guarter of 2021.2 The weak expansion in economic activity was the result of restrictions to contain the infections caused by the Omicron variant, the persistence of bottlenecks, the upsurge in energy and food prices, and the impact on trade and production derived from the military conflict between Russia and Ukraine. The unemployment rate decreased from 6.9% in February to 6.8% in March. Purchasing Managers' Indices continue pointing to a recovery in services in light of the easing of restrictions to deal with the COVID-19 infections and a slower pace of growth in manufacturing activity, with a deterioration in the components of production expectations stemming from the conflict in Ukraine and disruptions in the supply chains standing out.

In Japan, available information suggests that economic activity contracted during the first quarter of 2022, after having expanded at a seasonally adjusted quarterly rate of 1.1% during the fourth quarter of 2021.3 This reflected a deterioration in household spending in the face of the resurgence of COVID-19 cases and lower mobility since the beginning of 2022, although timely indicators suggest a rebound in economic activity at the end of the period following the lifting of mobility restrictions. In this environment, the unemployment rate declined from 2.7% in February to 2.6% in March. Purchasing Managers' Indices suggest a rebound in services and point to a slower pace of expansion in the manufacturing sector due to the continued disruptions in production chains.

In the main emerging economies, available indicators suggest a slower pace of growth during the first quarter of the year, although with a marked heterogeneity across countries and regions, depending on the evolution of the pandemic and the exposure of each country to the effects on global supply chains and the Russia-Ukraine conflict. In Emerging Asia, available information indicates a weakening of GDP growth in most economies. In China, a slower pace of growth was registered during the first quarter of 2022, decreasing from a

<sup>&</sup>lt;sup>2</sup> In annualized terms, euro area GDP registered a quarter-onquarter seasonally adjusted variation of 1.2% during the fourth quarter of 2021 and 0.8% during the first quarter of 2022.

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

seasonally adjusted quarterly rate of 1.5% during the fourth quarter of 2021 to 1.3% in the first quarter of 2022, reflecting the restrictions imposed on several cities and provinces to contain the recent increase in COVID-19 infections.4 In Latin America, available indicators point to a heterogeneous behavior, with the possible weakening of economic activity in the face of the lower mobility associated with the latest wave of infections in countries such as Chile and the gradual recovery in countries such as Brazil and Mexico. In Emerging Europe, available indicators suggest a moderation in the pace of recovery in some countries, while a sharp contraction is expected in Ukraine and Russia as a result of the armed conflict and economic sanctions imposed on Russia.

International commodity prices registered a mixed behavior since Mexico's previous monetary policy decision. After reaching in March their highest level since 2008, oil prices decreased slightly due to the coordinated release of strategic oil reserves by the main advanced economies, the possibility of a new nuclear agreement with Iran that would allow the resumption of its oil exports, as well as the moderation in oil demand due to the imposition of lockdown measures in China in response to the resurgence of COVID-19 cases. However, in recent weeks, oil prices were subject to volatility in light of the European Union's proposal to phase out Russian oil imports over the next 6 months and the G-7's commitment to gradually eliminate its dependence on energy from Russia. Natural gas reference prices registered a mixed behavior across regions, increasing in the US market due to the low temperatures and higher natural gas exports, and decreasing in Europe during most of the period due to the lower demand from China and improving weather conditions. At the end of April, there were episodes of volatility in European markets after Russia interrupted gas supplies to Poland and Bulgaria due to disagreements regarding the payment currency, and again in the second week of May, when natural gas shipments from Russia through pipelines in Ukraine and Poland were interrupted. Industrial metals prices generally trended downwards due to concerns of a lower demand from China resulting from its slower activity due to the restrictions implemented to contain the increase of COVID-19 cases. Grain prices also decreased in early April due to the lower demand from China, although in subsequent weeks most of them increased again as a result of uncertainty regarding supply from Russia and Ukraine as the armed conflict has extended.

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

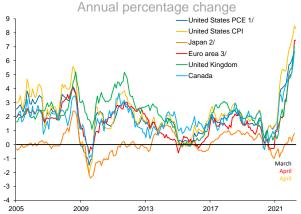
Inflation continued increasing worldwide, reaching its highest levels in four decades in some cases, driven by a more generalized increase in prices, with those of energy and foods standing out. This was due to the recovery of demand and the persistence of bottlenecks. The latter factor has been particularly affected by the resurgence of COVID-19 cases in China, the Russia-Ukraine conflict, and the sanctions imposed on Russia. In turn, the invasion of Ukraine has continued to exert pressure on commodity prices.

In most major advanced economies, headline and core inflation continued increasing, remaining above their central banks' targets, except for Japan, whose inflation remains at low levels (Chart 3). In particular, in the United States, the personal consumption expenditure deflator rose from an annual rate of 6.3% in February to 6.6% in March, its highest level since January 1982, reflecting an increase in energy and food inflation. The core component decreased from 5.3 to 5.2% during the same period, due to a reduction in services and merchandise inflation; among the latter, the lower inflation of automotive vehicles stands out. In this context, since Banco de México's previous monetary policy decision, shortterm inflation expectations drawn from surveys continued to increase significantly for these economies, while long-term inflation expectations drawn from financial instruments and surveys remained relatively stable.

12

<sup>&</sup>lt;sup>4</sup> In annualized terms, China's GDP growth was 4.0% in the fourth quarter of 2021, and 4.8% in the first quarter of 2021.

## Chart 3 Selected Advanced Economies: Headline Inflation



1/ The personal consumption expenditure deflator is used.

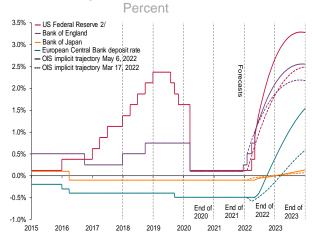
2/ Excludes fresh food. This series does not exclude the effect of the increase in the consumption tax in May 2014 and October 2019 nor the effect of the free daycare and preschool program in October 2019.
3/ Preliminary figures for April.

Source: Bureau of Economic Analysis, Bureau of Labor Statistics, Eurostat, Bank of Japan, Statistics Canada, Office of National Statistics.

Similarly, in most of the main emerging economies, inflation continued rising, remaining above their central banks' target, except for China. This higher inflation has resulted mainly from increases in energy and food prices that have escalated due to the Russia-Ukraine conflict, the pressures on the prices of other goods derived from imbalances between demand and supply and the continued disruptions in supply chains, as well as a gradual recovery in service prices.

In this context of persistent inflationary pressures, the central banks of most major advanced economies have continued reducing their monetary stimulus, with some even accelerating the process. In some cases, such as Sweden and Australia, central banks raised their monetary policy rates for the first time since the beginning of the pandemic, while the US Federal Reserve and the central banks of Canada, Korea, England, Norway and New Zealand continued raising their rates. With respect to their asset purchase programs, some have launched or announced a starting date for the gradual reduction of certain assets, while others have concluded purchases and are in the reinvestment stage or continuing certain asset purchase programs. This, together with the continued increase in world inflation, has continued to generate expectations of a faster reduction of monetary stimulus worldwide, through further increases in interest rates and a reduction in central banks' balance sheets. In particular, expectations drawn from financial instruments foresee a considerably faster pace of interest rate increases in most major advanced economies than previously expected, with raises anticipated over the next few years (Chart 4).

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



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

2/ For the observed reference rate of the US, the average interest rate of the target range of the federal funds rate (0.75% - 1%) is used. Source: Banco de México with data from Bloomberg,

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

At its May meeting, the Federal Reserve raised the target range for the federal funds rate by 50 basis points to 0.75-1.00% and anticipated successive increases. In this regard, the chairman pointed out that the Fed is in the process of raising the policy rate expeditiously to more normal levels and that, assuming that economic and financial conditions evolve in line with expectations, there is a generalized perception in the Federal Open Market Committee (FOMC) that additional 50 basis point increases could be considered for the next two meetings. Regarding the Federal Reserve's balance sheet, the FOMC decided to begin reducing its holdings of Treasury securities, agency debt and mortgage-backed securities beginning in June 1, through adjustments to the reinvestment amounts of principal payments on such securities, which will be reinvested to the extent they exceed certain monthly limits outlined in the Plans to Reduce the Size of the Federal Reserve's Balance Sheet. Said limit will initially be of USD 30 billion per month for Treasury securities and USD 17.5 billion per month for agency debt securities and mortgage-backed securities. After three months this limit will

increase to USD 60 billion and USD 35 billion per month, respectively. In this context, the expected trajectory for the federal funds rate implied in financial instruments has been revised upwards during the period and reflects, according to the latest available information, a rise in the interest rate at the end of 2022 to reach a level of 2.65%, higher than the 1.9% set at its May meeting.

- ii) At its March meeting, the European Central Bank left its refinancing, key lending and key deposit rates unchanged at 0.0, 0.25 and -0.5%, respectively. In addition, it reiterated its future guidance for interest rates and pointed out again that any adjustment to interest rates will be gradual and will take place sometime after the end of net purchases under the Asset Purchase Program (APP). Regarding the latter, it left unchanged the pace of reduction of its purchases for the coming months and highlighted that incoming information reinforced the expectation that purchases under said program should conclude in the third quarter of this year, adding that the Governing Council will maintain a discretional, gradual and flexible conduction of monetary policy. Regarding its Pandemic Emergency Program (PEPP), it concluded its net asset purchases at the end of March as it had previously stated and reiterated that it intends to reinvest the principal payments on maturing securities at least until the end of 2024.
- iii) At its January meeting, the Bank of Japan left its reference rate unchanged at -0.1% and its longterm interest rate target (indexed to its 10-year bond) at around 0%. It restated that it expects interest rates to remain at their current levels or even lower. As part of its curve control strategy, it also clarified that it will offer to buy 10-year government bonds at 0.25% every business day through fixed-rate purchase operations, unless it is highly likely that no bids are received. Regarding its commercial paper and corporate bond purchase program, it reiterated that it will make these purchases at the same pace as before the COVID-19 pandemic, so that its outstanding amounts will gradually return to prepandemic levels.

Since Mexico's previous monetary policy decision, a large number of central banks of major emerging economies, mostly from Latin America and Eastern Europe, continued raising their reference rates, including those of Chile, Colombia, Peru, Brazil, Hungary, Czech Republic, Poland, and South Africa, while those of Israel, India and Malaysia increased

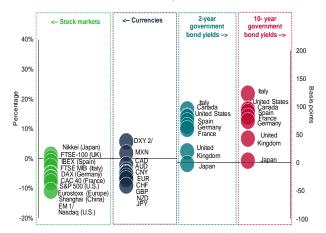
their rate for the first time since the beginning of the pandemic. It is worth noting that Russia's central bank, after increasing its interest rate from 9.5% to 20.0% in February, surprised the market in April by announcing two rate cuts of 300 basis points each, taking it to a level of 14.0%. For its part, China's central bank cut its reserve requirement ratio (RRR) from 11.50 to 11.25% and announced other liquidity provision measures for certain sectors affected by the COVID-19 pandemic.

International financial markets registered significant increase in volatility and risk aversion, particularly since the second half of April (Chart 5). This occurred in a context in which mobility restrictions were imposed in China due to the resurgence of COVID-19 cases, the invasion of Ukraine and the imposition of economic sanctions on Russia continued, as well as high levels of inflation and expectations of a faster reduction of monetary stimulus in the main advanced economies. Financial conditions tightened further during the period. In particular, equity markets in most of the main advanced and emerging economies performed negatively due to the context described above. In foreign exchange markets, the dollar strengthened significantly against most of the currencies of advanced and emerging economies, reaching its highest levels in two decades, in an environment of greater risk aversion and reduction of monetary stimulus and expectations that the Federal Reserve will withdraw the stimulus at a faster pace. In contrast, the euro and yen depreciated significantly, with the latter reaching its lowest level in around 20 years, due to the divergence between the Bank of Japan's expansionary monetary policy and the withdrawal of monetary stimulus by the central banks of other advanced economies. The currencies of emerging economies depreciated, although the Russian ruble reversed the previous losses suffered as a result of the beginning of the invasion of Ukraine (Chart 6). Long-term government bond interest rates increased in most major advanced and emerging economies, with a significant rise in short-term rates in some cases, reflecting the withdrawal of monetary stimulus and the expectation that this process will occur at a faster pace. In the case of the United States, the above contributed to a temporary inversion of the slope of the yield curve, measured by the spread between 10-year and 2-year bond interest rates, at the beginning of April, reaching negative territory for the first time since 2019. Since Mexico's previous monetary policy decision, capital inflows to emerging economies continued to show a differentiated behavior by asset. In most cases, inflows to equity markets, mainly to China, were

observed, while in fixed income markets outflows were observed from mid-April, with China standing out as well, given expectations of a more accommodative monetary policy in that country.

# Chart 5 Change in Selected Financial Indicators from February 3, 2022 to May 6, 2022

Percent; basis points



1/ The MSCI Emerging Markets Index consists of 24 countries.

2/ DXY: a weighted average estimated by the Intercontinental Exchange (ICE) of the nominal exchange rate of the main six currencies operated globally with the following weights: EUR 57.6%, JPY: 13.6%, GBP: 11.9%, CAD: 9.1%, SEK: 4.2%, and CHF: 3.6%.

Source: Bloomberg and ICE.

## Chart 6 Selected Emerging Economies: Financial Assets Performance since March 18, 2022

Percent, basis points

Region	Country	Currencies	Equity markets	Interest rates 2Y	Interest rates 10Y	CDS
Latin America	Mexico	-0.04%	-10.68%	65	82	41
	Brazil	-1.11%	-8.82%	53	58	27
	Chile	-6.84%	-0.33%	37	59	34
	Colombia	-6.21%	1.07%	63	109	76
	Peru	-0.86%	-16.67%	194	174	50
Emerging Europe	Russia	32.92%	-3.14%	-1,790	-1,317	3,088
	Poland	-4.62%	-14.53%	167	232	15
	Turkey	-1.52%	14.13%	-269	-384	53
	Czech Republic	-5.75%	-1.76%	135	124	-2
	Hungary	-7.12%	-5.09%	114	148	19
Asia	China	-5.77%	-7.60%	6	2	23
	Malaysia	-4.52%	-2.64%	127	78	31
	India	-2.19%	-5.86%	133	69	8
	Philippines	-0.28%	-3.54%	78	30	36
	Thailand	-3.86%	-4.41%	134	107	0
	Indonesia	-1.51%	-0.65%	103	53	19
Africa	South Africa	-8.57%	-10.87%	7	50	58

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

Source: Bloomberg.

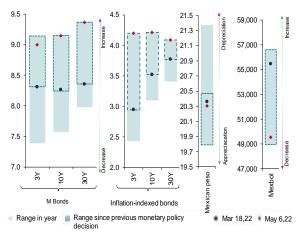
### A.2. Current situation of the Mexican economy

### A.2.1. Mexican markets

In the international context described above, in domestic financial markets, the exchange rate remained practically with no change in its quote against the dollar, and interest rates rose across all terms, in line with what was observed in other fixed-income markets at the global level, during a period characterized by a slight increase in volatility (Chart 7).

## Chart 7 Mexican Markets' Performance

Percent, MXN/USD and index



Source: Prepared by Banco de México.

The Mexican peso fluctuated in a range of 85 cents, between 19.79 and 20.64 pesos per dollar, ending the period with a marginal depreciation of 0.04% (Chart 8). This occurred in a context in which both spot and future trading conditions showed limited variations with respect to the previous period.

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

--- Mexican peso
--- 100-day moving average
--- 50-day moving average

202

Source: Prepared by Banco de México.

2020

25.50 25.00

24.50 24.00

23.50

23.00

22.50 22.00

21.50 21.00

20.50

20.00

19.50 19.00

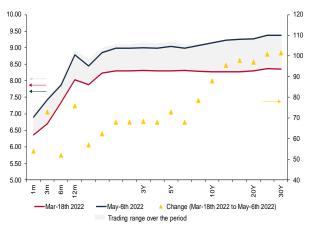
18.50 18.00

17.50

Interest rates of government securities exhibited upward adjustments, in line with the movements of yield curves worldwide (Chart 9), with increases of up to 73 basis points in the nodes for shorter-term bonds, and of up to 102 basis points for longer-term ones. The yield curve of real interest rate instruments also showed a flattening dynamic, with adjustments of up to 125 basis points for the short term and of up to 38 basis points for the long term. In this context, compensation for inflation and inflationary risk implied in spreads between nominal and real interest rates of market instruments displayed movements of between -10 and 70 basis points for all terms (Chart 10). These adjustments took place in an environment in which trading conditions improved during the period covering the monetary policy decision.

Chart 9
Nominal Yield Curve of Government Securities

Percent, basis points



Source: PIP.

MAM

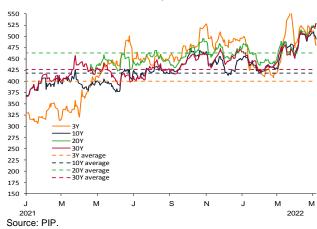
2022

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

Regarding expectations for the trajectory of the monetary policy reference rate, information implied by the Interbank Equilibrium Interest Rate (TIIE, for its Spanish acronym) swap curve incorporates an increase of around 84 basis points between the May and June 2022 meetings, while for the end of 2022 it points to a reference rate close to 9.27% (Chart 11). Most forecasters surveyed by Citibanamex anticipate the interest rate to increase by 50 basis points to 7.00% in the May decision, while for the end of 2022 a rate of 8.50% is expected.

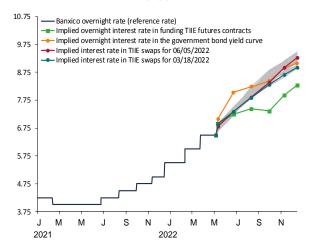
Chart 10
Compensation for Inflation and Inflationary Risk
Implied in Government Securities' Yields

Basis points



## Chart 11 Interbank Funding Rate Implied in TIIE Swaps

Percent



Source: Prepared by Banco de México with Bloomberg data.

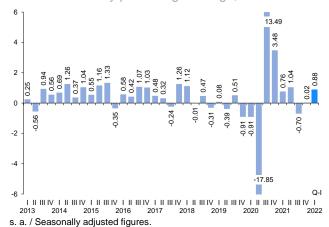
### A.2.2. Economic activity in Mexico

After the weak performance observed in the last quarter of 2021, according to Mexico's GDP flash estimate published by INEGI, during the first quarter of 2022, economic activity registered a reactivation (Chart 12). However, an uncertain environment prevails due to the persistence of some disruptions in global supply chains, the conflict between Russia and Ukraine, and the evolution of the pandemic worldwide.

Regarding external demand, during the first quarter of 2022, both the value of automotive and other manufacturing exports continued increasing (Chart 13).<sup>5</sup> By destination, manufacturing exports to the United States and the rest of the world maintained an upward trend.

## Chart 12 Gross Domestic Product

Quarterly percentage change, s. a.

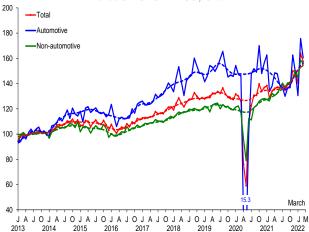


1/ The figure for the first quarter of 2022 refers to the timely estimate of quarterly GDP published by INEGI.

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

## Chart 13 Total Manufacturing Exports

Indices 2013 = 100, s.a.



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

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

On the domestic demand side, based on its monthly indicator, in February 2022 private consumption continued to recover, accumulating eight consecutive months increasing at the margin and placing it above the level registered in February

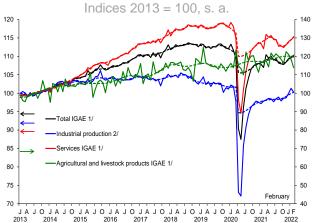
System of National Accounts, since the latter represents value added, measured in constant pesos.

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

2020. Consumption of goods showed dynamism, while that of services continued to recover. Meanwhile, in February, gross fixed investment reversed part of the recovery registered in previous months, remaining below the level prior to the health emergency. Regarding its components, investment spending on construction reversed the rebound registered in January, while machinery and equipment continued to expand.

On the production side, industrial production continued reactivating during the first two months of the year (Chart 14). This was mainly due to the dynamism of the manufacturing sector (Chart 15), despite the persistence of certain disruptions in global supply chains. In contrast, construction continued on a negative trajectory, while mining was subject to volatility, with an important rebound in January that was reversed in February. Tertiary activities continued to recover during the January-February period, although with some heterogeneity within them. The positive contributions of transportation and mass media information services, commerce, and financial and real estate services stood out.

## Chart 14 Global Indicator of Economic Activity

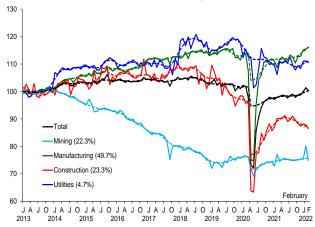


s. a. / Seasonally adjusted and trend series. The former is represented by a solid line and the latter by a dotted line.

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

### Chart 15 Industrial Activity<sup>1/</sup>

Indices 2013 = 100, s. a.



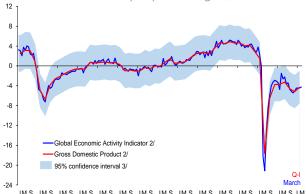
s. a. / Seasonally adjusted and trend series. The former is represented by a solid line and the latter by a dotted line.

1/ Figures in parenthesis correspond to their share in the total in 2013. Source: Mexico's System of National Accounts (SCNM, for its Spanish acronym), INEGI.

Regarding the cyclical position of the economy, during the first guarter of 2022, slack conditions are estimated to have narrowed with respect to the previous quarter, although they remain considerably ample (Chart 16). In February and March, several labor market indicators improved, in a context of lower COVID-19 infections. Particularly, the national and, especially, the urban unemployment rates decreased, reaching their lowest level since March 2020 at the end of the first quarter (Chart 17). This took place in a context in which the labor participation rate and, to a greater extent, the employment-to working-age population-ratio increased. Meanwhile, with seasonally adjusted figures, in March 2022, the net creation of IMSS-insured jobs continued trending upward. Finally, in February, unit labor cost in the manufacturing sector increased at the margin, after having fallen consecutively on four occasions (Chart 18).

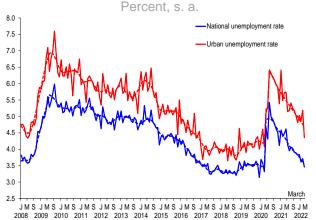
## Chart 16 Output Gap Estimates <sup>1/</sup> Excluding Oil Industry <sup>4/</sup>

Potential output percentages, s. a.



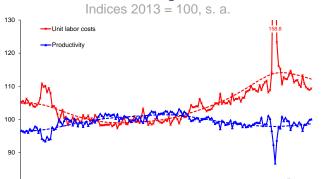
- s. a. / Calculations based on seasonally adjusted figures.
- 1/ Output gap estimated with a tail-corrected Hodrick-Prescott filter; see Banco de México (2009), "Inflation Report, April-June 2009", p.74.
- 2/ On-time GDP figures as of the first quarter of 2022 and implied IGAE as of March 2022, congruent with such on-time figure.
- 3/ Output gap confidence interval calculated with a method of unobserved components.
- 4/ Excludes both oil and gas extraction, support services for mining, and petroleum and coal products' manufacturing.
- Source: Prepared by Banco de México with INEGI data.

## Chart 17 National and Urban Unemployment Rates



s.a. / Seasonally adjusted series and trend series. The former is represented by a solid line and the latter by a dotted line. Source: Prepared by Banco de México with data from ENOE, ETOE (from April to June 2020), and ENOE new edition (ENOEN) from July to date.

# Chart 18 Productivity and Unit Labor Costs in the Manufacturing Sector 1/



- 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 March 2022, domestic financing to firms continued to decrease at real annual rates, although at a slower pace. Within it, bank credit to firms continued decreasing at a real annual rate, albeit at a slower pace since the third quarter of 2021. This, in a context in which corporate credit demand continued to recover, while lending conditions remained tight compared to the beginning of the pandemic, although these have been easing for smaller firms since the second half of 2021. Net corporate debt issuance in the domestic market was negative during the first quarter of this year, and therefore continued showing lack of dynamism. As for credit to households, commercial bank housing portfolio regained some dynamism compared to previous months. In turn, outstanding bank consumer credit registered a positive real annual variation for the third consecutive month, mainly as a result of the sustained dynamism of the payroll credit and credit card portfolios. This, in a context in which household demand for credit has been gradually recovering. Household lending conditions remained stable, while consumer credit conditions eased during the first guarter of the year.

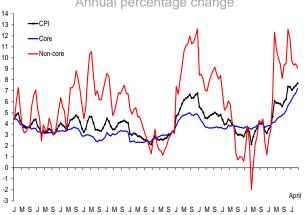
Interest rates on bank credit to firms have followed the dynamics of the overnight interbank interest rate. During the first quarter of 2022, corporate credit intermediation margins narrowed slightly, so that they are generally at lower levels than those observed prior to the pandemic. At the same time, mortgage loan interest rates remained at levels around their historical lows. Meanwhile, in December 2021, credit card interest rates registered levels similar to those observed during the third quarter of

that year, while personal credit rates increased. Thus, consumer credit intermediation margins continued at levels higher than those observed prior to the pandemic. Regarding portfolio quality, corporate and housing loan delinquency rates remained at low levels in March 2022. Lastly, consumer portfolio delinquency rates remained at lower levels than those registered prior to the onset of the pandemic, although they continue to be high.

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

Annual headline inflation increased from 7.45% in March 2022 to 7.68% in April (Chart 19 and Table 1). This result is explained by an increase of 33 basis points in the core component's contribution to headline inflation and a decrease of 10 basis points in non-core component's incidence. Thus, core inflation remained on an upward trend, while non-core inflation showed resistance to decline from high levels.

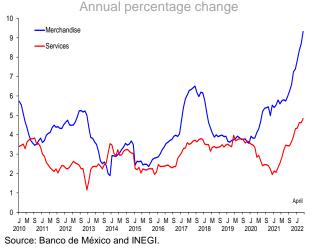




Between March and April 2022, annual core inflation increased from 6.78% to 7.22%. This component continued to be significantly affected by various shocks derived from the COVID-19 pandemic, in addition to being affected by the increase in the prices of raw materials, food and energy, associated with the war conflict between Russia and Ukraine. In the case of merchandise, annual inflation increased from 8.69% to 9.33% on the aforementioned dates (Chart 20), influenced by disruptions in production and distribution chains, as well as by pressures on production costs, which are probably also intensifying as a result of measures to contain the spread of the omicron variant of COVID-19 virus in

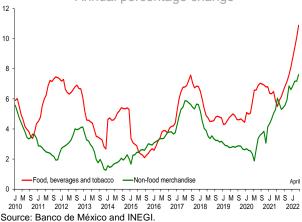
some cities in China and by the aforementioned conflict. In particular, the effects of this conflict on international food commodity prices have exerted pressure on local food merchandise inflation, whose annual inflation increased from 10.08 to 10.88% during the same period, while non-food merchandise inflation rose from 7.17 to 7.61%. (Chart 21). During the same period, annual inflation of services rose from 4.62 to 4.83%, as a result of the reopening of their activities, the high demand that had been contained, and the higher costs of inputs and operations due to the measures implemented to comply with the health safety measures required to avoid contagions. Thus, annual inflation of services other than education and housing increased from 6.60 to 7.01% on the aforementioned dates, reflecting also the increase in international prices of food and energy commodities that have pressured the prices of transportation and food services.

Chart 20 Merchandise and Services Core Price Sub-index



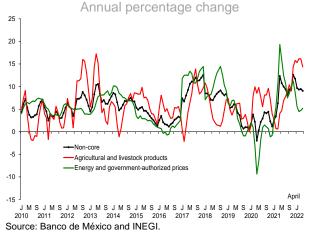
## Chart 21 Merchandise Core Price Sub-index

Annual percentage change



Annual non-core inflation went from 9.45 to 9.07% between March and April 2022 (Chart 22 and Table 1). The annual inflation of agricultural and livestock products fell from 16.12 to 14.36%, as a result of the reduction from 20.35 to 15.84% in fruits and vegetables inflation, while livestock products' inflation rose from 12.96 to 13.21%. The high levels of inflation of agricultural and livestock products and their components reflect, in part, increases in the cost of their inputs, especially fertilizers and grains. Annual energy inflation registered 5.23 and 5.91% during the same period.

Chart 22 Non-core Price Sub-index



Regarding inflation expectations from the survey conducted by Banco de México among Private Sector Forecasters, between February and April, the median for headline inflation for the end of 2022 increased from 4.68 to 6.75%, while that for the core component rose from 4.62 to 6.00%. At the same time, the median of headline inflation expectations at the end of 2023 was revised upwards from 3.80 to 4.13%, while that for core inflation was revised from 3.70 to 4.00%. The median of headline inflation expectations for the medium term increased from 3.70 to 3.76%, while that for core inflation went from 3.60 to 3.70%. Long-term expectations remained at around 3.50%. Finally, compensation for inflation and inflationary risk increased and remains at high levels. This was due to increases in both expectations implied in market instruments and in the inflation risk premium, which continues at high levels.

In view of greater-than-anticipated pressures on inflation, the forecasts for headline and core inflation were revised upwards, although convergence to the 3% target in the first guarter of 2024 is maintained. 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 in energy prices due to the ongoing geopolitical conflict; iv) exchange rate depreciation; and v) cost-related pressures. On the downside: i) a decline in the intensity of the war conflict; ii) a better functioning of supply chains; iii) a greater-than-expected effect from the negative output gap; and iv) a larger-than-anticipated effect from the Policy Program to Fight Inflation and High Prices. The balance of risks for the trajectory of inflation within the forecast horizon remains biased to the upside and continues deteriorating.

Table 1
Consumer Price Index and Components
Annual percentage change

ltem	February 2022	March 2022	April 2022
CPI	7.28	7.45	7.68
Core	6.59	6.78	7.22
Merchandise	8.34	8.69	9.33
Food, beverages and tobacco	9.40	10.08	10.88
Non-food merchandise	7.18	7.17	7.61
Services	4.62	4.62	4.83
Housing	2.72	2.72	2.76
Education (tuitions)	3.19	3.18	3.18
Other services	6.62	6.60	7.01
Non-core	9.34	9.45	9.07
Agricultural and livestock products	16.17	16.12	14.36
Fruits and vegetables	19.60	20.35	15.84
Livestock products	13.57	12.96	13.21
Energy and government-authorized prices	4.48	4.73	5.18
Energy products	4.97	5.23	5.91
Government-authorized prices	3.27	3.48	3.40

Source: INEGI.





Document published on May 26, 2022

