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INFLATION CYCLE IN CHILE: RECENT EXPERIENCE AND PROSPECTS (*)

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Good morning and thank you for inviting me to present at this new version of the Chile Day. This meeting takes place in a context where progress has been made in reducing inflation in many countries. In the case of Chile, annual inflation fell from 14.1 to 5.3% within a year. Although this is still high, the evolution of the macroeconomic scenario suggests that the convergence of inflation to the Central Bank's 3% target has been consolidating, a process which is expected to be completed during the second half of 2024. This has allowed the Board to adjust the degree of monetary tightness, reducing the Monetary Policy Rate (MPR) by 175 basis points since July, to 9.5%. However, as we emphasised in our Monetary Policy Report published last week, although risks have been balancing out, the process of inflationary convergence is ongoing, and we must remain vigilant to deliver price stability to our people. Recent market developments and the August CPI print do not change materially the outlook of our Monetary Policy Report.

I will take this opportunity to summarise the view of the Central Bank on the recent evolution and prospects of inflation in Chile and its macroeconomic drivers, the implications for monetary policy, as well as the main risks and challenges ahead. I will also provide a few preliminary reflections on our experience with navigating the inflation cycle over the past few years. Of course, any conclusions are necessarily tentative as the process of controlling inflation is still under way.

Evolution of inflation and its drivers

Over the past few years, inflation has increased globally due to local and global factors. In the case of Chile, local components have played a very significant role. At its peak, annual CPI inflation reached more than 14% a year ago, way above our 3% target for the two-year policy horizon. Core inflation excluding volatile items also rose to very high levels of around 11% during several months (Chart 1).

At the Central Bank we undertook an aggressive monetary policy tightening, taking the MPR from 0.5% in July 2021 up to 11.25% in October 2022, and then maintained the rate at that highly restrictive level until past July. Over the course of the current year, as tight monetary policy has taken effect, inflation has receded. As the rebalancing of the economy proceeded and convergence of inflation to the target started to firm, the timing was appropriate for starting to ease the policy

(*) Presentation at Chile Day, London, United Kingdom.

rate. In August, headline inflation reached 5.3% and core inflation 7.4% year-on-year, significantly below what we saw a year ago. The decrease has been most pronounced in goods components, including energy, food, and others. Services inflation is also decreasing but more slowly, especially due to lagged adjustments of regulated tariffs and indexation (Chart 2).

The key factor supporting disinflation has been the resolution of macroeconomic imbalances, created by massive transfers to households that injected liquidity worth 30% of GDP. This stimulated private consumption in an unprecedented manner, which grew by almost 21% in 2021. Since last year, consumption, particularly durable goods, has fallen towards sustainable levels. Recent data suggests that the bulk of the adjustment seems to have already occurred (Chart 3).

The behaviour of consumption has responded to tight financial conditions in recent quarters, which increased households' financial burden associated with high levels of interest rates and inflation. Higher interest rates have also made deposits more attractive, contributing to the recovery of private savings. Along with a significant fiscal consolidation in 2022, the recovery of private savings has helped swing the current account deficit from a peak of 10% of GDP in the third quarter of 2022 to 4.5% in the most recent quarter (Chart 4).

Of course, the adjustment of consumption has affected domestic output. Real GDP has contracted for several quarters, mostly due to lower retail activity. However, since much of the adjustment has been concentrated in imported goods, the effect on domestic value added has been much smaller than the fall in consumption. The data for the second quarter shows a year-on-year decline in private consumption of 6.1% in comparison to a fall of 1.1% in GDP, in line with an increase in net exports (Chart 5).

The moderation of the business cycle, through an adjustment concentrated in imports, has so far had a relatively soft effect on the labour market. Annual employment growth has returned to its pre-pandemic average of roughly 2% in recent months. The unemployment rate has fluctuated between 8.5 and 8.8%, above last year's figures, at the same time as the recovery of labour force participation has met subdued labour demand (Chart 6).

As for wages, these have shown high nominal growth rates influenced by indexation and minimum wage adjustments, but negative real growth rates until recently, due to the impact of inflation and declining labour demand in a context of a rebound in labour supply.

An additional factor that has contributed to the decline in inflation is the reduction of external cost pressures. Food and fuel prices are lower than last year, following the onset of the war in Ukraine. Other imported goods prices have also stabilised, and transportation costs have normalised with the resolution of supply bottlenecks that arose after the pandemic (Chart 7).

Another significant determinant of lower inflation pressures has been the behaviour of the exchange rate in recent quarters. Compared to its highest level in mid-2022, it appreciated in

nominal and real effective terms by around 15%. This reduction occurred in a context where local uncertainty has receded from the peaks of recent years.

Other information that can be added to this analysis pertains to the dynamics of price adjustments in companies. Price indices constructed from firm-level electronic payments data show that the frequency of price increases for goods has been decreasing, approaching their historical average. Business surveys conducted by the Central Bank further highlight the importance of the different determinants of inflation described so far. For several months, companies have been reporting a reduction in price pressures associated with the exchange rate and general costs, while the perceived influence of the level of sales has reached neutral terrain. On the other hand, the surveys also reveal an ongoing pressure of labour costs. Part of this pressure is explained by the impact of inflation on wages through indexation (Chart 8). This will continue to affect price inflation in the coming months, especially of services.

In this context, inflation expectations have also fallen significantly. Medium-term expectations from surveys of economic analysts and financial traders and those implicit in asset prices have returned to the 3% target during this year, after showing large deviations over 2021 and 2022. Short-term market expectations have also fallen significantly. Surveys of companies, for which we have less history, have also started to diminish recently (Chart 9). It is important that the process of consolidating inflation convergence continues to be transmitted to the perceptions and decisions of companies and consumers, to reduce the second-round effects of high inflation expectations.

Inflation expectations above the target, the impact of local risk and uncertainty in local financial markets and the excess of liquidity in households introduced additional challenges for our recent inflationary process and monetary policy. Related to this, inflation forecasts and monetary policy decisions had to rely upon uncertain estimations of consumption propensities. Those estimations were revised upwards several times, given higher-than-expected household consumption, as we had overestimated the propensity of households to save part of those funds and perhaps also their tendency to react to rising interest rates in this highly unusual situation.

Overall, different large shocks both from the demand and supply side generated heterogeneous responses of monetary policy across the globe. In our case, the perspective of inflation convergence has allowed to initiate an easing cycle (Chart 10).

Some preliminary reflections on the recent inflation cycle

This discussion leads me to make a few preliminary reflections based on the episode of the past few years. Of course, any definite conclusions cannot be drawn, in a context where the task of controlling inflation continues to be challenging and is not completed. Also, while a lot of things can be learned from this episode, this will continue to depend on how the situation unfolds.

A first important insight is that our monetary policy framework based on flexible inflation forecast targeting has allowed us to navigate the inflation cycle well. This framework entails the commitment

by the Bank to set monetary policy in a way consistent with bringing the forecasted annual CPI inflation rate to 3% within two years, while allowing for transitory inflation deviations.

It is important to remember that our monetary policy framework relies upon a floating exchange rate. This contributes to mitigate the impact of shocks affecting the economy and facilitates the adjustment of different markets to those shocks. The MPR is the instrument to bring inflation to the target, based on the evaluation of its drivers for the medium-term inflation outlook.

Like elsewhere, our policy framework was severely tested over the past few years, due to the significant shocks that strained macroeconomic and financial stability. These shocks increased forecasted inflation, prompting the Board to initiate a sharp tightening cycle even before current inflation deviated from target. This response, coupled with fiscal consolidation, rebalanced the macroeconomy. In this sense, when facing unprecedented shocks, waiting for more information may be useful, but the benefits need to be balanced against the costs of delaying action. Mistakes can be made, but a rapid response prevents their effects from lingering and affecting credibility.

A second key idea is that prudent and predictable behaviour of fiscal policy is a key ingredient in facilitating inflation targeting. The rise in inflation during 2021 and 2022 responded largely to the massive transfers. This leaves as a lesson that fiscal support must be focused and avoid adopting a procyclical stance. In fact, the fiscal consolidation that the authority carried out in 2022 was relevant support for reducing inflation. The significant adjustment in public spending and the rejection of additional pension withdrawal projects were key factors in reducing uncertainty and controlling domestic spending pressures. In this way, the fiscal anchor, which was weakened after the strong procyclical behaviour of 2021, has been favoured by the continuous improvements that have been introduced and the commitment of the authority. One part has been the positioning of an Autonomous Fiscal Council that has also provided proposals for improvement.

A third conclusion is that sound analysis, rich data, and robust models are other key ingredients for the successful implementation of inflation forecast targeting, especially in unforeseen situations. Analytical tools need to be adopted to such situations, to ensure an adequate calibration of the monetary policy response. Regarding data, new information tools can be a big help here. The Bank has invested to work with large-scale administrative microdata sets from different sources for the better part of a decade. This information is of higher frequency than standard data and forms the base of real-time estimates of activity, demand, and even inflation. The Bank has also been building a closer relationship with companies around the country, to learn about their perceptions of the economy and understand their actions. In addition, our staff has been implementing a modelling agenda that is constantly being updated in line with developments in the literature and policy needs, for instance, to incorporate heterogeneities among economic agents or macro-financial linkages.

Also, economic research and monetary policy analysis should delve into a number of issues that emerge from the recent inflation cycle, including: the role of expectations for inflation persistence and monetary policy when these deviate from central bank targets and forecasts; the impact of supply and demand-side factors on inflation dynamics in a context of seemingly fragile and changing

value chains; the response of household consumption and inflation to monetary and fiscal policy measures, considering heterogeneities and the size of propensities to save and consume depending on expectations about the persistence of such measures; as well as the implications of these issues for monetary policy frameworks, including the appropriate definition of inflation targets.

The broader lesson is that applied economic research must be the backbone of monetary policy decisions and needs to react swiftly to address changing environments. Fortunately, good data and good researchers are mutually reinforcing. Even more reason to place investing in both among the highest priorities for central banks.

A final insight is that, with inflation becoming a paramount concern to the public, a communication strategy that explains to wider audiences the need for tight policy can make them unexpected allies in the fight against inflation. People have suffered the cost of inflation, and need to know what is happening, why, and what is needed to reduce inflation, and that the process has costs. Importantly, this perception is actionable. A communication plan that consistently targets wider audiences has contributed to the notion that monetary policy medicine, bad tasting as it is, beats inflation. This notion is now shared by mainstream economists and the public at large.

But this support may prove short lived if central banks do not deliver in time lower inflation or their actions are not consistent with their words, damaging the legitimacy of monetary policy. This insight should not be lost and speaks more generally about the role of effective communication and speedy action for maintaining de facto central bank independence – written in the law, but not in stone. All institutional arrangements need to eventually make sense to people.

Inflation outlook and risks

I will now move on to summarise the inflation outlook from our September Monetary Policy Report. Overall, both the domestic and external scenario are similar to the previous Report from June. In the central scenario, total inflation will continue to decrease, and it is expected to close the year at 4.3% annually (4.2% in June), converging to 3% in the second half of 2024 (Chart 11). This projection weighs lower-than-expected figures in previous months against the impact of the recent depreciation of the peso and higher external prices for fuels.

Recently, inflation recorded for August surprised downwards in relation to expectations. I would like to point out that high-frequency figures are valuable, especially for what they contribute to trends. However, it is not advisable to draw conclusions from each of them. Extracting the trends from the information we receive and how they relate to the general macroeconomic scenario is what we must consider. Also, other things have happened and will happen before the next Monetary Policy Meeting, including the effects that the depreciation of the peso may have on inflation. Therefore, it is premature to talk about a change with respect to the central scenario.

Core inflation will close 2023 at 6.3% annually and reach 3% at the beginning of 2025. The decline in the services component will be slow due to the impact of indexation of wages and prices. In the

case of goods, beyond the effect of the peso depreciation, their decline will continue to be determined by more moderate demand pressures and relief from external and internal cost factors. This projection assumes that the output gap will continue to close for the remainder of the year, generating the necessary conditions for inflation convergence. That is, the economy will no longer operate above its capacity, which has generated pressure on prices and has contributed significantly to fuelling the high inflation levels. The evolution of the local economy, in particular the contraction of private consumption, has led to a decline in the output gap after several quarters in positive territory. Towards 2024 and 2025, the gap will be in negative territory, as in our previous forecast, in line with subdued domestic demand. This will allow completing the inflation convergence process within the policy horizon.

The GDP growth projection for this year ranges between -0.5 and 0.0% (between -0.5 and 0.25% in June). This projection takes into account the impact of operational problems that have affected mining production in recent months, with scheduled production increases for 2023 taking effect as of the fourth quarter of the year. Non-mining activity, on the other hand, will resume positive quarterly variations starting at the end of this year, gradually approaching growth rates consistent with its potential level. For 2024 and 2025, as in our June Report, GDP growth ranges of 1.25-2.25% and 2-3% are expected, respectively (Chart 12).

Regarding monetary policy, the Board began reducing the MPR in July. In the central scenario, the policy rate will follow the path outlined in the July meeting. This means that, by the end of the year, the MPR will stand between 7.75 and 8%. However, the magnitude and timing of the MPR reduction process will depend on the evolution of the macroeconomic scenario and its implications for the inflation trajectory. Incoming data has not so far altered this strategy and the main thrusts of the messages from the September Monetary Policy Report.

The set of projections I have just described is what we call the central scenario. It is based on a set of assumptions about the economic environment, agent behaviour, and policy orientation. Based on these assumptions, sensitivity exercises can be carried out, which, while keeping GDP growth within the projected ranges, may require a somewhat different monetary policy action. These scenarios constitute the MPR corridor around the central scenario (Chart 13).

The upper bound of the corridor reflects alternative scenarios in which the inflation convergence process is less favourable than expected. For example, this could occur in a situation where the global economy shows greater resilience, particularly in the U.S., and further increases in commodity prices are observed. This would generate greater global inflationary pressures that would be transmitted to domestic inflation. The medium-term inflationary effects could be more persistent if there is a correction of inflation expectations.

The lower bound of the corridor reflects scenarios in which inflation convergence is faster than anticipated. This could occur if demand pressures are lower than expected. Such a situation would arise if the economy were affected by shocks that reduce the external impulse; if there is a

deterioration in business and household confidence that harms investment and consumption performance; or if the impact of credit conditions is greater than initially considered.

As for more severe risk scenarios, these are mainly associated with the global macro-financial context. A further deterioration could trigger episodes of high volatility, reduced liquidity, and incentives for capital outflows from emerging economies. In addition to previously identified sources of risk around the U.S. banking system, there are increasing concerns about China, especially related to the evolution of its economy and financial market. If risk scenarios materialise, their implications for monetary policy will depend on how the combination and magnitude of these elements affect the outlook for medium-term inflation convergence.

Final remarks

Let me wrap up by emphasising that, undoubtedly, the reduction in inflation is good news for our people. However, the task is not yet completed, and we remain vigilant. Our central scenario is considering the convergence of inflation to 3% during the second half of 2024. Recent market developments and the August CPI print do not change materially this outlook.

The flexible inflation forecast targeting framework has allowed our small and open economy to navigate well during both fair and foul weather since it was implemented in the early 2000s. But the task of returning inflation to the 3% goal is not over yet. Although we have made progress in controlling inflation, we are now facing the challenge of completing inflation convergence. Our country has gone through a long and painful cycle for families and businesses affected by the adverse impact of high inflation. The Central Bank has had to implement a significant adjustment of monetary policy, which has not been without consequences for the economy, but we are already seeing positive results.

Going forward, the calibration of monetary policy will require a delicate balance that avoids greater persistence but also prevents demand weakness that could lead to excessive deflation. To complete the convergence process, our economy will need to grow below its potential for several quarters. This will allow our country to move towards a scenario where growth capabilities can be deployed adequately without the burden of high inflation and the necessary measures to reduce it.

Monetary policy will guide the economy towards trend growth while achieving price stability, but the question arises as to whether this growth is satisfactory and how it can be improved. Developing growth capabilities goes beyond what central banks can accomplish. On various occasions, we have highlighted the importance of implementing policies that enhance our economy's productivity. For example, education remains a critical factor, particularly in terms of regaining what has been lost in recent years. Improving the skills of our workers through effective training is also essential. Additionally, the country can and should leverage its natural advantages, positioning itself favourably for the energy transformation that the planet requires.

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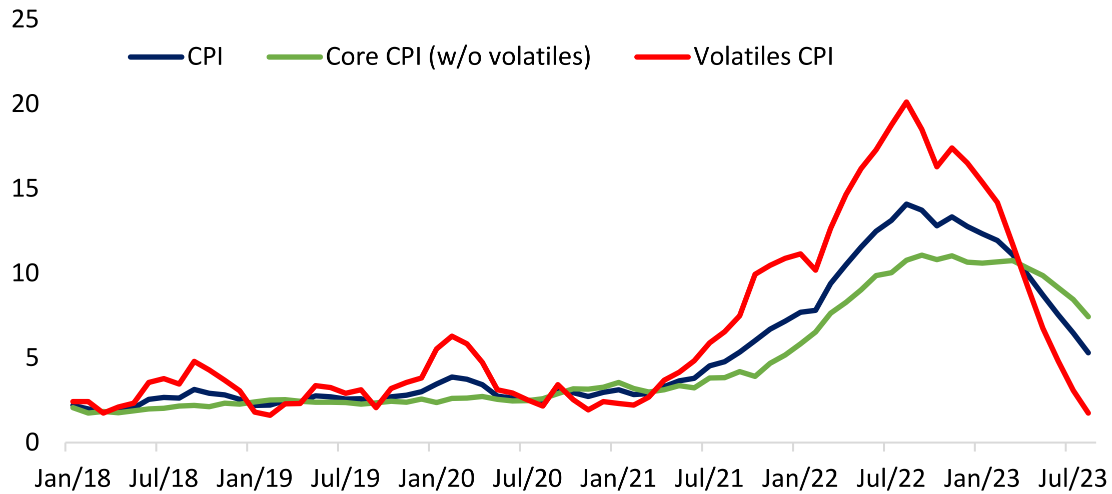
From the Central Bank, our contribution is precisely to offer stability, through low and stable inflation and suitable financial conditions that are favourable for business development, investment, and growth. As I mentioned, this clears the path for the economy to deploy its capabilities. This is by far our most significant contribution to the country.

Thank you very much.

Chart 1

Inflation indicators (*)

(annual change, percent)

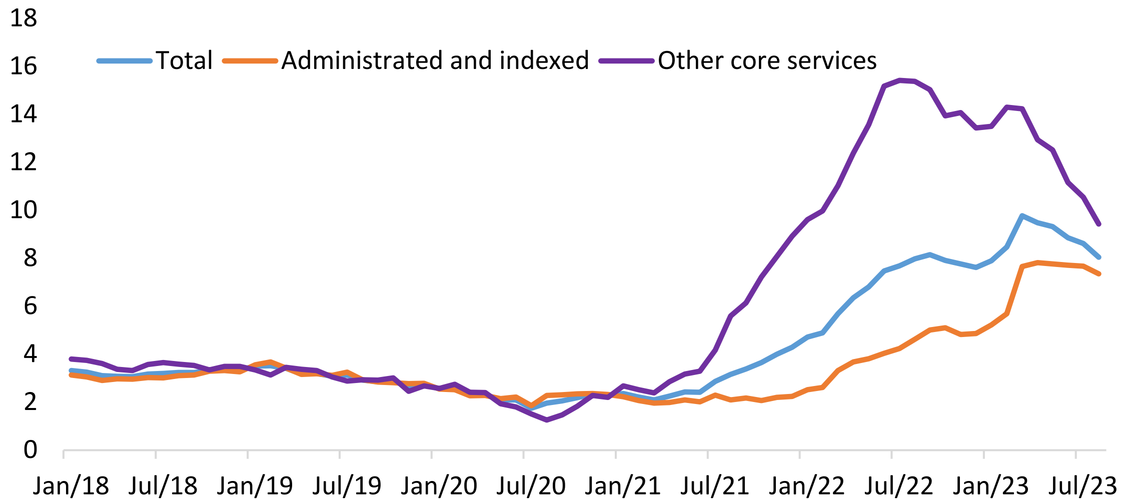


(*) For more detail on the different groupings and their shares in the total CPI basket, see box IV.1 in December 2019 Monetary Policy Report, Carlomagno and Sansone (2019), and Economic Glossary. Sources: Central Bank of Chile and National Statistics Institute.

Chart 2

Inflation of core (non-volatile) services (*)

(annual change, percent)

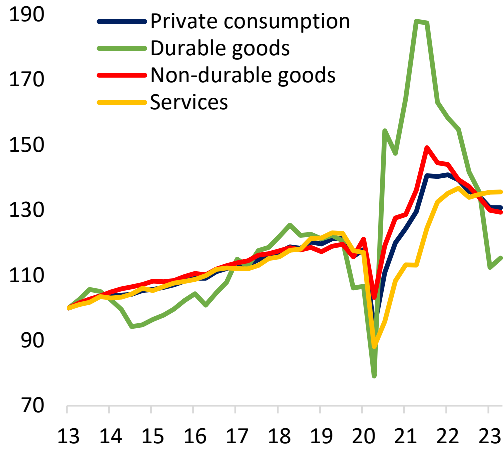


(*) Total corresponds to sum of administrated and indexed services and other core services.
Sources: Central Bank of Chile and National Statistics Institute.

Chart 3

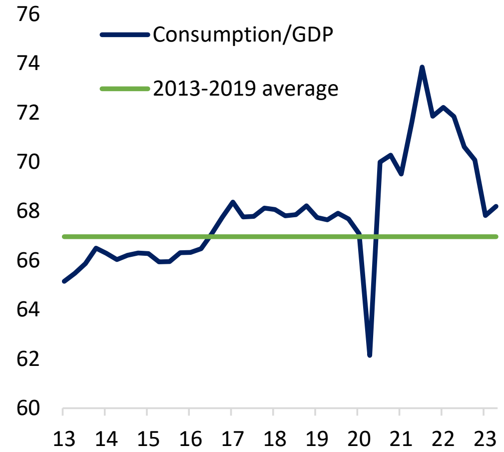
Private consumption and components (*)

(index 2013.QI = 100)



Private consumption (*)

(percent of non-mining GDP)

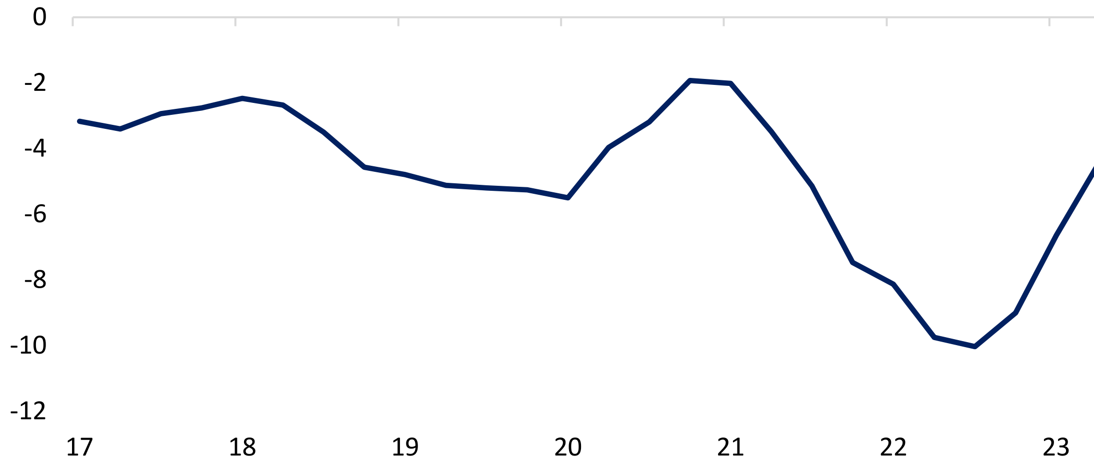


(*) Real seasonally adjusted series. Source: Central Bank of Chile.

Chart 4

Current account balance

(percent of annual GDP, moving annual sum)

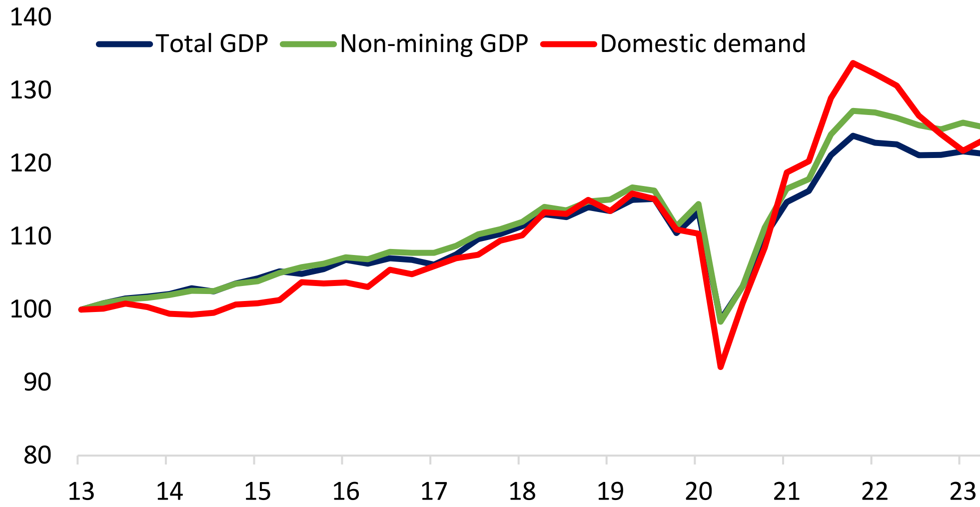


Source: Central Bank of Chile.

Chart 5

Gross domestic product and domestic demand (*)

(index 2013.QI = 100)

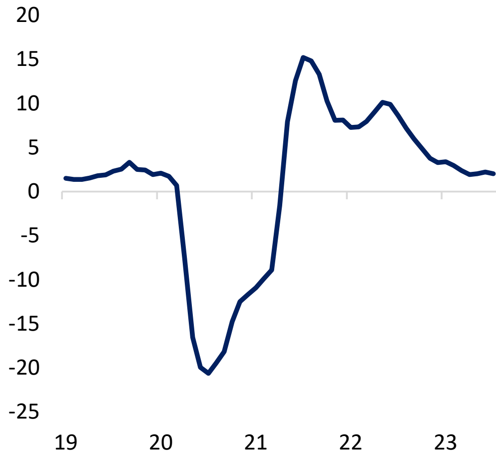


(*) Real seasonally adjusted series. Source: Central Bank of Chile.

Chart 6

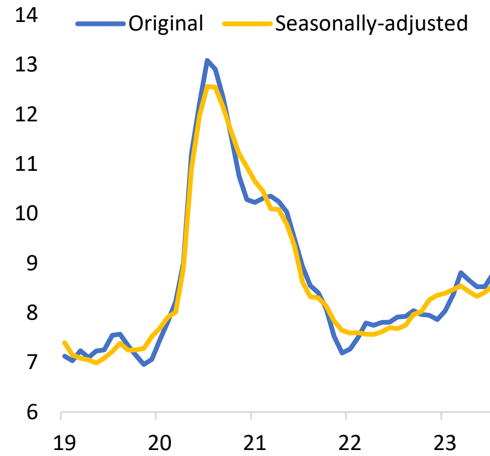
Employment (*)

(annual change, percent)



Unemployment rate (*)

(percent)

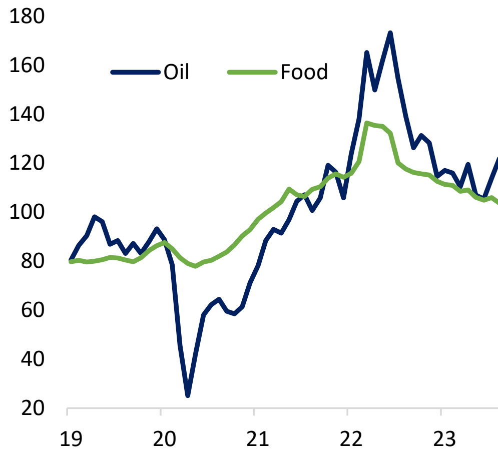


(*) Quarterly moving averages. Source: Central Bank of Chile and National Statistics Institute.

Chart 7

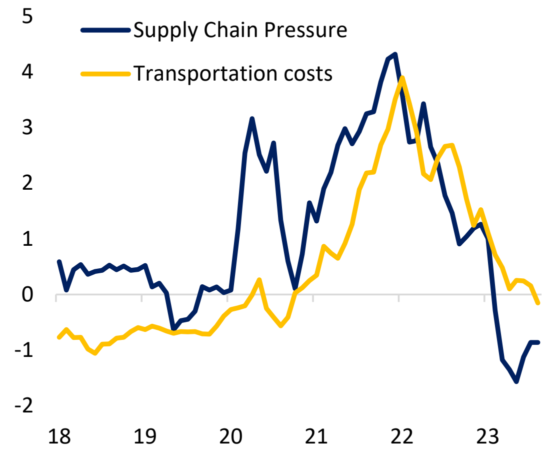
Commodity prices (1)

(index 2019-2023 = 100)



Evolution of cost factors (2)

(standard deviation; percent of GDP)

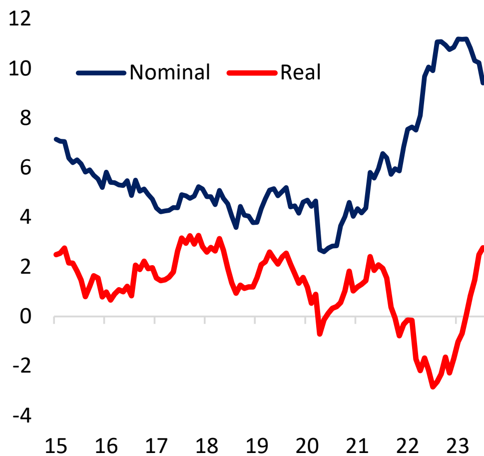


(1) Food price corresponds to FAO index and oil price considers the average of Brent and WTI. (2) Supply chain pressure considers the Global Supply Chain Pressure Index. Transportation costs correspond to the value of imported goods CIF minus FOB, measured as percentage of quarterly nominal GDP. Sources: Central Bank of Chile using microdata of Chile's National Customs Service, Bloomberg, NY Federal Reserve and Food and Agriculture Organisation of the United Nations.

Chart 8

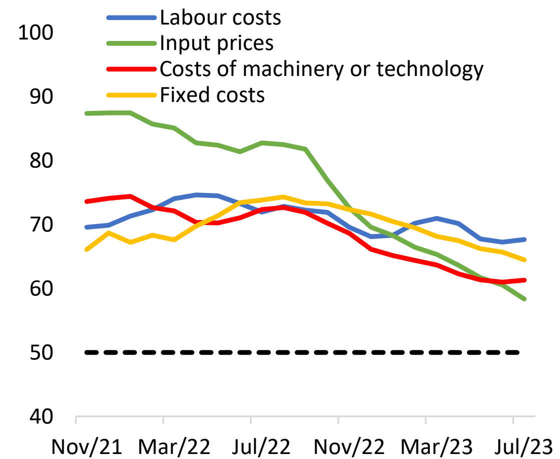
Wage inflation rates (1)

(annual change, percent)



EDEP survey: Influence on prices (2)

(diffusion index)

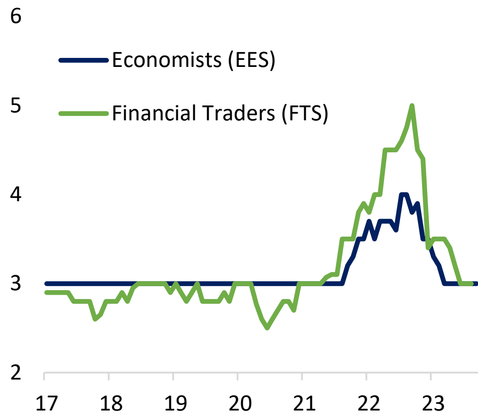


(1) Wage series is nominal earnings index (IR). Real wage is IR deflated by CPI. (2) EDEP: Survey of Expectations and Price Determinants. Considers influence of factors on the price of the main product or service in the past 3 months. Values above 50 represent increases and below 50 decreases. Sources: Central Bank of Chile and National Statistics Institute.

Chart 9

Inflation expectations 2 years ahead (1)(2)

(annual change, percent)



EDEP survey: Expected inflation by firms within 2 years (3)

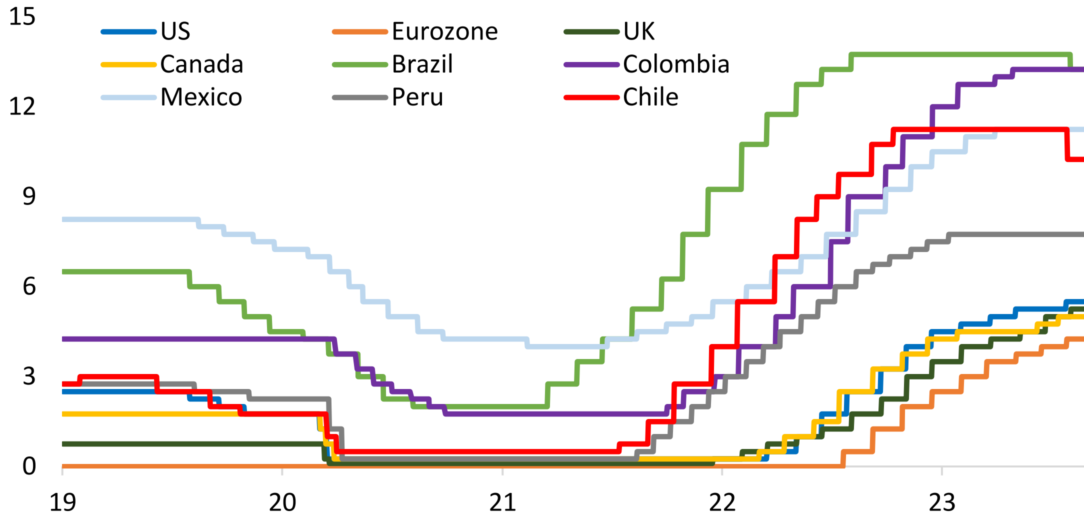
(annual change, quarterly moving series, percent)

(1) Median responses. (2) The FTS considers the survey of the first half of each month up to January 2018. From February 2018 onwards, it considers the last survey published in the month, including the one prior to the September 2023 monetary policy meeting. In the months where no survey is published, the latest available one is used. (3) EDEP: Survey of Expectations and Price Determinants. Source: Central Bank of Chile.

Chart 10

Monetary policy rates

(percent)



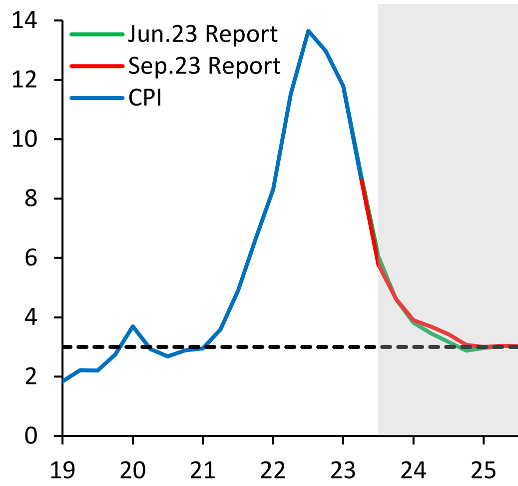
Source: Bloomberg.

Chart 11

Inflation projections (*)

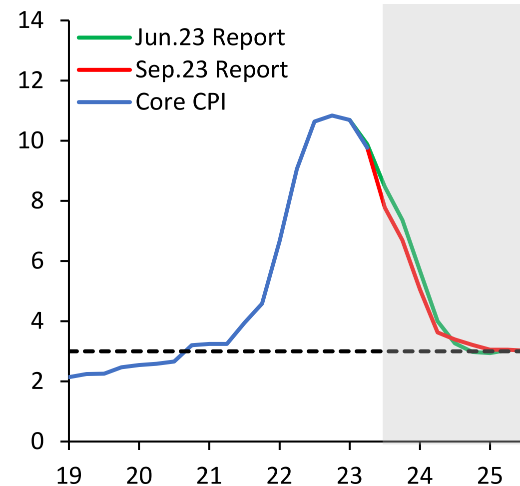
Headline inflation

(annual change, percent)



Core inflation (without volatiles)

(annual change, percent)

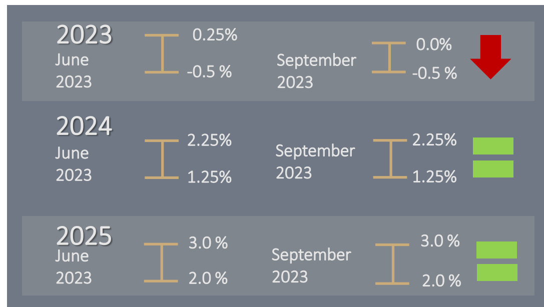


(*) Gray areas, as from the third quarter of 2023, show forecasts. Sources: Central Bank of Chile and National Statistics Institute.

Chart 12

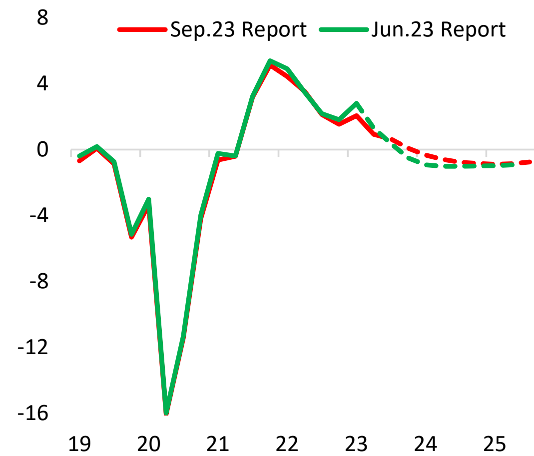
GDP growth projections (1)

(annual change, percent)



Activity gap (2)

(percent)

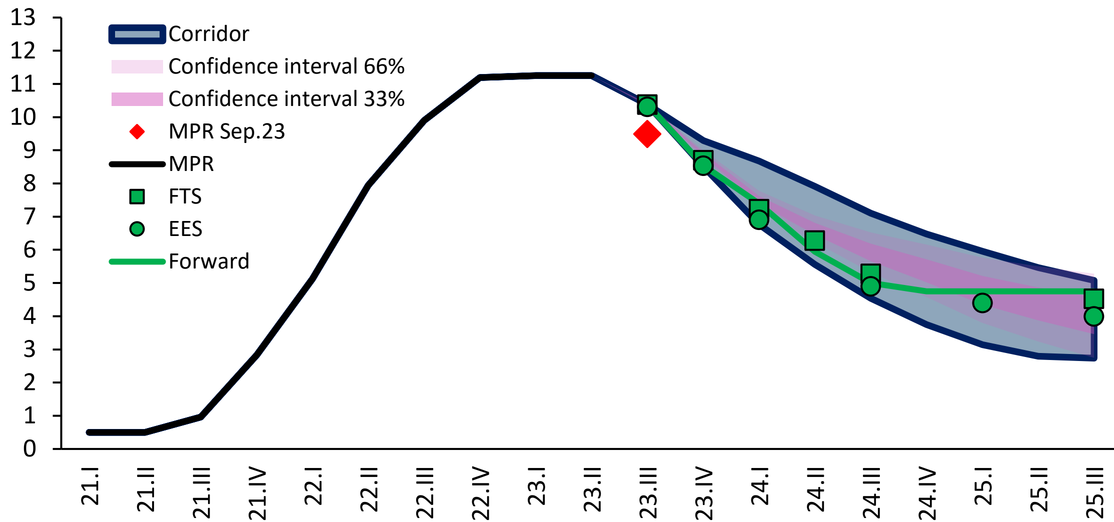


(1) Forecasts from each IPoM. Arrows indicate changes in forecasts between September and June 2023 Reports. (2) Dotted lines show forecasts. Forecast assumes structural parameters updated in December 2022 Report (trend GDP) with methodological review of potential GDP. Source: Central Bank of Chile.

Chart 13

Monetary Policy Rate corridor (*)

(quarterly average, percent)



(*) The corridor is built by following the methodology described in boxes V.1 of March 2020 Report and V.3 of March 2022 Report. Includes August EES, FTS pre-policy-meeting of September and the average quarterly smoothed forward curve as of August 30. Source: Central Bank of Chile.