

MONETARY POLICY REPORT

MARCH 2022





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The Central Bank of Chile's Monetary Policy

Money plays a fundamental role in the proper functioning of any economy. To preserve such role, the monetary policy of the Central Bank of Chile (CBCh) must protect the value of the national currency —the peso—, in its quest to keep inflation low and stable. Achieving this fosters the population's wellbeing by safeguarding their income's purchasing power and making the economy function better. When inflation is low and stable, monetary policy can also moderate fluctuations in employment and production.

The inflation target and the monetary policy interest rate (MPR)

The Bank conducts its monetary policy seeking that, irrespective of the current level of inflation, its forecast for a two-year horizon will be 3%. This is similar to the practice of other countries in the world that have, as does Chile, a floating exchange rate; this is the so-called inflation targeting scheme.

The MPR is the main instrument used by the Bank to achieve the inflation target. Its level is decided at the Monetary Policy Meeting, which is held eight times a year. In practice, the MPR is a reference interest rate to determine the cost of money and other financial prices, such as the exchange rate, and longer-term interest rates, among others. In turn, these variables affect the demand for goods and services and, thereby, prices and inflation. Monetary policy decisions take several quarters to be fully reflected in the economy, which warrants that monetary policy be made from a forward-looking point of view, having as its primary focus the inflation projection two years ahead, and not just today's inflation.

Communication, transparency and the Monetary Policy Report

Since the Central Bank makes its monetary policy decisions autonomously, it must constantly account for them and their results to the general public. This is so not only because it is a government agency within a democratic society, but also because a credible monetary policy, understood by the people, helps to keep inflation low and stable. Through the Monetary Policy Report (MP Report), the Bank communicates to the general public its view of the recent evolution of the economy, its projections for the coming years and the way in which, in this context, it will conduct monetary policy in order to meet the inflation target.

The MP Report is published four times a year (every March, June, September, and December) and is put together by a team of around 60 persons.



Cover picture: Castro/Chiloé/ Región de Los Lagos

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*/ This Report incorporates the monetary policy decision of 29 March. For the central scenario construction purposes, the statistical cut-off date is 23 March. This document was originally written in Spanish. In case of discrepancy or difference in interpretation, the Spanish original prevails.



SUMMARY

Inflation and its short-term outlook have continued on an upward path, and levels near 10% are anticipated by mid-2022. The higher inflation is having a significant impact on households, and continues to respond mainly to the overspending of recent quarters. This impact has been heightened against a backdrop of significant cost-push pressures, which have increased again due to the commodity price shock triggered by Russia's invasion of Ukraine. The central projection scenario considers that in the latter part of 2022 inflation will begin to converge to the 3% target, which will be reached within the two-year horizon. Resolving the imbalances that accumulated in the economy in recent quarters is vital for this convergence, fundamentally by adjusting the fiscal and monetary impulse, among other measures. Consistent with this, and with a less favorable external scenario, after the excessive growth of 2021, the economy will grow under its potential in 2022 and 2023, with contractions in private consumption and investment. The Board has rapidly adjusted the MPR to a contractionary level, which is necessary for it to contribute to the closing of the activity gap and the convergence of inflation within the monetary policy horizon. Also, considers that, if the assumptions in the central scenario prove correct, future increases in the MPR would be smaller than those of recent quarters.

Inflation has continued to rise, approaching 8% annually. Most CPI components showed upward annual variations, particularly the rapid increase in the core CPI for goods, which went from around 5% in mid-2021 to around 9% early this year. Services showed a lower annual variation, close to 5%, explained by the freezing of several regulated tariffs in recent years and lags in the indexed prices adjustments.

The strong boost to spending during 2021 continues to be the main driver of higher inflation. Its impact has been accentuated in a scenario of significant and escalating cost pressures. Global supply chains have yet to recover from the effects of the pandemic and, among other factors, continue to experience disruptions due to the rise in Covid-19 infections and China's zero tolerance policy. The prices of several commodities (i.e., energy, foods, and some metals) have reached high levels, a situation that is exacerbated by the peso's depreciation over the last couple of years. On top of this, labor costs have risen and supply has not yet fully recovered from the impact of the pandemic. Different sources of qualitative information —IMCE and Business Perceptions Report (IPN)— show companies' negative assessment of the behavior of their costs and their impact on margins.

The increase in domestic inflation has gone beyond the December forecast, and most of the surprise has been concentrated in the core component of the CPI. Cumulative annual inflation to February 2022 was close to 1 percentage point higher than anticipated in December's central scenario. More than half of this surprise came from higher increases in the prices of the goods in the core CPI basket. A lesser part of the surprise came from food and fuel prices included in its volatile component.



Inflation's short-term outlook has increased, approaching 10% in the middle of the year. Several factors are combined in this projection. In a context where domestic demand is still exceptionally high, the main factors are high and increasing cost-side pressures, which cause further price increases. This also suggests that part of the recent inflation surprises will be more persistent, as they reflect margins adjusting to the deterioration they experienced in recent quarters. There are also the recent hikes in the prices of certain commodities due to Russia's invasion of Ukraine and a real exchange rate (RER) is currently high. Coupled with this is the indexation to higher past inflation, which would have a particular impact on the monthly CPI variations during March and April, so both figures are expected to be high.

The current high inflation affects economies across the world, although their underlying causes are not necessarily the same. In the United States and the United Kingdom, the main drivers have been strong demand and the tight labor market, with contained supply and upward pressure from wages. In the Eurozone, energy has been the main cause of inflation, contributing around half of the increase. In several Latin American economies, the main culprit is associated with higher energy and food prices.

In the central scenario, annual CPI inflation will see a fast decline starting in the second half of 2022, to hover around 3% in early 2024. This decline in inflation will be intensified by falling prices of energy and some foods. Core inflation, on the other hand, will decline more slowly, more influenced by the reversal of the activity gap. Still, it should also stand around 3% by the turn of 2024.

A fundamental factor for the convergence of inflation to the target is that the imbalances that the economy accumulated during 2021 are resolved. In the central scenario, in 2022 and 2023 the economy will grow below its potential, a necessary condition to narrow the gap caused by the excessive increase in spending observed last year. This will be compounded by a reduction in fuel prices from their current levels and an RER that will be lower, but still above its averages of the last 15 to 20 years.

Data for late 2021 and early 2022 suggest that the economy is already on a downward path from last year's record high spending, a process that is occurring somewhat faster than anticipated. The level of private consumption, particularly of durables, declined during the last quarter of 2021, as did wholesale and retail trade activity. The latter extended into early 2022. First-quarter leading indicators, such as digital sales and imports, also show a decline from last year's highs.

In the central scenario, private consumption and gross fixed capital formation (GFCF) will contract in the two-year period 2022-2023. For consumption, the high basis for comparison will be key, as will be the reduction of liquidity accumulated over the last few quarters—part of which has been saved— and the drop in credit availability. In the GFCF contraction, the tightened financial conditions and the persistence of high uncertainty will play a very important role.

The annual GDP variation will be negative for several quarters, and estimates are that activity will grow between 1.0% and 2.0% in 2022, and between -0.25% and +0.75% in 2023. It is worth noting that these estimates are significantly different from private expectations (i.e., the median of the Economic Expectations Survey and Consensus Forecast, both from March 2022), which assume that both consumption and investment will continue to expand in 2022 and 2023, and that GDP will rise above the upper bound of the range foreseen for each year (Box V.1). Towards 2024, once macroeconomic imbalances are resolved, expectations are that activity will resume growth rates in line with its potential, that is, between 2.25% and 3.25%.

The scenario of inflation convergence and resolution of macroeconomic imbalances is based on a significant reduction in fiscal spending during 2022. Pending the new administration's decree on fiscal responsibility, the central scenario maintains its assumption that public spending will be that of the approved budget and the convergence path outlined therein, in accordance with indications from the Ministry of Finance.

The central scenario projection considers that, despite the higher copper price, the external impulse that Chile will receive will be lower than expected in December. The rise in inflation and the central banks' responses will lead to less comfortable financial conditions, which is already reflected in the behavior of the prices of different assets. In turn, projected world growth for this year is reduced to 3.1% (4.2% in December) and remains at 3.4% for 2023.

The war in Ukraine has introduced an additional adverse factor into the macroeconomic scenario, although so far its direct impact remains limited. The conflict has a significant effect on import prices, especially due to the sharp rise in the oil value with respect to the previous Report's projections (around 30% for the 2022-2023 average). In terms of world growth, the progression of the war and the sanctions imposed on Russia will have major effects on the performance of the Eurozone, which will translate into a lower growth forecast for Chile's trading partners. As for the reaction of financial markets, this has been more significant in Russia, Ukraine, and its neighbors, and the central scenario assumes that the most intense effects will continue to be restricted to these countries (Box I.1).

The Board estimates that, if the assumptions in the central scenario prove correct, future increases in the MPR would be smaller than those of recent quarters. Although the MPR increases have been fast and significant, the risks for the convergence of inflation still persist. The Board will carefully monitor these risks, making sure that inflation converges to the target within the two-year monetary policy horizon.

Experts' two-year inflation expectations as measured by the Economic Expectations and Financial Traders Survey (EES and FTS) have remained above 3% for several months, which is cause for concern. Breakeven inflation also shows high figures over several terms, although in this case their levels are clouded by premiums which, when discounted, reduce them significantly (Box V.1). On the other hand, indicators that measure the perceptions of households and firms obtained from qualitative studies and surveys show the perception that the rise in inflation is a transitory development that will be reversed in a few more quarters. Likewise, firms indicate that, for now, the higher inflation expectations have not significantly altered the dynamics of price formation, while households believe that the adjustments they have already made to their consuming behavior will be sufficient to weather the period of higher price increases (Box V.2).

The central scenario of this Report incorporates more persistent than usual inflation dynamics, partly as a result of expected inflation levels above the inflation target at the normal horizons. This reflects the synthesis of available background information on inflation expectations and the Board's assessment of their effect on inflation dynamics. In addition, the upper limit of the MPR corridor considers a sensitivity scenario in which the persistence of inflation increases, calling for a stronger monetary policy response than assumed in the central scenario.

The lower bound of the corridor represents a scenario where the contraction of activity and demand is more intense than in the central scenario. The speed at which domestic spending adjusts will be decisive in assessing how quickly inflation converges to the target. This negative trajectory could combine, among other factors, a further deterioration of expectations and labor, and a stronger impact of uncertainty on investment. This sensitivity requires a faster MPR reduction in response to weaker activity than forecast in the central scenario.

In addition to sensitivity exercises, scenarios are analyzed in which changes in the economy would be more significant and where activity would fall outside the range of projections. This time, the Board describes a scenario in which the effects of the war in Ukraine take on much more harmful characteristics for the economy. In this situation, a more severe slowdown or even a global recession could be triggered, in addition to a significant worsening of financial conditions, particularly for emerging countries. However, due to the very uncertainty surrounding the conflict, it is difficult to anticipate what effects would predominate in the MPR decisions should such conditions come true.

SUMMARY OF FORECASTS

	2022(f)	2023 (f)	2024 (f)
GDP (annual change; %)	1.0-2.0	-0.25/0.75	2.25-3.25
Current Account (% of GDP)	-4.6	-3.5	-3.2
Average CPI (annual change; %)	8.2	3.4	3.0
Average core CPI (annual change; %)	7.7	4.7	3.0
CPI in around 2 years (%) (*)			3.0
World GDP growth at PPP (annual change; %)	3.1	3.4	3.3
Copper price (average; US\$cent/pound)	435	390	365

(*) Inflation forecast for the first quarter of 2024. (f) Forecast.

Source: Central Bank of Chile.



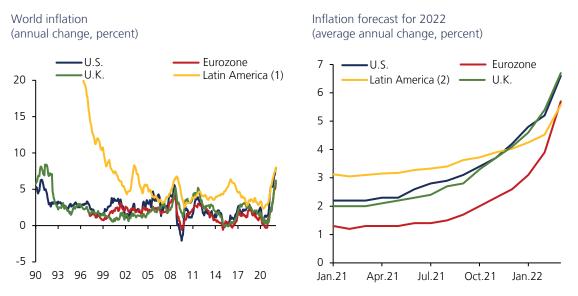
I. INTERNATIONAL SCENARIO

The global economic outlook has become more complex in recent months. Global inflation has continued to rise and shows further signs of persistence. In developed economies, inflation has climbed to levels not seen in decades. This has led the Fed and other authorities to accelerate their monetary normalization process. In this scenario, financial conditions have deteriorated for emerging economies. Most recently, the Russian invasion of Ukraine has significantly increased uncertainty and, in addition to the high humanitarian cost, will affect activity —mainly in the Eurozone— and has put greater pressure on commodity prices and the process of normalization of supply chains. Along these lines, the risk has increased that the Fed will withdraw its monetary stimulus earlier than expected in response to new inflationary surprises. The possibility of a tightening of financial conditions as a result of increased risk aversion stemming from the war has also risen. All these elements point to a diminished external momentum for the Chilean economy.

INTERNATIONAL SCENARIO EVOLUTION

Inflation has continued to rise around the world and in some countries has reached decades-high levels (figure I.1). Although it has been cross-cutting across economies, the main cause of this higher inflation differs among them. In the U.S. and the U.K., the main drivers are strong demand and tight labor markets, with contained supply and upward wage pressures; in the U.S., this is compounded with housing price increases. In the Eurozone, energy continues to be the main driver of inflation, contributing around half of the increase. In several Latin American countries, the root cause is associated with higher energy and food prices. All in all, this continues to unfold in a context where cost pressures have not abated, particularly as supply chains have not fully recovered from the impact of the pandemic, and where the monetary stimulus remains high in the developed world.

FIGURE I.1 WORLD INFLATION AND EXPECTATIONS



(1) Simple average of annual inflation in Brazil, Colombia, Mexico and Peru. (2) Simple average of annual inflation expected at December 2022 in Brazil, Colombia, Mexico and Peru.

Sources: Statistics bureaus of respective countries and Consensus Forecast.



Given this scenario of higher inflation, central banks have been adjusting the expansionary nature of monetary policy by their actions and communications. The Fed and the Bank of England have already begun their monetary normalization process. The European Central Bank, which had shown a more cautious stand in previous months, mentioned at its March meeting the possibility of putting an early end to its asset purchase program as from the third quarter, subject to the evolution of the economy. Among commodity exporters, Canada joined the rate hike, and New Zealand and Norway have continued to raise the rates. In Latin America, central banks have further raised their benchmark rates in view of persistent inflation in the region. Thus, this year, most of the world's central banks are expected to continue or begin to raise their monetary policy rates (figure 1.2).

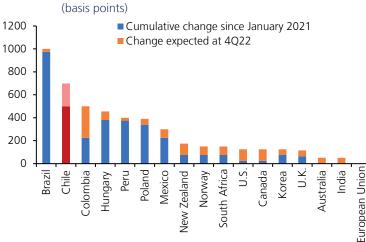


FIGURE I.2 GLOBAL POLICY RATE AND EXPECTATIONS (*)

(*) Considers MPR movements and expectations according to Bloomberg surveys as of March 24. The expected change in the MPR is rounded off to 25 basis point increments. Expectations for Chile as of 4Q22 are based on the March EES. Sources: Bloomberg and Central Bank of Chile.

The change in the macroeconomic outlook has taken a toll on financial conditions, especially in the emerging world (figure I.3). Global long rates have been rising since the end of 2021, in a scenario in which, in general, stock markets have been falling and the dollar has strengthened. The exception is Latin America, where stock markets and local currencies show some recovery, which is partly due to better commodity prices and a reversal of the deterioration suffered during 2021. However, in emerging economies, sovereign and corporate risk premiums have risen, which is largely explained by expectations of a less expansionary monetary policy from the Fed. Moreover, in Latin America, the deepening of the cycle of rate hikes and the weak outlook for this year continue to drive up financing costs.

The outlook for the global economic scenario has worsened due to the uncertainty associated with Russia-Ukraine conflict and the increase in commodity prices, especially energy. Although the main economic and financial repercussions have been confined to Russia and its neighboring countries, uncertainty has increased significantly. Furthermore, there are potential hurdles for global activity, especially in the Eurozone, as a result of increased uncertainty, the expected recession in Russia and Ukraine, and higher commodity prices. In addition to the sharp increases in commodity prices, there will also be further pressure on global logistics chains, which will further delay the convergence of inflation to levels in line with the central banks' targets (box I.1).



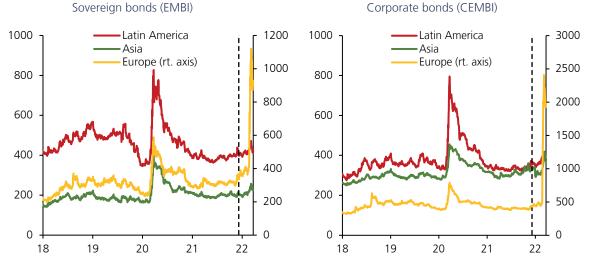
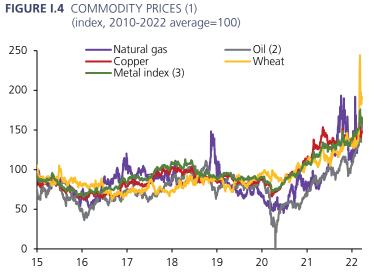


FIGURE I.3 RISK PREMIUMS IN EMERGING MARKETS (*) (basis points)

(*) Dashed vertical line indicates statistical cutoff of December 2021 MP Report. Source: Bloomberg.

Commodity prices have been high for several quarters, and now they have risen more sharply because of the war (figure I.4). Before the conflict, the increase was generally explained by markets being at historical lows in the face of a rapid recovery in demand and a contained supply. After the invasion of Ukraine, this behavior was compounded by several factors, including uncertainty about future supply, given the importance of Russia in the world's production of raw materials, and the impact of the sanctions imposed on this country.



(1) Wheat and natural gas correspond to one-month futures. (2) WTI-Brent average. (3) S&P GSCI Industrial Metals. Source: Bloomberg.



Regarding energy prices, most noteworthy is the increase in the cost of a barrel of oil, which in some days went above US\$120. Russia is an important player in this market, as it produces around 12% of the world's supply. In addition, OPEC+ has already had difficulties in meeting its production targets and inventories are at all-time lows. With this, considering the average of the last 10 days before the close of this Report, the price of an oil barrel was around US\$110, for the WTI-Brent average (+51% since the close of the previous Report).

Food prices have also shown significant increases in the most recent period, especially of certain grains. In the case of wheat (+36% since the close of the previous Report), Russia and Ukraine account for around 25% of world exports. In corn (+29% since December), Ukrainian exports account for just over 15% of global shipments. Meanwhile, during February, the FAO index rose 20.7% annually, reaching a new all-time high. Its trajectory reflects that the rise in global food prices is a process that had already begun several quarters ago, combining strong international demand, the deteriorated outlook, and/or lower supplies from producing countries and the impact of the high cost of energy, which has restricted production and increased the prices of fertilizers.

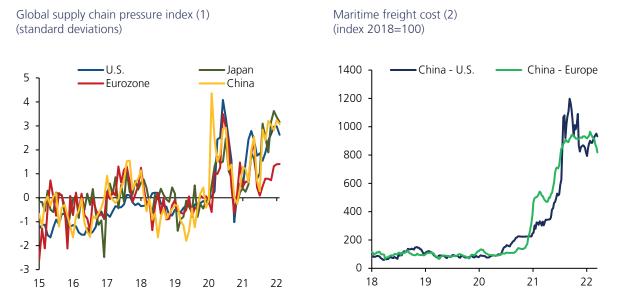
Metal stock prices have also responded strongly to the war, particularly those of which Russia is a major producer. The escalating nickel price stands out after reaching more than 10-year highs, as does palladium, used mainly in the manufacture of automobile catalysts. Copper prices have not been free of volatility, hitting US\$4.8 at the beginning of March (US\$4.6 at the close of this Report). All this in the midst of persistently low inventories and high uncertainty.

Global logistics chains are still unable to fully recover and the war could hinder their normalization (figure 1.5). In the latter part of 2021 there were some signs of slight stabilization in global value chains. However, the Omicron variant brought restrictions that led to new disruptions in activity in China, a country that still maintains its zero-tolerance policy regarding Covid-19. Likewise, the possible shortage of some inputs, derived from the invasion of Ukraine, such as palladium and neon gas, will affect the supply of certain industries, such as automobile and semi-conductor manufacturing, which could again disrupt global production of goods. There is also the added impact of higher oil prices on maritime shipping costs, although these have eased slightly from their highs of 2021.

In this scenario, the expected external impulse is revised down from December, due to the worsened outlook for Chile's trading partners, and the deterioration of financial conditions and the terms of trade. In the U.S., economic growth is expected to slow down in the short term, following the strong dynamism shown in the fourth quarter of 2021. In China, although the outlook shows no major changes, the real-estate sector is still showing signs of weakness and the recent quarantines will again affect activity in the short term, in contrast to a more expansionary monetary and fiscal policy, in order to achieve the 5.5% growth target set for this year by the Chinese government. In Latin America, the outlook remains weak. The region's inflationary environment is compounded by fiscal fragility and political uncertainty factors for this year. In this context, expectations of a less expansionary global monetary policy to address inflation, especially from the Fed, will drive up the cost of credit for emerging countries. For its part, the invasion of Ukraine will impact inflation through higher commodity prices and an extension of global bottlenecks. It will also affect activity, particularly in Russia's European trading partners. These phenomena are framed in an international scenario where the adverse economic effects of new variants of Covid-19 should be attenuated as the availability of effective vaccines continues to increase.



FIGURE I.5 BOTTLENECKS



(1) Standard deviations with respect to historic average. For details, see <u>Global Supply Chain Pressure Index: March 2022 Update</u>.
(2) Cost of transporting a 40-foot container in the respective routes.
Sources: Benigno, Di Giovanni, Groen & Noble (2022) and Bloomberg.

In the central scenario, the world growth projection is adjusted to 3.1% in 2022 (4.2% in the December Report) and maintained at 3.4% in 2023 (table V.3, chapter V). Copper prices are forecast at US\$4.35 per pound in 2022 and US\$3.9 in 2023 (US\$4.1 and US\$3.6 in December), while oil prices are corrected upwards, to US\$94 per barrel in 2022 and US\$83 in 2023 for the WTI-Brent average (US\$70 and US\$66 in December). With this, the terms of trade will follow a trajectory below that assumed in the December Report, and are forecast at -3.1% in 2022 and 2023 (-2.8% and -4.9% in December).



BOX I.1:

Impact of the Ukrainian war on the external scenario

The Russian invasion of Ukraine will have a negative impact on the international economy, deteriorating the external scenario facing the Chilean economy. The main consequences for Chile are a significantly higher price of certain commodities —energy and foods— and some slowdown in our trading partners' growth, particularly the European. The financial conditions relevant to Chile have not been affected, although the risk of a reversal is perceived to be higher.

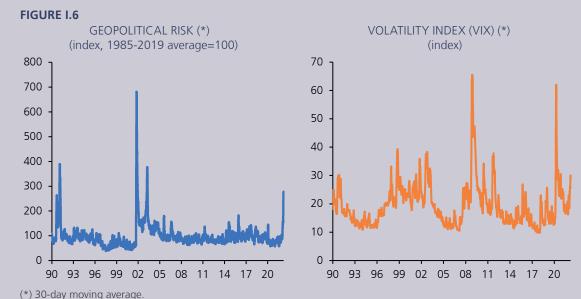
The central scenario of this Report and the alternatives contemplated in the MPR corridor's sensitivity scenarios, assume that the conflict will not spread to other countries, and that the situation will begin to normalize in the second part of this year. The sanctions imposed on Russia —including the exclusion of several banks from the Swift system and the freezing of a significant part of its Central Bank's reserves— will continue to have financial effects mainly in Russia and in some countries —in general, its neighbors— more exposed to Russian financial assets, but not at a global level. However, the unfolding of the conflict is still highly uncertain, and scenarios other than the one just described could generate much more severe economic and financial effects and require monetary policy paths outside the limits of the corridor.

The war between Russia and Ukraine has significantly raised the indicators of geopolitical risk and financial volatility (figure I.6), which will affect global consumption and investment.¹/ Although the conflict may be significantly more damaging to global financial conditions, so far the effects have been limited and concentrated in the countries directly involved and their nearest neighbors. In the central scenario, the increased uncertainty and worsening financial conditions will particularly affect the Eurozone, Russia, and Ukraine. Due to their remote geographical location, less direct involvement in the conflict and less exposure to Russian assets, the U.S., China, Latin America, and Chile would be less affected through this channel. In any case, given the high volatility of financial asset prices and the possibility that the conflict will keep escalating, scenarios of a greater reversal of global financial conditions have gained importance and will need to be monitored.

The higher prices of commodities, such as wheat and, especially, energy such as oil and natural gas fuels, are a second channel that worsens the external scenario. The rise in these prices will increase global inflation in the short term, reducing real income and increasing business costs, all of which affects demand and activity in Chile's main trading partners.²/ The projections consider, however, that most of the recent increases in these prices will be transitory. On the one hand, the central scenario assumes that the war conflict would not escalate into a confrontation of more countries and, on the other hand, the lower supply of Russian oil could be, at least partially, substituted by other sources in the future. Furthermore, the central scenario of this Report does not consider a total interruption of Russian gas supplies to Europe, which would have more significant effects on activity in that continent.

¹/ See Caldara & Iacoviello (2021) and Bloom (2009).

²/ Although exporters of wheat and energy will certainly benefit from these higher prices, they are not so relevant as Chile's trading partners.



Sources: <u>Caldara & lacoviello (2021)</u> and Bloomberg.

World trade will lose dynamism as a result of lower demand induced by increased uncertainty, falling domestic demand in Russia and Ukraine, and high commodity prices, transmitting the effects of the conflict even to countries not directly involved in it. World trade will also be affected by new bottlenecks associated with shortages of key inputs for relevant industries —palladium in the case of automobiles and neon gas for semiconductors— and the effect that sanctions against Russia could have on the recovery of supply chains. Finally, the deep recession that the Russian and Ukrainian economies will suffer, which represent close to 4% of world GDP, will have a direct impact on their main trading partners. Chile is not one of them.

The projections currently available from investment banks and international organizations are largely similar to those considered in this Report, but are subject to significant degrees of uncertainty (table I.1 and figure I.7). Actually, some of them include more pessimistic risk scenarios, where the impact of the war is more negative, significantly increasing its economic impact.

Depending on the exposure to the conflict and the initial conditions of activity, labor market, inflation, and expansionary stance of monetary stimuli, the effects of the conflict could trigger a complex trade-off for monetary policy decisions. Therefore, monetary authorities will have to weight the risk of the inflationary process becoming more persistent against the possible medium-term deflationary effects of lower activity. In the case of Chile, the worst-case external scenario described in the central scenario does not significantly change the activity projections of trading partners and only raises the short-term inflation outlook, with limited implications for monetary policy. Meanwhile, deviations from the central scenario, such as those considered in the sensitivity scenarios, place the MPR within the borders of the corridor. In the U.S. and the Eurozone, which are further behind in the process of monetary normalization, both the Fed and the European Central Bank —with different intensities and despite the greater risks of the macroeconomic scenario resulting from the war— have maintained and intensified the direction towards a less expansionary monetary policy, placing more weight on the positive impact on inflation than on the negative impact on economic activity.

	March 2022 MP Report		Consensus Forecast		Investment banks (2) (3)	
	2022	2023	2022	2023	2022	2023
World	3.1 (-1.1)	3.4 (=)	3.5 (-0.9)	3.5	3.5 (-0.9)	3.4 (-0.1)
U.S.	3.3 (- <mark>0.8</mark>)	1.9 (-0.4)	3.3 (-0.7)	2.4 (-0.1)	3.3 <mark>(-0.6</mark>)	2.2 (-0.1)
Eurozone	2.2 (-1.9)	2.1 (-0.3)	3.2 (-1.0)	2.3 (-0.3)	2.7 (-1.4)	2.2 <mark>(-0.3</mark>)
China	4.7 (-0.1)	5.1 (-0.1)	5.0 (-0.1)	5.2	4.7 (+0.1)	5.1 (+0.1)

TABLE I.1 COUNTERPARTIES' PROJECTIONS (1)(percent)

(1) For the MP Report, the change from the projections in the December 2021 Report is shown in parentheses. For Consensus Forecast, the change from the December 2021 published projections is shown in parentheses. For investment banks, in parentheses is the change from the projections published the week of 3 December 2021. (2) Simple average of the projections made by Barclays, Bank of America, J.P. Morgan and Goldman Sachs. (3) The composition of world GDP may vary among investment banks and is not necessarily comparable with our internal projections.

Sources: Central Bank of Chile, Consensus Forecast, Barclays, Bank of America, J.P. Morgan and Goldman Sachs.

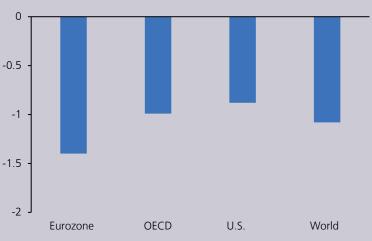


FIGURE 1.7 ESTIMATED IMPACT IN GDP IN FIRST YEAR (*) (percent)

(*) Based on OECD simulations that consider commodity price movements between February 24 and March 9 with respect to the January average, a 50% depreciation of the ruble against the dollar, bilateral depreciations of 5% against the dollar of the currencies of Bulgaria, Czech Republic, Hungary, Poland, Romania, and Turkey, a 10% increase in Russia's interest rate and risk premium, higher risk premiums in emerging economies and falls of 15% and 40% in Russia's and Ukraine's domestic demand in the first half of 2022.

Source: OECD Interim Economic Outlook, March 2022.



II. FINANCIAL CONDITIONS

Since the last Report, the performance of the Chilean financial market has been influenced by both internal and external factors. On the one hand, risk perception regarding the local economy showed some improvement in recent months, which contributed positively to the behavior of variables such as the exchange rate and long-term interest rates, although they are still far from their levels prior to the social outbreak. On the other hand, the ongoing war between Russia and Ukraine has increased global uncertainty —Chile has not been spared—, although its impacts on the prices of financial assets have been concentrated in the countries party to the conflict and geographically close neighbors. Local credit remains weak, amid tighter access conditions, lower demand for financing and interest rates rising in all portfolios, consistent with the pass-through of a more contractionary monetary policy given the higher inflation scenario. The Board has raised the MPR by 650 basis points (bp) since June of last year and estimates that, if the assumptions of the central scenario in this Report prove correct, future increases in the MPR would be smaller than those of recent quarters. In any case, this will depend on how the macroeconomic scenario evolves.

EVOLUTION OF FINANCIAL MARKETS

After continuous and significant deterioration throughout 2021, several local financial indicators have performed somewhat more favorably in the last few months. This, in a context in which certain political-legislative doubts have been dispelled and where the market has been internalizing a more contractionary response by the local monetary authority to the sharp rise in inflation. On the external front, the Russia-Ukraine war has generated greater volatility in world financial markets, including Chile. Doubts about the future of the conflict have permeated the local sphere, boosting economic and political uncertainty (Depuc). These reached new peaks towards the statistical close of this Report, after having shown a marked decline since mid-December (figure II.1). In any case, the asset prices that have been hit hardest so far have been those of the countries involved in the conflict and their neighboring countries.

Local long-term interest rates partially reversed their increase during 2021, amid widespread rises in other global counterparties (figure II.2). Yields on 10-year bonds in pesos (BTP-10) tended to match the global upward movements in the weeks leading to the publication of this Report. Still, the BTP-10 rate has remained below its highs of mid-October last year (close to 7%), when there was a turning point in its performance, coinciding with the period of discussion and subsequent rejection of a fourth withdrawal of pension savings. Its level is high from a historical perspective and with respect to other counterparties, which largely responds to the high local risk; this is the main factor behind the increase in the cost of mortgage loans and other long-term instruments (box V.1 in December 2021 MP Report). Thus, the differential between the Chilean and the U.S. rates is still wide, at around 400bp (420bp at the December cut-off date).





(*) 30-day moving average. Since December 2021, the Depuc includes an update of the dictionary of words used for its construction and detailed in DTBC No. 883. Thus new elements are incorporated that influence local conditions. From this date forward, the data dictionary will be subject to periodic updates based on the content of the corresponding news items. Dotted vertical line indicates the date of publication of the December 2021 MP Report.

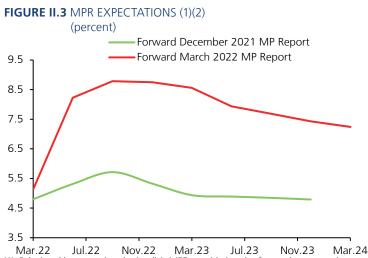
Source: Becerra & Sagner (2020).





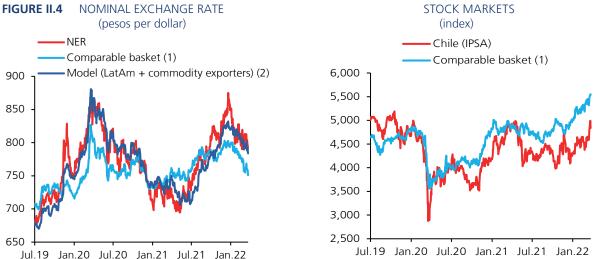
(1) For all countries, zero-coupon bond interest rates are considered, which correct for market rates of bond coupon payments. (2) The basket of comparable economies combines Latin American countries and commodity exporters (Brazil, Colombia, Mexico, New Zealand, and Peru). The weights are the coefficients of a cointegrating relationship with Chile's interest rate. Sources: Central Bank of Chile, Bloomberg, and RiskAmerica.

In the shorter term, local interest rate movements have been influenced by the higher inflation outlook, which has led to an increase in private expectations for the MPR (figure II.3). This has been the result of the upward surprise in recent inflationary figures, as well as the significant increase in world commodity prices, exacerbated by the war. Thus, expectations for the MPR inferred from asset prices have risen considerably with respect to the statistical close of the December Report. Globally, the greater intensity and persistence of inflation in a broad group of countries has changed the main central banks' communications and spurred expectations of a faster withdrawal of monetary stimuli, especially in the United States.



(1) Calculated by extracting the implicit MPR considering the forward curve on the overnight index swap curve up to 2 years, discounting the fixed rates of each maturity at the simple accrual of the average swap index (ICP). (2) Quarterly average at 7 December 2021 and 23 March 2022, respectively. Source: Central Bank of Chile.

The Chilean peso has resumed performing more in line with its short-term fundamentals. The local stock market has also rebounded. After several quarters of sustained increases, the peso/dollar parity appreciated slightly less than 6% from the December Report's statistical close. This coincides with the rise in copper prices, in a context in which the perception of risk surrounding the Chilean economy had been turning less negative. Thus, in recent months the peso has appreciated more than the currencies of some comparable economies, although it is still one of the currencies that have lost the most value in the last two years (figure II.4). In multilateral terms (MER, MER-5 and MER-X), the peso appreciated between 5% and 7% with respect to the last Report. The real exchange rate has also fallen, although it is still well above its 20-year average. Meanwhile, though with ups and downs, the IPSA has accumulated gains so far this year. By sectors, results have been driven mainly by companies linked to exporters of commodities whose prices have risen, and other manufacturing companies.



(1) Captures movement or trend that the NER/IPSA should follow according to the currencies/shares of comparable basket economies (i.e., Australia, Brazil, Colombia, Mexico, New Zealand, and Peru). The weights are the coefficients of a cointegrating relationship with Chile's nominal exchange rate/stock market. (2) Captures movement or trend that the NER should follow according to its fundamentals, such as copper price and domestic price level. The model also considers exogenous changes to the equilibrium level of the NER, of around 10% in 2019 and 15% in 2021 (a total change in level of 25%). For more details see <u>"Use of Macroeconomic Models in the Central Bank of Chile" (2020)</u>.

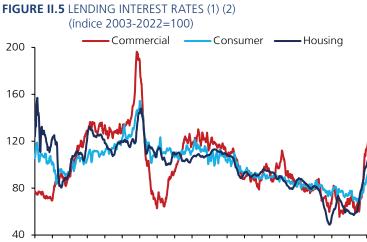


FINANCING COSTS AND CONDITIONS

The substantial increase accumulated by the MPR has been gradually passed through to shorter-term bank credit interest rates. Lending interest rates continued to rise across the board and now exceed the average of the last decade (figure II.5). In the consumer and commercial segments, rates have risen by around 660 and 620bp between June 2021 and the available March data. The mortgage category, which has been more affected by the increase in longer-term benchmark rates than by the MPR, also shows increases in its average rates: 190bp between June 2021 and February 2022. In the case of mortgage credit, there is greater participation of variable or mixed-rate loans in their composition, as close to half of the flows of this portfolio have been granted in these conditions.

Market rates have been rising in a context of tighter conditions for access to credit. The Bank Lending Survey (BLS) for the first quarter of 2022 reported tighter supply conditions than in the previous quarter for most portfolios, with special emphasis on corporate ones. In the <u>February Business Perceptions Report (IPN)</u>, clients reported more stringent customer risk assessment by banks, while also reporting higher collateral requisites and more background information. Regarding the mortgage segment, it noted the increase in the required down payment and the shortening of terms since the last quarter of 2021.

The demand for funds continues to show poor dynamism, in a context where household and corporate liquidity levels remain high, despite a declining trend initiated in recent months. This can be seen in the evolution of the real balances of current and demand accounts, which have decreased after their peaks of the second half of 2021 but are still high by historical standards (figure III.5). At the same time, agents' savings have increased, amid rising bank interest rates and high levels of uncertainty. According to the February 2022 IPN, the proportion of companies reporting no need for new loans had been rising since the middle of last year. Some respondents noted that this lower need for credit was explained by the high liquidity they had thanks to good sales in 2021. However, they reiterated that their borrowing intentions were being affected by the tightening of financial conditions, especially in mortgage. In addition, they continued to report a more cautious behavior by companies — especially among the smaller ones— and individuals, which could be associated with the persistent uncertainty on different fronts. Meanwhile, the BLS for the first quarter of 2022 reported a weakening of credit demand in all segments, including businesses and households.



03 04 05 06 07 08 09 10 11 12 13 14 15 16 17 18 19 20 21 22

(1) Weekly data for the Metropolitan Region; weighted averaged rates of all operations performed each period. For housing, operations in UFs. (2) Moving 4-week average.

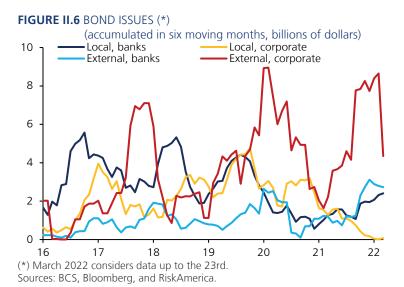
Source: Central Bank of Chile based on Financial Market Commission data.



Against this backdrop, credit performance has remained subdued. Consumer loans have continued to contract in annual terms, with the exception of the credit card component, which has continued to improve. Commercial loans show slow growth, with annual expansion rates well below those observed before the social crisis, and new mortgage loans have been slowing down for some months.

In terms of repayment behavior, although non-performing loans remains low, provisions have continued to increase, suggesting that banks maintain a cautious view of portfolio risks. In particular, provisions have increased in the consumer and commercial portfolios, mainly additional provisions in the latter. On the commercial side, there is still a higher share of some lower-quality categories. All this in a context of still high uncertainty, stricter conditions for access to credit, household and firms' liquidity in some sectors beginning to decrease, and a more complex international scenario.

In recent months, the Chilean corporate bond market continued to show low activity, while there has been an increase in bond issuance by banks. Bond placements by non-financial companies in the local market have remained low, while those abroad are still high but declining amid more deteriorated international financing conditions, particularly due to the increase in long rates. Meanwhile, local bank bond issues have increased, absorbed mostly by pension funds (figure II.6). Spreads narrowed with respect to the December Report at the local level, especially in the banking sector. In any case, both are still above their pre-social-crisis levels.





III. ACTIVITY AND DEMAND

The Chilean economy began to slow down in recent months after being strongly dynamic last year, mainly due to the boom in domestic spending. Private consumption of goods, which reached record highs in 2021, is the one that has moderated its pace of expansion the most, in a context in which the significant liquidity provided by the household-support measures has been decreasing. Investment has also lost momentum, as shown by several indicators linked to construction and other works. In contrast, services activities have been consolidating a recovery process as the economy has been opening up. The labor market shows an increase in participation. However, the demand for labor by firms has been somewhat less buoyant in recent months, in line with stabilizing levels of business performance; all of it in a context where business and consumer expectations have become more pessimistic.

In line with forecasts in the December Report, GDP grew 11.7% in 2021 —the highest in several decades—, a result that incorporates a deceleration of activity in most economic sectors in the latter months of the year (figure III.1) (box III.1). With the exception of services, all sectoral aggregates of the Imacec have fallen from October onwards in seasonally-adjusted terms. Trade has suffered the most notable drop, related, above all, to lower demand for durable goods. The deterioration in mining was linked to operational problems, lower ore in copper mines and restrictions in water availability. Other goods, which includes construction, also showed poorer results. In contrast, entrepreneurial and personal services continued to benefit from the lower sanitary containment measures compared to last year, with support activities for mining and commerce, and health-care services standing out.



FIGURE III.1 IMACEC

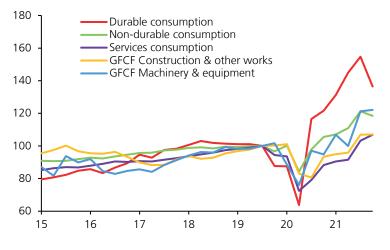
Source: Central Bank of Chile.



On the demand side, private consumption of goods was already exhibiting a noticeable decline in the fourth quarter of 2021 (figure III.2), higher than expected in the December Report. The surprise is mainly based on the downward correction of durable goods, which dropped 11.8% compared to the previous quarter in seasonally-adjusted terms. Non-durables also fell, but to a lesser degree and in line with expectations.

FIGURE III.2 DOMESTIC DEMAND





Source: Central Bank of Chile.

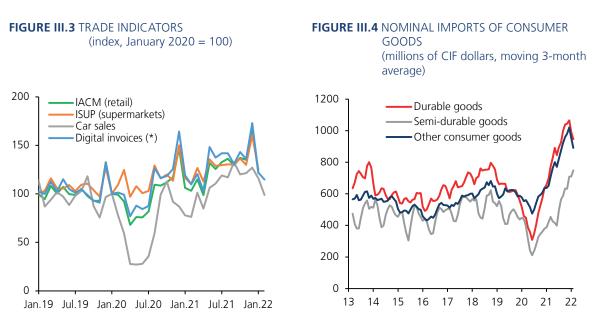
Several indicators confirm that this trend has continued so far in 2022. Retail trade activity (IACM) and supermarket sales (ISUP), both seasonally adjusted, decreased in January. Meanwhile, digitally-invoiced retail sales (real, seasonally adjusted, excluding gas stations) and car sales (ANAC) posted negative monthly variations in January and February (figure III.3). This is consistent with the evolution of nominal imports of consumer goods, which in recent months showed some reversal of the growing trend they had observed throughout 2021, in which the case of durable goods stands out (figure III.4).

This occurs in a context in which the effects of stimulus measures —i.e., fiscal transfers and partial withdrawals of pension savings— are still present, despite some recent decline. This translates into the decrease in households' available liquidity, although it remains high in historical perspective. Proof of this is the fall in the balances of the individuals' current and demand accounts from their peaks of the second half of 2021 (figure III.5).

As a counterpart, services consumption continues to be favored by the sanitary easing and resumed the growing trend it was on before the pandemic. During the fourth quarter its de-seasonalized series grew 3.6% with respect to the previous quarter (figure III.2). Also, in January, every index of services sales (INE) posted positive evolution, notably artistic, entertainment, and recreational activities.

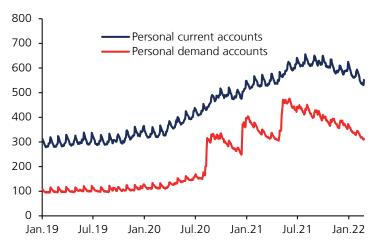
Investment moderated in the fourth quarter, in line with forecasts in the December Report. After growing 15.2% in the third quarter with respect to the second in the seasonally-adjusted series, the last quarter of the year posted 0.4% growth, also in seasonally-adjusted terms. This reflected the slowdown of both machinery & equipment and construction & other works (figure III.2).





(*) CPI-deflated. Excludes gas stations. Sources: INE, ANAC, SII, and Central Bank of Chile.

FIGURE III.5 REAL BALANCES IN INDIVIDUALS' ACCOUNTS (*) (millions of UFs, daily data)



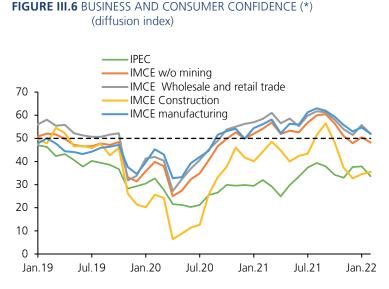
(*) In January 2022, the Compendium of Bank Accounting Standards of the Financial Market Commission was updated, which is used for the generation of monetary statistics. This change implied adapting the monetary compilation instruments of the Central Bank of Chile (from F01 file to SIM01 file). Source: Central Bank of Chile.

The recent evolution of investment-related indicators saw a reversal of good results it exhibited during 2021, in particular in the construction and other works component. Construction data such as concrete sales, authorized surface, and real-estate sales have been slowing down. This is in line with the significant increase in home prices and mortgage loan rates. In the case of machinery & equipment, imports of capital goods early in the year reported a moderate downward adjustment, concentrated in those items that had benefited from the boom in demand and automation.



In this context, the perception of companies and consumers has become more pessimistic (figure III.6).

Thus, the monthly business confidence index (IMCE) shows a downward trend in all the sectors included in the study, in both current and future perspectives, especially in the construction sector. In addition, the <u>February</u> <u>Business Perceptions Report (IPN)</u> reports that in recent months companies have observed a stabilization or a moderate decrease in their performance, amid significant cost pressures and uncertainty. On the consumer side, the Economic Perception Index (IPEC) fell in February and remains in pessimistic territory.



(*) Value above (below) 50 denotes optimism (pessimism). Sources: UAI/ICARE and Gfk/Adimark.

THE LABOR MARKET

Labor supply has continued to reactivate. The participation rate has risen further, boosted by reducedpandemic-related risks and employment subsidy programs such as the workers' IFE (emergency family income) (figure III.7). In any case, these advances are heterogeneous among the different groups of workers. One of the most lagging is the highest age bracket (over 54), suggesting that a significant proportion of this segment may have quit the workforce permanently. Meanwhile, the recovery of female participation still lags behind that of men and continues to be strongly associated with the greater burden of family and personal responsibilities.

In contrast, demand has stabilized in recent months. The figures for job postings on the Internet show some slowdown since the second half of last year (figure III.7). In turn, expected hirings in companies included in the IMCE have fallen in every sector, especially in construction.

In this context, employment continues to increase. Regarding occupational categories, according to information from the INE, formal and self-employed salaried employment fully recovered to prepandemic levels. Even, according to administrative data from pension funds, the level of formal salaried employment is above its pre-pandemic level. In contrast, the rest of the categories are still quite lagging behind and show little sign of recovery, standing at levels similar to those of the beginning of last year.



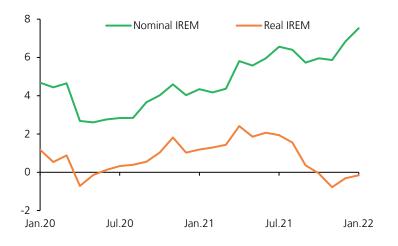
In any case, despite some correction, the mismatch between labor supply and demand lingers on, which continues to put upward pressure on wages. Information from the Business Perceptions Survey (EPN) reveals that nearly nine out of ten firms have difficulties finding new workers, with agriculture, construction, and tourism being the most challenging. The same survey shows that the most used strategy in this situation is to offer better compensations to candidates. Accordingly, nominal wages have grown substantially. However, because of the high inflation, they have dropped in real terms. However, there has been a shift in the trend in the last few months, which could be associated with the shortening of the lag in wage indexation (figure III.8).





Sources: Central Bank of Chile and National Statistics Institute (INE).





Source: National Statistics Institute (INE).



BOX III.1:

Recent evolution of the economy under the new national accounts

Last 18 March saw the publication of the national accounts based on the new 2018 benchmark compilation (2018BC) together with the corresponding estimate of the balance of payments series —including the current account— and the international investment position. Among the main methodological novelties of the 2018BC, most salient is the incorporation into gross fixed capital formation of a large part of the specialized construction services of companies involved in the maintenance and repair of buildings and engineering works. This entailed an increase in investment as a percentage of GDP in the period 2013-2021, in both nominal and real terms. Other important innovations are the use of new tax records (electronic tax documents and corporate balance sheets), in order to strengthen the economic classification of taxpayers and strengthen the allocation of activities associated with the digital economy, changes in the estimation method related to the electricity consumption of households and firms, and greater coverage of auxiliary financial services ¹/. This box analyzes the effects of these changes on the main macroeconomic aggregates in the period 2013-2021.

Changes in the evolution of GDP and domestic demand

The evolution of GDP in the period 2013-2020 showed minor changes, so the average annual growth rate of the period stayed practically the same (table III.1). In 2021, GDP grew 11.7%, slightly less than the 12% that the Imacec showed based on the previous compilation (2013BC) and in the midpoint of the projection range of the December Report (between 11.5% and 12.0%). In quarterly terms, contrasting revisions are observed throughout the year, with the last quarter exhibiting the biggest difference in the annual rate of variation (2018BC: 12%; Imacec based on 2013BC: 13%), where trade and services activities stand out as the sectors with the greatest contribution to the revision.

In domestic demand, annual growth of the aggregate shows no significant revisions for the period 2013-2020 (table III.1). Excluding the change in inventories, there is an upward revision of investment reflecting a generalized increase in its components. In 2021, domestic demand growth was in line with expectations in the central scenario of the December Report (21.6%), but with a restructuring between private consumption and inventory change. In the fourth quarter, there was weaker durable consumption and greater-than-expected variation in inventories, due to a greater recovery in inventory levels compared to 2020.

In January 2022, the Imacec consistent with the 2018BC anticipated the year beggining with growth somewhat above the previous version. The annual variation of this index reached 9.6% (previous: 9.0%) and the seasonally-adjusted monthly variation was 0% (previous: -1.0%). This confirms the path of normalization of the economy since the last months of 2021 (figure III.9), especially in the lines associated with consumption, and a weakening of the activities associated with investment in construction. Services exhibit a more dynamic behavior, determined by the opening of the economy.

¹/The details of innovations and main results are presented in the document <u>Cuentas Nacionales de Chile: Compilación de Referencia</u> 2018 and Balanza de Pagos, Posición de Inversión Internacional y Deuda Externa.

Changes in the current account and the savings-investment balance

Within the framework of the new benchmark compilation, a methodological review of the current account was carried out, which incorporated imports of digital platform services and improvements in the estimation of export trade commissions. In addition, income from foreign direct investment and interest on debt instruments were revised, among others. The new estimate shows an increase in the current-account deficit, mainly in 2014, 2019, and 2020, with the services trade deficit having the main incidence in the revision, followed by the decrease in income in 2014 and 2020. In 2021, the current account posted a historical deficit of US\$20.31 billion, that is, 6.6% of GDP, reflecting the higher income paid abroad and, to a lesser extent, the deficit in the trade balance of services (figure III.10).

From the standpoint of the savings-investment balance, total gross savings of the economy amounted to 25.3% of GDP in nominal terms, composed of a national savings rate of 18.8% of GDP and external savings of 6.6%. The decrease in national savings and the increase in external savings compared to 2020 responded mainly to the strong dynamism of consumption and a rebound in investment in all its components reflecting: the reduction of sanitary restrictions; the increased liquidity provided by tax transfers and pension fund withdrawals; a decrease in precautionary behavior associated with less uncertainty; and the recovery of the labor market.

Conclusions

The 2018 benchmark compilation confirms the strong growth of the economy in 2021 driven by domestic demand, in line with the macroeconomic scenario described in the December Report and based on the former compilation. The last few months of last year saw a slowdown in expansion velocities, partly explained by the end of macroeconomic stimuli and deteriorating financial conditions. The larger current-account deficit, meanwhile, responds to high domestic spending in the last year. The central scenario of this Report foresees a lower deficit in 2022, estimated at around -4.6% of GDP. This downward trajectory is related to the slowdown in consumption in conjunction with a scenario of weaker investment.

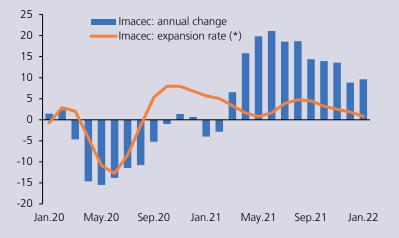
2013-20 2021 2021 (anual L Ш Ш IV average) Prev. Curr. Prev. Curr. Imacec Curr. MP Report Prev. Curr. Prev. Curr. Curr. GDP 0.8 0.8 0.6 -0.0 18.1 18.9 17.2 17.2 13.0 12.0 11.5-12.0 11.7 Non-mining GDP 0.5 20.9 19.9 0.9 0.9 1.2 20.3 20.2 14.8 13.6 13.3 Domestic demand 0.4 0.4 30.9 31.3 28.4 28.2 22.9 21.6 21.6 6.7 5.7 Final demand 0.6 0.8 3.8 4.0 29.6 29.3 24.9 24.8 16.1 18.9 18 Gross fixed capital formation -1.8 -1.2 1.3 1.6 20.7 21.6 29.8 29.7 19.9 17.6 17.6 Total consumption 1.4 1.4 4.4 4.8 32.1 31.7 23.7 23.3 15 19.2 18.2 Private consumption 1.1 1.1 5.2 5.4 35.6 36.2 27.5 27.5 16.1 21 20.3 Exports -0.1 -0.2 -4.9 -4.9 -1.9 -2.5 1.7 1.1 0.6 -0.7 -1.5 Imports -1.3 -1.5 15.9 14.5 38.3 35.4 38.3 37.3 38.4 31.3 32 Percent of GDP (real) Investment in fixed capital 22.2 24.1 20.5 24.4 20.0 22.6 22.0 24.9 25.2 21.8 24.3 Percent of GDP (nominal) Investment in fixed capital 22.7 24.3 19.2 22.9 19.5 21.9 22.2 24.7 25.9 21.3 24.0 Total investment 22.6 24.4 23.8 25.5 21.0 22.7 23.6 25.8 27 22.6 25.3 External savings 2.5 3.5 2.6 3.5 3.4 4.0 8.4 8.8 4.5 6.6 9.3 National savings 20.2 21.0 21.2 17.6 18.7 16.9 17.7 18.1 18.8 22.1 15.2

TABLA III.1 EVOLUTION OF MAIN MACROECONOMIC AGGREGATES, 2013-2021(real annual change, percent)

Source: Central Bank of Chile.



FIGURE III.9 EVOLUTION OF THE IMACEC, 2020-2022 (percent)



(*) Expansion rate refers to monthly change in moving 3-month average of seasonally-adjusted Imacec. Source: Central Bank of Chile.

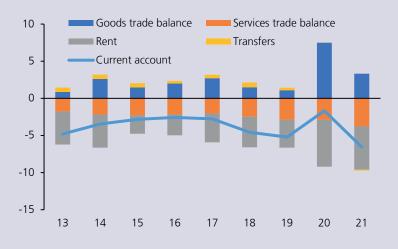


FIGURE III.10 CURRENT-ACCOUNT BREAKDOWN, 2013-2021 (percent of GDP)

Source: Central Bank of Chile.



IV. PRICES AND COSTS

The annual variation of the CPI has continued to rise, with generalized increases among its components. The surprises with respect to the December projection have been significant, and are mainly seen in the goods in the core CPI basket and, to a lesser extent, in some volatile items. The main factor behind the higher inflation continues to be the strong impulse to domestic spending provided in 2021, coupled with stronger than expected cost pressures, which have continued to increase. This is due to global supply and distribution difficulties that have not subsided and still rising commodity prices, which is exacerbated by the cumulative depreciation of the Chilean peso over the last two years. All of this has continued to put upward pressure on prices, particularly for goods, and has raised the outlook for annual inflation over the coming quarters. In this context, market inflation expectations have remained above 3% in the two-year horizon for several months, which is a cause for concern. Inflation expectations of firms and households has also increased, although this is perceived as a transitory phenomenon, which would not be altering the firms' pricing policies nor would they require further adjustments in the consuming behavior of households (box V.2).

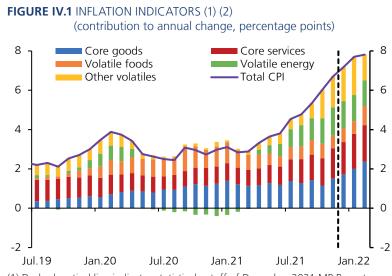
RECENT EVOLUTION OF INFLATION AND COSTS

Annual CPI inflation CPI rose again and reached 7.8% in February of this year, with upward trajectories in most of its components (figure IV.1). Core CPI —which excludes volatile items— rose to 6.5% annually (around 5% annually at the end of last year), driven by the sustained rise in goods prices since the end of 2019, among which the price of automobiles stood out once again. This has occurred in a scenario where the exchange rate has accumulated a significant depreciation in the last two years, despite the appreciation with respect to the previous statistical close. The annual variation of the services component of core inflation reached 4.9% in February, which is lower than headline CPI inflation and is explained by the lags in the usual readjustment of indexed prices and rates (figure IV.2).

Volatile price inflation maintained its annual growth rates ranging between 10% and 11%, where the increase in food and fuel prices stood out (figure IV.3). Annual inflation of the volatile food CPI reached 8.9% in February, reflecting higher prices of several of its items. The increase in the price of fuels (+3.3% with respect to the December statistical close) was the main factor behind the increase in energy prices, as electricity rates have remained unchanged due to the stabilization mechanism in place. Meanwhile, some of the atypical increases in items such as tourist packages and airline fares during the past year were reversed¹/.

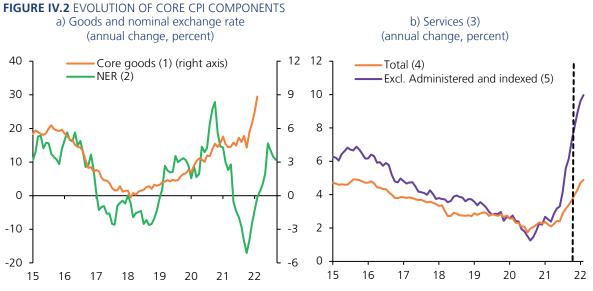
¹/ Between January and November 2021, the prices of tourist package and airline fares had risen by 74% and 51%, respectively.





(1) Dashed vertical line indicates statistical cutoff of December 2021 MP Report.
 (2) For more detail on different groupings and share in total CPI basket, see <u>box IV.1 in December 2019 MP Report</u>, <u>Carlomagno & Sansone</u> (2019), and <u>Economic Glossary</u>.

Sources: Central Bank of Chile and National Statistics Institute (INE).



(1) Accounting for 26.7% of CPI basket.

(2) Lagged six months. For March 2022, considers information up to statistical closure.

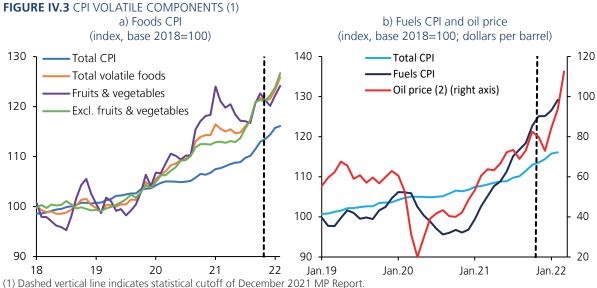
(3) Dashed vertical line indicates statistical cutoff of December 2021 MP Report.

(4) Represents 38.4% of CPI basket.

(5) Represents 11.7% of CPI basket.

Sources: Central Bank of Chile and National Statistics Institute (INE).

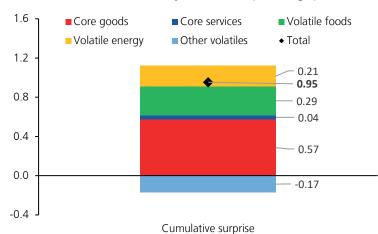
Regarding projections, cumulative inflation in the last three months (2.3pp between December and February) was almost 1pp higher than foreseen in the previous MP Report. More than half of the accumulated difference came from the core component of the CPI basket, particularly goods and foodstuffs. Among the former, worth noting was the greater increase in the prices of automobiles, clothing & footwear, and household equipment. The rest of the positive surprise was explained by the volatile part, both foods and fuels, whose prices have accumulated significant increases since the last MP Report. Core services, meanwhile, were in line with forecasts (figure IV.4).



 (1) Dashed vertical line indicates statistical cutoff of December 2021 MP Rep (2) Average Brent-WTI oil price per barrel.

Sources: Central Bank of Chile, Bloomberg and National Statistics Institute (INE).

FIGURE IV.4 CUMULATIVE INFLATION SURPRISES SINCE DECEMBER 2021 MP REPORT (*) (cumulative monthly contribution, percentage points)

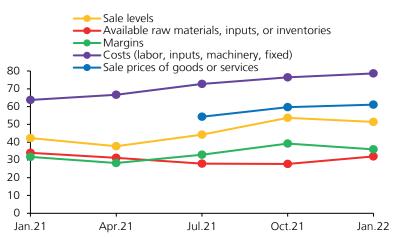


(*) For more detail on different groupings and share in total CPI basket, see box IV.1 in December 2019 MP Report, Carlomagno & Sansone (2019), and Economic Glossary.

Sources: Central Bank of Chile and National Statistics Institute (INE).

The higher effective inflation took place in a context in which domestic spending has remained high, which has been intensified by the significant cost pressures faced by companies. Locally, transportation costs and industrial producer prices (INE) continued to rise, as did nominal wage growth (ICMO and IR), which went to levels unseen since the 2014-2015 period. In the February Business Perceptions Report (IPN), companies noted that the cost pressures they faced were the main reason for their price hikes. The availability of inputs or inventories remained low, despite a slight improvement most recently (figure IV.5). At the global level, pressures on supply chains —in terms of transportation costs and production and logistical difficulties— have shown record highs²/. Reports published by other central banks suggest that inflation is a cross-cutting phenomenon among economies, although its causes are not always the same. Thus, among the main factors mentioned are the strong impulse of demand, the tight labor market, supply and distribution problems, plus the higher costs and commodity prices³/⁴/.

FIGURE IV.5 IPN: EVOLUTION OF CORPORATE FACTORS IN LAST THREE MONTHS (*) (diffusion index)



(*) Value above (low) 50 represents higher proportion of "increased" ("decreased") responses. Weighted by company size. Source: Business Perceptions Report (IPN), Central Bank of Chile.

Market inflation expectations have risen again in the short term, in response to higher actual figures and commodity prices. Two years ahead, they have remained above 3% for several months, which is cause for concern. In the twelve-month horizon, the median of the surveys —March EES and FTS prior to the March meeting— place inflation at 5.3% and 7.4%, respectively (around 4.8% in the previous MP Report). Two-year inflation expectations have also increased, placing it between 3.7% and 4.0% (between 3.5% and 3.9% in the last MP Report) (figure IV.6). At 35 months (EES), they remain at 3%. Thus, the group of experts responding to these surveys estimate that inflation will take longer to converge to the target than expected by the Bank. This could be due to the differences between the outlook for the activity scenario and, especially, for the spending scenario estimated by the respondents compared to the Bank's projections (box V.1). The expectations implicit in financial asset prices have also

²/ See <u>"Global Supply Chain Pressure Index: March 2022 Update", Federal Reserve Bank of New York Liberty Street Economics</u>

³/ See monetary policy reports of the U.S., Europe, England, Canada, Australia, New Zealand, Norway, Brazil, Mexico and Colombia.

⁴/ See qualitative reports of surveys to companies in England, U.S. and Norway.

risen. However, as noted in previous MP Reports, indicators such as breakeven inflation are more volatile and contain information on premiums that affect their value, which may be relevant in situations such as the current one, where there is greater uncertainty (see boxes IV.1 and <u>V.1 in the December 2016 MP Report</u>). In the cases of companies and consumers, their perspectives for short-term inflation have also risen, although this is perceived as a transitory phenomenon, which would not be altering the companies' pricing processes (box V.2).

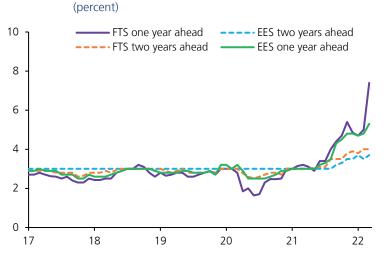


FIGURE IV.6 INFLATION EXPECTATIONS IN SURVEYS (*)

(*) FTS considers the survey for first two weeks of each month through January 2018. From February 2018 onwards, considers the last survey published in the month, including the one prior to the March 2022 MP Meeting. In months with no survey published, the latest one available is considered. Source: Central Bank of Chile.



V. FUTURE EVOLUTION OF MONETARY POLICY

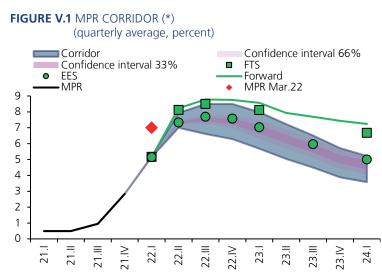
Inflation has risen to around 8% annually, with significant surprises since last year's Report. This increase has been driven by very high demand levels and stronger and longer lasting cost pressures than expected in December, leading inflation projections to approach figures close to 10% annually in the coming months. The convergence of inflation to the target requires, the economy to adjust the imbalances it accumulated last year, among other factors. Data for late 2021 and early 2022 indicate that this process has already begun, and could be occurring at a somewhat faster than anticipated rate. Consistent with this, the central scenario projection considers contractions in private consumption and investment this year and next, with negative annual GDP growth rates for several quarters. The Board has rapidly raised the monetary policy rate (MPR), and in the central scenario of this Report it anticipates that the convergence of inflation to the target will require additional increases in the short term, that will place it above its neutral value throughout the projection horizon. All in all, the challenges for monetary policy conduct become especially complex, in a context of high uncertainty both locally and internationally.

MONETARY POLICY STRATEGY

In recent months, inflation has been higher than expected. A major part of the surprise originated in a greater-than-expected rise in the core CPI component (the CPI minus volatiles), particularly in goods, plus increases in some volatile items, especially fuels and certain foods (figure IV.4). Excessive domestic spending growth in 2021 remains the main factor behind rising prices, coupled with higher and more prolonged cost pressures than previously anticipated.

In this context, the MPR has increased at a faster pace than was assumed in the December Report's central scenario. In the meetings of January and March, the MPR was raised by a combined 300 basis points (bp), to 7%. The MPR corridor contained in this Report places it between 100 and 200bp above the December forecast. The further increase in the MPR will contribute to the normalization of domestic spending —a key assumption in the reduction of inflationary pressures in the medium term— and to a somewhat earlier closing of the activity gap. It will also help mitigate the impact of higher inflation persistence on expectations formation.

The Board estimates that, if the assumptions in the central scenario prove correct, future increases in the MPR would be smaller than those of recent quarters (figure V.1). Although the MPR increases have been fast and significant, the risks for the convergence of inflation still persist. The Board will carefully monitor these risks, making sure that inflation converges to the target within the two-year monetary policy horizon.



(*) The corridor is built by following the methodology presented in boxes V.1 of March 2020 Report and V.3 of March 2022 Report. Includes March EES, FTS pre-policy-meeting of March and the average smoothed forward curve of quarter to 23 March. This is calculated by extracting the implicit MPR considering the forward curve on the interest rate swap curve up to 2 years, discounting the fixed rates at every maturity at the simple accrual of the ICP. For the current quarter the surveys and the forwards consider the average daily effective and are completed with the respective sources. Source: Central Bank of Chile.

CENTRAL SCENARIO ACTIVITY AND DEMAND PROJECTIONS

Data for the fourth quarter of 2021 show that domestic demand began to slow down in the latter part of the year, particularly in the consumption of durable goods. As a counterpart, there was an increase in inventory build-up, which has been recovering after several quarters at minimum levels. The respondents to the <u>Business Perceptions Report</u> (IPN) report that replenishing inventories has been somewhat delayed, due to the production and logistical difficulties remaining from the pandemic. The deceleration of private consumption is in line with the behavior of commerce in the last part of 2021, especially in the retail segment. In contrast, a rebound in services activities has been consolidating with the easing of sanitary restrictions. Several partial indicators for the first quarter of this year suggest that private consumption has continued to decline, as shown by the evolution of the Imacec for commerce and recent data on retail and electronically invoiced sales.

The central scenario reduces GDP growth to a range between 1% and 2% in 2022 and between -0.25 and 0.75% in 2023, considering negative annual variations in several quarters (table V.1). Towards 2024, the economy will resume expansion rates more in line with its potential growth (figure V.2). For that year, GDP is projected to grow between 2.25 and 3.25%. Thus, at the end of the projection horizon, GDP will achieve a substantial rebound from the levels of the previous two years.



TABLE V.1 ECONOMIC GROWTH AND CURRENT ACCOUNT

	2021	2022 (f)	2023 (f)	2024 (f)	
	(annual change, percent)				
GDP	11.7	1.0-2.0	-0.25/0.75	2.25-3.25	
National income	15.9	0.1	0.4	3.5	
Domestic demand	21.6	-1.2	-1.1	2.8	
Domestic demand (w/o inventory change)	18.0	-1.1	-0.7	2.8	
Gross fixed capital form	17.6	-3.8	-0.2	2.0	
Total consumption	18.2	-0.2	-0.8	3.1	
Private consumption	20.3	-0.3	-1.1	3.2	
Goods and services exports	-1.5	3.3	5.4	2.8	
Goods and services imports	31.3	-4.7	0.7	2.7	
Current account (% of GDP)	-6.6	-4.6	-3.5	-3.2	
Gross national saving (% of GDP)	18.8	19.7	20.3	20.5	
Gross national investment (% of GDP)	25.3	24.3	23.8	23.7	
GFCF (% of nominal GDP)	24.0	23.1	23.2	23.2	
GFCF (% of real GDP)	24.3	23.0	22.9	22.7	
		(US\$ million)			
Current account	-20,307	-14,800	-12,300	-12,000	
Trade balance	10,528	17,200	16,800	14,500	
Exports	94,677	100,500	100,900	102,900	
Imports	84,148	83,300	84,100	88,400	
Services	-11,979	-12,500	-11,600	-11,300	
Rent	-18,423	-20,100	-18,700	-16,400	
Current transfers	-433	600	1,200	1,200	

(f) Forecast.

Source: Central Bank of Chile.

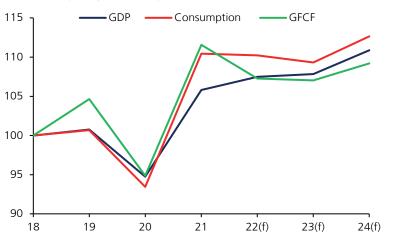


FIGURE V.2 GDP, CONSUMPTION AND GROSS FIXED CAPITAL FORMATION (*) (index, 2018=100)

(*) Projections consider the midpoint of the forecast ranges in this Report. (f) Forecast. Source: Central Bank of Chile.



Gross fixed capital formation (GFCF) concentrates the biggest downward revisions of the central scenario, so a more intense contraction is expected this year (figure V.2). Investment will continue to be affected by tighter financing conditions. Despite some decline in recent months, long-term interest rates (BTP-10) have remained high, associated with high levels of uncertainty as well as the diminished size of the domestic capital market (box V.1, December 2021 Report). This situation has further pushed up the cost of mortgage loans and, in general, of other longer-term instruments, which is considered to be the main reason behind the greater restrictions in access to credit. On the external front, financial markets have performed less favorably in recent months, with new increases in long rates around the world and a lower appetite for risk. The invasion of Ukraine has added more uncertainty globally, which has also raised its local measure (Depuc) (figure II.1). Finally, the real exchange rate (RER) will remain above its historical averages for several quarters, thus driving up the costs of importing capital goods.

Investment surveys and other sources reinforce this view of weak investment, especially in construction and other works. The Capital Goods Corporation's (CBC) survey shows a drop in large-scale projects for this and next year (-15% and -28% annually, respectively), as well as postponed mining initiatives towards 2023-2024. Construction companies' confidence remains pessimistic in its different components (IMCE) and the data on authorized surface area for new construction works have recorded low levels for several quarters (INE). In the housing segment, there has been a decline in sales (CChC), in line with higher prices and costlier mortgage loans, which has been reflected in reduced flows of these loans in recent months.

Accordingly, the central scenario foresees GFCF's annual change at -3.8% in 2022 and -0.2% in 2023 (-2.2% and 0.1% in December). In 2024 it will grow 2% annually.

Private consumption will normalize somewhat faster than expected in December, especially for durable goods, consistently with the decline already observed (figure V.2). The reduction in consumption is explained by several factors. Although household liquidity is still high, it has been gradually decreasing, as can be seen in the balances of individuals' current and demand accounts (figure III.5). Tighter financial conditions will also reduce momentum. Interest rates in the consumer portfolio have been rising for several months, in line with the transmission of monetary policy adjustments (figure II.5). This rise, together with high current uncertainty, could also have an impact on the use of excess resources from stimulus policies, favoring savings. In fact, the amounts of time deposits and savings of individuals have increased by around 20% in real terms since May of last year. Thus, in the central scenario, private consumption will fall by 0.3% and 1.1% in 2022 and 2023, respectively, returning to growth rates consistent with trend GDP by 2024.

The outlook for the labor market has been moderated since December, amid a cyclical adjustment in the economy, a drop in investment, and an ongoing recovery of the labor participation rate from the effects of the pandemic. Employment has continued to increase, surpassing pre-pandemic levels as shown by administrative records. However, some indicators related to labor demand appear somewhat weaker, such as internet job postings or sectoral employment expectations (IMCE). Labor supply has reactivated further, although its progress is heterogeneous among different groups of workers.

Regarding fiscal policy, the convergence of inflation and the resolution of macroeconomic imbalances require a significant reduction in fiscal spending in 2022. Pending the new administration's fiscal responsibility decree, the central scenario maintains the assumption that spending will fall in line with the approved budget. This implies a real annual fall in public spending of 24.6% in 2022, which includes the addition of incremental spending associated with the Universal Guaranteed Pension and other projects, as outlined in the last Public Finance Report. For the 2023-2026 period, the spending trajectory is considered to be in line with the structural balance target. This is consistent with a process of fiscal policy normalization, following the implementation of extraordinary stimulus measures in response to the pandemic.

The current account deficit will decline over the projection horizon, after rising in 2021 due to excessive growth in domestic demand. As a percentage of GDP, the deficit closed 2021 at 6.6%, close to 2 percentage points (pp) higher than forecast in December. This was influenced by stronger-than-expected dynamism of imports towards the end of last year and corrections to some items in the new benchmark compilation of the National Accounts (Box III.1). In the central scenario, the deficit is projected to fall to 4.6%, 3.5%, and 3.2% in 2022, 2023, and 2024, respectively. These projections consider a recovery in the levels of national savings, which were severely depleted during 2021 as a result of the fiscal stimulus and high consumption. This increase in savings will favor a decline in volume imports of goods, in line with the expected slowdown in local spending. A rebound in services exports is also expected, as well as higher prices for exports, particularly copper. Measured at trend prices¹/, the current account deficit will also adjust to 3.5% in 2024.

The external impulse that the Chilean economy will receive is again reduced compared to the previous Report, to which is added a greater degree of uncertainty due to Russia's invasion of Ukraine. The terms of trade observed in 2021 decrease in the projection horizon (figure V.3 and table V.2). Commodity prices have risen substantially, especially following the onset of the war (Box I.1). At the statistical close, the oil price accumulated a rise of about 20% compared to the values prior to the beginning of the conflict, to levels not seen in more than a decade. The central scenario considers that oil prices will remain high in the immediate future, to resume a downward trajectory during the second quarter of this year, as adjustments in production and crude oil shipments from other countries allow the world supply to be reorganized.



¹/This measure adjusts the value of mining exports and fuel imports considering deviations of copper and oil prices from their long-term values. The same is done for rents and transfers associated with copper exports. Other exports and imports are valued using current prices. In addition, it does not correct for possible changes in the quantities exported or imported due to movements in copper and oil prices. The calculation considers long-term prices of US\$3.3 per pound for copper and US\$60 per barrel for oil (see <u>Box V.2 in MP Report</u> of September 2012, and <u>Box V.3 in MP Report of June 2021</u>).

	Aveg. 10-19	2020	2021	2022 (f)	2023 (f)	2024 (f)
	(annual change, percent)					
Terms of trade (1)	0.2	10.1	11.8	-3.1	-3.1	-1.5
External prices (in US\$) (2)	0.6	-1.1	9.3	4.1	3.4	3.5
	(levels)					
LME copper price (US\$cent/pound)	306	280	423	435	390	365
WTI oil price (US\$/barrel)	72	39	68	92	80	75
Brent oil price (US\$/barrel)	80	42	70	96	85	80
Gasoline parity price (US\$/m3) (3)	610	333	579	790	677	630
Federal Funds Rate (%)	0.7	0.5	0.3	1.1	2.5	2.9

TABLE V.2 INTERNATIONAL BASELINE SCENARIO ASSUMPTIONS

(1) Considers the average of the available data, which includes the annual variations from 2014 to 2019.

(2) For 2021 corresponds to estimates.

(3) For definition, see Economic Glossary.

(f) Forecast.

Source: Central Bank of Chile.

The oil price increase more than outweighs the positive effect on the terms of trade of the rise in the copper price, which has reached new highs. Forecasts for the 2022-2023 period are increased for the prices of oil (to US\$89 per barrel of Brent-WTI average) and copper (to US\$4.1 per pound), from US\$68 and 3.8 in December, respectively. As a result, the terms of trade will fall in 2022, 2023, and 2024 (table V.2). In turn, the increase in commodity prices, coupled with inflationary surprises abroad, affect the higher expectations for external inflation in dollars (IPE).

International financial conditions are expected to tighten somewhat, mainly due to more contractionary monetary policies in the world's main economies and a more uncertain global financial environment. The greater intensity and persistence of inflation in a broad group of countries has changed the communications of the main central banks and prompted expectations of a more rapid withdrawal of monetary stimuli, especially in the U.S. This has led to further deteriorated external financial markets, with almost across-the-board increases in interest rates and sovereign spreads. The most significant financial impacts of the war are so far concentrated in Russia, Ukraine and their neighbors.

Out trading partners' growth in 2022-2023 is slightly revised downward, to an average of 3.3% in the period (3.6% in December) (table V.3). The impact of the war on Chile's two main trading partners —the U.S. and China— is expected to be limited. The same is not true for the Eurozone, given its proximity to the conflict and mutual trade dependence with Russia (Box I.1). For the U.S., the revision essentially responds to an earlier economic recovery process, which led to a positive GDP surprise in the fourth quarter of 2021, and a monetary policy that is expected to be more contractionary, both elements that will reduce momentum, especially this year. Adjustments for China are minor, combining opposing factors, especially its weak real-estate sector versus announced further macroeconomic incentives. The outlook for Latin America is little changed and remains pessimistic. Limited room for policy maneuver in an environment of higher inflation and political uncertainty in much of the region will prevail despite improved terms of trade in several countries.



TABLE V.3 WORLD GROWTH (*) (annual change, percent)

	Aveg. 10-19	2020	2021	2022 (f)	2023 (f)	2024 (f)
World GDP at PPP	3.7	-3.0	6.3	3.1	3.4	3.3
World GDP at market exchange rate	3.1	-3.2	5.9	3.1	2.9	2.6
Trading partners	3.8	-1.9	6.3	3.3	3.3	3.1
United States	2.3	-3.4	5.7	3.3	1.9	1.7
Eurozone	1.4	-6.5	5.3	2.2	2.1	2.0
Japan	1.2	-4.5	1.7	2.2	1.4	0.9
China	7.7	2.2	8.1	4.7	5.1	5.4
India	7.1	-7.3	9.2	8.0	6.2	6.3
Rest de Asia	4.5	-2.4	4.2	3.9	4.3	4.2
Latin America (excl. Chile)	1.8	-7.5	6.3	1.6	1.8	1.6
Commodity exp.	2.4	-4.0	4.8	3.6	2.4	1.8

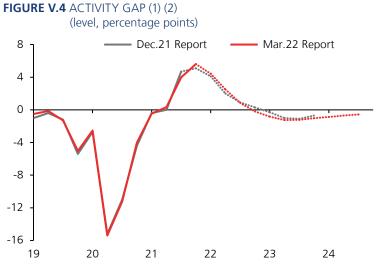
(*) For definition, see Glossary.

(f) Forecast.

Source: Central Bank of Chile based on a sample of investment banks, Consensus Forecasts, the IMF, and statistics bureaus of respective countries.

ACTIVITY GAP AND INFLATION'S CONVERGENCE TO THE TARGET

The central scenario assumes that the activity gap is already on a narrowing process after last year's strongly dynamic spending (figure V.4). It is expected to approach values close to zero in the latter part of this year, a projection that considers potential GDP growth around 2.5% for the period 2022-2024.



(1) Dotted lines show forecast.

(2) Forecast assumes structural paramenters updated in <u>June 2021 Report</u>. Source: Central Bank of Chile. Short-term inflation projections are raised significantly. In the central scenario, inflation will rise to around 10% annually by mid-2022, to then take a descending path and end the year at 5.6%, that is, almost 2pp above the December forecast (table V.4). The increase in projections with respect to December results from combining several elements, mainly the greater cost pressures (figure V.5a). External factors also play an important role, due to the significant rise in commodity prices —especially oil— and the adjustments to their outlook. In this projection, core CPI will peak at just under 9% annually this year, ending December at 7.2% (about 2.5pp higher than in the December Report).

TABLA V.4 INFLATION (1)

(annual change, percent)

	2021	2022 (f)	2023 (f)	2024 (f)
Average CDI	4.5	8.2	3.4	3.0
Average CPI				
December CPI	7.2	5.6	2.9	3.0
CPI in around 2 years (2)				3.0
Average core CPI	3.8	7.7	4.7	3.0
December core CPI	5.2	7.2	3.3	3.0
Core CPI around 2 years (2)				3.1

(1) Core inflation is measured using the CPI without volatiles.

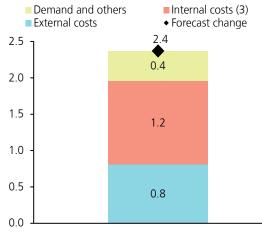
(2) Inflation forecast for the first quarter of 2024.

(f) Forecast.

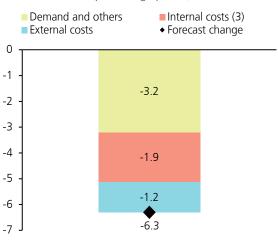
Sources: Central Bank of Chile and National Statistics Institute (INE).

FIGURE V.5





b) Change in annual inflation forecast between third quarter 2022 and first quarter 2024 (2) (percentage points)



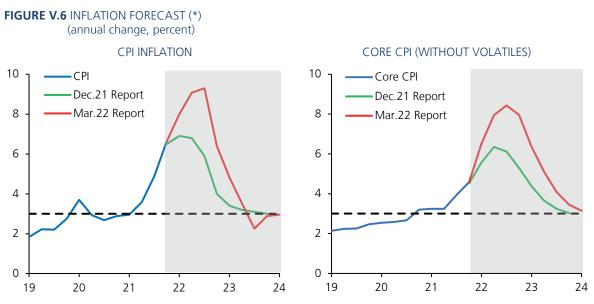
(1) Built using headline CPI inflation forecast in December 2021 and March 2022 Monetary Policy Reports.(2) Change considers forecasts in this Report's central scenario.

(3) Includes the effect of the exchange rate variation.

Source: Central Bank of Chile.



In the latter part of this year, inflation will begin a process of convergence to the target, which will materialize within the two-year policy horizon (figure V.6). The slowdown in domestic spending is a key element behind this projection (figure V.5b). The withdrawal of the significant macroeconomic stimulus will contribute to this, with the result that the economy will grow somewhat below its potential this year and next. At the same time, the more complete restructuring and reorganization of supply chains at home and abroad is expected to ease related cost Pressures by 2023. The projection also considers the reversal of the cost shock associated with commodity prices, even making a negative contribution to annual inflation during the next two years, due to the high comparison base they will leave behind.



(*) Gray area, as from the first quarter of 2022, shows forecast. Sources: Central Bank of Chile and National Statistics Institute (INE).

Experts' inflation expectations have remained for several months above the 3% target in the twoyear horizon. A possible explanation of why the market expects a slower convergence of inflation lies in the difference between activity and demand projected in this Report and what was observed in the surveys. This means that, while the projections described above anticipate a contraction in consumption and investment in 2022 and 2023, the median of the Economic Expectations Survey (EES) and the mean of Consensus Forecasts foresee that both aggregates will continue to expand in said years (Box V.1).

The central scenario in this Report incorporates changes in the price-formation process resulting from the higher inflation levels observed. The changes in the process of forming price expectations are considered partial because, although experts' expectations are above the two-year inflation target, information obtained from surveys and studies on firms and households shows that, for the time being, these higher inflation expectations have not significantly altered the dynamics of price formation (Box V.2). In any case, the evolution of inflation expectations is a matter of special concern for the Board.



SENSITIVITY AND RISK SCENARIO

As always, monetary policy conduct will be contingent on the effects of incoming information on the projected dynamics of inflation. Thus, the Board considers a range of sensitivity scenarios that may require a somewhat different monetary policy action, as derived from the MPR corridor (figure V.1) (Box V.3).

The upper limit of the MPR corridor considers a sensitivity scenario in which the persistence of inflation increases, calling for a stronger monetary policy response than assumed in the central scenario.

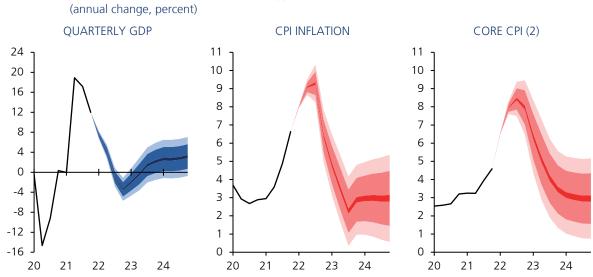
The lower bound of the corridor is a scenario where the slowdown of domestic demand is more intense than previously foreseen. A sharper decline in consumption and investment cannot be ruled out, affected by a worsening of consumer and business confidence in the context of a recession in the local economy and a deterioration of the labor market. In this case, medium-term inflationary pressures would diminish, and a faster MPR reduction than described in the central scenario would be required, in response to weaker activity than forecast in that scenario.

There are also alternative scenarios that would place the MPR trajectory within the limits of the corridor. Locally, a smaller contraction in public spending would raise demand and inflation pressures, besides contributing negatively to financial performance through an increase in risk premiums. In such a situation, a more contractionary monetary policy would be needed. Externally, there may be scenarios where inflationary pressures caused by the war in Ukraine differ from the central scenario estimates. One possibility is that the unfolding conflict could contribute to intensifying the current supply constraints, as well as to a dismantling of supply chains, further boosting external inflation. In contrast, there is the possibility that the negative impact of greater uncertainty on global demand, but also on local demand, especially investment, could prevail. The consequences of these scenarios on the MPR trajectory go in opposite directions.

In addition to doing sensitivity tests, scenarios are analyzed in which the changes in the economy would be more significant and where the expansion of activity would be outside the forecast range (figure V.7).

On this occasion, the Board points to a scenario where the impact of the war in Ukraine takes on much more noxious characteristics, either on activity performance and/or global inflation. Due to the very uncertainty surrounding the conflict, it is difficult to anticipate what effects would predominate in MPR decisions if such a situation were to materialize.





(1) The figure shows confidence interval of central projection at the respective horizon (colored area). Confidence intervals of 10%, 70%, and 90% around the baseline scenario are included. Confidence intervals are built using the RMSE of XMAS-MEP models' 2009-2017 average. (2) Measured with the CPI without volatiles. Sources: Central Bank of Chile and National Statistics Institute (INE).

FIGURE V.7 GROWTH AND INFLATION FORECASTS (1)



BOX V.1: Recent evolution of inflation expectations

The view that agents may have of future developments is relevant to their actions today. For example, if they foresee that prices will rise, they might try to raise their prices today, which would drive inflation up. Therefore, when the Bank makes its projections, it considers not only its own view of the economy, but also how other agents foresee it. Usually, these views do not differ significantly. However, in an environment of greater uncertainty and rapid and significant changes, these differences may widen. This has been the case in the last couple of years, where the economy has been affected by very strong shocks. Currently, a group of experts responding to the Economic Expectations Survey (EES) and the Financial Traders Survey (FTS) estimate that inflation will take longer to converge to the target than anticipated by the Bank.

The main factor that could explain these differences is the outlook for activity and, especially, the expenditure scenario. In the EES, the differences between the median of private consumption growth in the survey and the central scenario of this Report are over 4 percentage points. For GFCF, the cumulative differences are even greater, approaching 6% for its expansion in the next two years (table V.5). In the central scenario of this Report, adjusting the spending impulse is necessary for the resolution of the macroeconomic imbalances accumulated during 2021, and will contribute significantly to the convergence of inflation to the target (figure V.5b). The projections compiled by Consensus Forecasts in March also point in a similar direction as the EES.

Headline GDP GFCF **Private consumption** inflation 2022 2022 2022 2023 Accum. 2023 Accum. 2023 Dec.22 Dec.23 Accum. EES 2.0 1.5 0.5 5.8 4.0 3.5 1.3 1.8 1.5 1.2 2.7 Consensus 2.1 1.2 3.3 0.6 2.0 2.2 0.6 2.8 6.6 3.6 1.4 Forecasts -0.25/ 0.75 March 2022 1.0-2.0 1.75 (2) -3.8 -0.2 -4.0 -0.3 -1.1 -1.4 5.6 2.9 Report Diff. EES - MP 0.5 1.25 1.75 4.3 1.5 5.8 1.8 2.3 4.1 Report Diff. CF - MP 0.6 0.95 5.2 0.8 2.5 1.7 1.55 6.0 4.2 Report

TABLE V.5 MARKET FORECASTS FOR INFLATION, ACTIVITY, AND DEMAND (1) (annual change, percent)

(1) The EES considers forecast median, while Consensus Forecast uses the mean. Both correspond to March 2022 readings. (2) Considers midpoint of projected ranges.

Sources: Central Bank of Chile and Consensus Forecasts.

Inflation expectations inferred from the prices of financial assets —breakeven inflation — have also risen in recent months, quite significantly in certain horizons. In any case, it should be kept in mind that the levels of this breakeven inflation not only reflect inflation expectations, but are also influenced by a series of elements that reflect liquidity premiums, risk, and other considerations of portfolio strategies that may become relevant in situations of greater uncertainty, as are seen today (box IV.1, December 2016 Report). An estimate of the decomposition of the 10-year breakeven inflation which today is above 4%, shows that the impact of the premiums is significant. In fact, if discounted, expected inflation remains at around 3% (figure V.8).

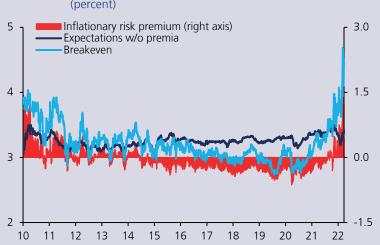


FIGURE V.8 DECOMPOSITION OF 10-YEAR BREAKEVEN INFLATION (*) (percent)

Conclusions

A scenario where the expectations of some market agents remain above the monetary policy target is a worrisome situation. If it effectively reflects the expectations of price-setting agents (households and firms), and they remain high for a prolonged period of time, it would push inflation persistence above what is consistent with its traditional fundamentals, forcing a considerably more contractionary policy to neutralize the impact of expectations on price formation. The central scenario of this Report assumes this effect of more persistent inflation partially, while the sensitivity scenario at the upper bound of the corridor contemplates the possibility of such effect being even more intense.

^(*) Estimates based on <u>Beyzaga & Ceballos (2016)</u>, <u>Abrahams *et al.* (2016)</u> with overnight index swap rates. Sources: Central Bank of Chile and RiskAmerica.



BOX V.2:

Inflation expectations of households and firms

Traditionally, central banks have calibrated the evolution of inflation expectations based on surveys of experts and the measurement of breakeven inflation using financial prices. These measures have the advantage of being collected from a reference group that has significant technical knowledge of monetary policy and economic developments, but may not capture closely the expectations of those directly involved in price formation in the goods and services markets. The need to understand the latter process has led central banks to seek methods to learn and figure out how the agents directly involved understand it and set their expectations. In general, this has been done through surveys to households and firms.

These international studies are rather recent. In general, they show that knowledge about inflation targeting and monetary policy differs significantly among experts, firms, and households. Households perceive that the evolution of inflation is more related to the increases in the prices of the basket they usually consume, rather than to the average variation of a price index such as the CPI basket (<u>D'Acunto *et al.*</u>, 2021). In addition, the accuracy of household expectations is, at least partly, determined by the business cycle and the economy's average inflation level, because times of high inflation lead individuals to keep a closer eye on the economy (<u>Central Bank of Chile,</u> 2020). For the case of firms, international evidence shows that there is an inflationary bias in their expectations (<u>Coibion *et al.*</u>, 2018) and that, like households, they are largely influenced by the managers' personal experiences (<u>Candia *et al.*</u>, 2021; <u>Andrade *et al.*</u>, 2021). This explains why, in both households and firms, there is great heterogeneity of expectations. Finally, the findings also show that firms with higher inflation expectations tend to raise their prices by more and to reduce their employment and investment (<u>Coibion *et al.*</u>, 2020).

In Chile, for the last few quarters, the Central Bank has been developing an agenda to obtain information on the inflation expectations of households and businesses. These sources include the Business Perceptions Survey (EPN), the Business Perceptions Report (IPN), the Survey of Price Determinants and Expectations (EDEP) and the study "Inflation stories: perception and expectations of Chilean households during the Covid-19 pandemic" (Zapata <u>et al., 2022</u>). A Minute accompanying this Report (Cortés <u>et al., 2022</u>) summarizes the methodologies of these surveys and the results of some of the above cited studies.

These sources of information show that the current inflationary situation is one of the main concerns of these groups, but they also reveal that they see it as a transitory phenomenon. The EDEP data show that the inflation that companies expect one year ahead has been rising for some months. However, the same has not been true for two-year expectations, and especially not for their own expected price changes (figure V.9). This indicates that, at least in the last three months, companies have been factoring the changes in the macroeconomic environment, including higher inflation, into their prices in a normal way. The February Business Perceptions Survey captures information showing a similar trend. At that time, most companies responded that higher inflation was not leading them to modify pricing, investment, or hiring decisions, among other factors. It is important to note that the median of the 12- and 24-month expected inflation distributions does not coincide with what the experts say, nor with what is foreseen in the central scenario of this MP Report. In fact, in the two-year term it is above 3%. This result is not surprising in light of international evidence, which shows that both business and household expectations tend to exceed the inflation target.





FIGURE V.9 DISTRIBUTION OF INFLATION EXPECTATIONS AND SALE PRICES

Source: Survey of Price Determinants and Expectations, Central Bank of Chile.

In the case of households, the information available shows that their inflation expectations have also increased. According to the Economic Perception Index (IPEC), in February just under 70% of consumers expected prices to rise "a lot" in the next twelve months (55% in mid-2021). <u>Zapata *et al.* (2022)</u> point out that households do indeed perceive that prices tend to increase over time at a relatively stable rate, so there exists a conception of a "normal" increase in prices. However, they consider that during the last year the speed of price increases has been faster than they are used to. Moreover, households expect price variations to return to their "usual" dynamics in one or two years.

Regarding the impact of inflation on household behavior, <u>Zapata *et al.* (2022)</u> point out that households have modified their purchasing decisions upon noticing a greater increase in prices. Even so, this change is not associated with a growing and persistent expectation of future increases, being perceived rather as a momentary shock. In fact, there is low prevalence of bringing forward purchases as a change of economic behavior, as replacing products and changing places of purchase are more commonly used, followed by not consuming second necessity products until a better scenario comes along. In addition, households noted that they did not expect big changes in their behavior beyond those already made.

All in all, these sources of information are recent and understanding them is a work in progress. Therefore, although their results provide a first look at price formation by households and firms, they should not be taken as a definitive conclusion about the behavior of inflation expectations.



BOX V.3:

Monetary policy forward guidance and the MPR corridor

Over the last five years, the Board has implemented several changes in the communication of monetary policy, with the purpose of improving its transparency and understanding. Among other changes, these have included modifications in the frequency and extension of the monetary policy meetings, more information in the statement and minutes of the meetings, and their coordination with the publication of the Report¹/. In March 2020, the Board added a new instrument for communicating the monetary policy stance: the MPR corridor. To ensure a good understanding of it and maximize its communicational value, it is appropriate to walk through its construction step by step.

The corridor is constructed based on the MPR trajectory associated with the central projection scenario. This trajectory is based on the historical reaction function —over the last 20 years— of the Board's MPR decisions to deviations in activity and inflation —the so-called Taylor Rule—, ensuring that inflation will converge to 3% in the two-year horizon, according to the most likely paths for the main macroeconomic variables²/. This trajectory is not explicitly presented in the corridor, but it is included in the central area of the fan chart (the darker pink area) (panel (a), figure V.10). This mechanical rule constitutes an initial working assumption with which the staff presents a reasonable starting point for contrasting monetary policy strategies. The fan chart communicates the statistical deviation of the MPR from that starting point. As it is a statistical assessment of historical deviations, there is no Board judgment regarding the width or symmetry of the fan chart.

The second piece of information is the sensitivity scenarios. These are described in chapter V of the Reports, but their specific results are not presented except for those that constitute the bounds —floor and ceiling— of the corridor. The decision as to which sensitivity scenarios are included in the corridor, and in particular its bounds, is a judgment by the Board as to which plausible deviations from the central scenario are the most relevant at a given juncture and emphasizes the idea that monetary policy decisions consider not only the current scenario, but also possible deviations and related costs. Finally, the borders of the corridor consider uncertainty about the nominal neutral MPR. This is incorporated by estimating the same sensitivity scenarios, but assuming the upper and lower values of the neutral MPR range —between 3.25% and 3.75% — as a reference point to assess how expansionary the monetary policy is. It is worth mentioning that the projections are made for inflation to converge to the 3% target within the two-year policy horizon, whereas the MPR converges to its neutral level in the medium term. Panel (b) of figure V.10 illustrates the construction of the corridor in the December 2021 Report. At the time, the Board noted that the bounds of the corridor were defined by scenarios where the evolution of spending could have different trajectories from those of the central scenario, with the ceiling corresponding to a scenario of higher private consumption and a floor where the impact of uncertainty would be greater than expected. It also evaluated other sensitivities that were incorporated within the corridor area. The width of the corridor is calibrated so that the sensitivity scenarios included imply deviations in GDP growth for the next few years around the range of projections presented in each MP Report.

It should be noted that the MPR trajectory in the central scenario does not necessarily coincide with the midpoint of the corridor. The decision of how asymmetric this scenario is with respect to the edges of the corridor corresponds exclusively to the communication aspects that the Board wishes to highlight in each Report.

The communicational decision to emphasize a range of possibilities for future monetary policy rather than a specific path associated with a particular scenario, reflects the multiple reasons why the MPR may differ in the future from that specific path. First, changes in monetary policy strategy due to shocks are common, especially

¹/ A box in the <u>September 2017 MP Report</u> contains an explanation of these changes ²/ The document "Use of Macroeconomic Models at the Central Bank of Chile" describes the models used to perform these exercises.



for a small, open economy such as Chile. Second, the analysis may lead to a reassessment of the inflationary implications of a given macroeconomic scenario, either by a revision to the prevailing transmission mechanisms and/or the structural parameters of the economy. Third, MPR decisions may weigh differently strategic and risk-balancing considerations at a given moment, requiring MPR paths that differ from that of a mechanical rule.

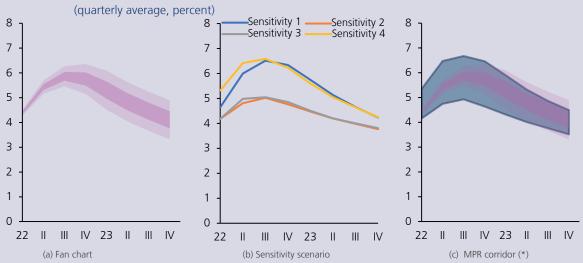
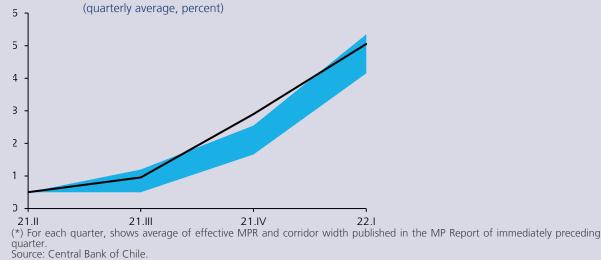


FIGURE V.10 BUILDING THE DECEMBER 2021 MPR CORRIDOR

(*) Borders consider lower and upper sensitivity to which uncertainty is added from neutral MPR (3.25 to 3.75%). This uncertainty is increasing over the horizon and adds 25bp to the upper bound and subtracts 25bp to the lower bound in two years. Source: Central Bank of Chile.

Finally, it is important to stress that, while this corridor is a relevant guide to the future path of the MPR, it is by no means a commitment by the Board. In fact, in the last quarter of 2021, increases in the MPR took it above the corridor's ceiling, in a context in which the rate rose rapidly in the face of rising inflation and its outlook. Moreover, although so far the MPR has tended to stand in the upper part of the corridor, this has only responded to a scenario where inflation and its outlook have been continuously corrected upwards and not to an explicit bias in the central scenario projections or in the communication of monetary policy (figure V.11).

FIGURE V.11 EFFECTIVE MPR AND MPR CORRIDOR (*)





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