MONETARY POLICY REPORT

SEPTEMBER 2022

ARCOS DE CALÁN
Ñuble Region

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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: Arcos de Calán / Región de Ñuble

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*/ This Report incorporates the monetary policy decision of 6 September. For the central scenario construction purposes, the statistical cut-off date is 31 August, with the exception of the exchange rate, which considered information up to 5 September. This document was originally written in Spanish. In case of discrepancy or difference in interpretation, the Spanish version prevails.

SUMMARY

High inflation is having a major impact on the incomes and expectations of different economic agents. The projections of this Report revise projected inflation upwards for the end of this year and all of 2023, estimating that by the beginning of 2024 it will be back to values closer to the target. The reduction of inflation from its current highs to 3% assumes that the economy will continue to adjust the imbalances accumulated last year, which considers a decrease in activity and demand for several quarters. The Central Bank's goal is to achieve inflation convergence by an adjustment in economic activity that is brief, orderly and at the minimum cost possible. To this end, it is essential to prevent the inflationary process from becoming more persistent. After the decision of the September Meeting, the MPR is around the maximum level considered in the central scenario of this Report. Future movements of the policy rate will depend on the evolution of the macroeconomic scenario and its implications for the convergence of inflation to the target. The Board will be especially vigilant of the upward risks for inflation, not only because of the high level it has reached but because inflation expectations two years ahead remain above 3%.

Inflation continued to rise, reaching 13.1% annually in July. In recent months, increases in food prices —volatile and non-volatile— continued to stand out, accounting for almost one third of annual inflation as of July. Core inflation (i.e., the CPI minus volatiles) rose to 10% annually, owing largely to the higher contribution of services and non-volatile food prices. The rise in total inflation again exceeded expectations. As in June, the surprise was concentrated in volatile prices and non-volatile food.

The CPI hike occurs in a context where inflation expectations have risen. Various sources of inflation show that short-term expected inflation has increased significantly. Over the two-year horizon, the surveys to both experts and businesses continue to foresee inflation above 3% annually, to figures that have also risen in recent months. This has also led to more frequent changes in prices by businesses, in response to the increase in demand and costs in the last two years (Box I.4).

Regarding activity, data for the second quarter and early third quarter indicate that the economy advanced in its adjustment process after the major imbalances accumulated in 2021. Excluding mining, in the second quarter activity relapsed by 0.5% q/q —seasonally-adjusted series—, a drop that continued into July. By sectors, worth noting was the drop in trade, which was partly offset with increases in some services.

Private consumption continued to decline from its high levels of 2021. In the second quarter, seasonally adjusted, private consumption fell by 2.4% q/q, somewhat more than expected. The decline was concentrated in goods, especially durables, coinciding with the strong depreciation of the real exchange rate (RER) and a significant build-up of inventories. Actually, both the IMCE and the information gathered in the August Business Perceptions Report (BPR) point to the fact that, in recent months, inventories have increased more than expected.

The path of consumption adjustment is occurring in a context where real wages continue to contract, job creation has slowed, and the liquidity remaining from the 2021 stimulus measures has been drying up. Between April and July, aggregate employment showed little variation. The demand for workers has lost strength compared to the beginning of the year, while supply remains below pre-pandemic levels (Box I.3). In the August BPR, companies reported that, although they perceive an increase in their labor costs, wage adjustments are generally smaller than the increase in the CPI and are now less frequent.

Gross fixed capital formation (GFCF) has declined further in a scenario of high uncertainty and a steadily deteriorating business confidence. Seasonally adjusted, GFCF fell 1% q/q in the second quarter (–7% q/q in the first quarter), a slightly better than expected performance, influenced by some large-scale investment projects. By components, the sharp drop in machinery and equipment stood out. Business confidence continued on the downward trend it has followed throughout this year, especially in the construction sector. This coincides with degrees of economic uncertainty that remain high in a historical comparison, more restrictive credit access conditions and high long-term interest rates.

Despite reduced consumption and weak investment, the current account deficit —accumulated over twelve months— widened in the second quarter, still reflecting the magnitude of the 2021 imbalances, which were then compounded with deteriorated terms of trade and high transportation costs. In the moving year ending in the second quarter of 2022, the current account accumulated a deficit of 8.5% of GDP, a figure in which government savings-expenditure imbalance played a preponderant role, resulting from the income support measures adopted during 2021. Households also showed a significant imbalance, due to the liquidation of savings implied by the withdrawal of pension funds to finance increased private consumption. Although the impact of these phenomena has been receding, this will only begin to show up in the current account in the second half of this year.

Abroad, the sharp rise in inflation and the reaction of central banks has led to tighter financial conditions, reducing the outlook for global growth, and increasing the risk of a global recession in 2023. Several economies have reported inflation rates that were unseen in several decades. In view of the greater persistence of and high expectations for inflation, most central banks have continued and/or accelerated their interest rate hikes, where worth singling out are the unexpected magnitude of the hikes and the more restrictive message from the Fed. The worsening of financial conditions has begun to impact on the activity and expectations of different agents, in addition to the uncertainty surrounding the unfolding of the war between Russia and Ukraine, the gas supply problems in Europe and the weakness of the Chinese economy and its real estate sector.

Commodity prices have fallen across the board, mainly influenced by lower expected demand and an appreciated US dollar. Compared to the levels prevailing at the close of the June Report, the price of oil and copper have fallen between 15 and 20%. Food prices have also fallen, driven by supply factors. Global supply chains have seen some normalization, with declining shipment costs. Although bottlenecks have been resolved, the risk of new quarantines persists given China's zero-Covid policy. In this scenario, significant external cost pressures remain.

Global financial markets have reacted by being highly volatile in recent months. Doubts concerning the trajectory of the Fed's monetary policy and its potential effects have been one of the main sources of financial fluctuations. Thus, market sensitivity to data or statements by authorities has increased, with episodes of high volatility and fluctuating risk aversion. Compared to the close of the last Report, interest rate hikes, stock market declines and a global strengthening of the dollar to levels not seen in twenty years have been observed. These movements are consistent with the Fed's hardened messages regarding the monetary policy efforts needed to reduce high inflation.

In the local financial market, the exchange rate, interest rates and the risk premium have shown a volatility that goes beyond what is observed in other economies. The peso/dollar exchange rate fluctuated at unusually high levels in mid-July, with a marked divergence from its external determinants, causing distortions in the functioning of the markets and prompting the Central Bank to announce an intervention program (Box I.2). Upon said announcement, tensions in the price formation process in the forex market eased, observing a decrease in volatility and in the exchange rate. In any case, compared to the statistical cut-off date of the previous Report, the peso depreciated in nominal and real terms.

Projections

The central scenario does not consider a specific effect on the economy due to the result of the plebiscite. This assumes that uncertainty will gradually reduce in the coming quarters, in the midst of a process in which institutional changes continue, allowing institutions and the economy to function properly.

The central scenario estimates that headline inflation is nearing its peak for this cycle, which it is still expected to reach during the third quarter of this year. Going forward, prices should begin to slow down their increases compared to earlier months, thus gradually reducing inflation.

Inflation forecast at the end of 2022 and 2023 is revised up from the last MP Report, due to the additional depreciation of the peso and the increased persistence of inflation. This year will close at 12%, close to 2 percentage points (pp) above the June forecast. Cumulative surprises in volatile prices and the recent depreciation of the peso explain much of this correction. By 2023, on average, projected inflation is about 1pp higher than in June, reflecting an RER between 3 and 4% above what was projected in June. Furthermore, it is assumed that it will remain more depreciated throughout the projection horizon, ending the period its average of the last fifteen to twenty years. At the same time, our projection considers greater second-round and indexation effects, reflecting inflationary persistence. Current levels and the anticipated evolution of the exchange rate are important factors behind the correction of inflation projections over the policy horizon, which more than compensates for the fall in the international prices of fuel, foods, and other commodities.

The central scenario considers that inflation will converge to the 3% target within the two-year monetary policy horizon. In the projection, annual CPI inflation will end 2023 around 3.5%, reaching 3% by the third quarter of 2024. Core inflation will take longer to converge to 3% because of the strong persistence already mentioned and a higher RER. This greater inflationary persistence requires a more contractionary monetary policy —in nominal and real terms— than anticipated in the last Report, as summarized in the new MPR corridor in this Report (figure II.1).

To a large extent, the convergence of inflation to the 3% target within two years is based on the assumption that the economy will continue to adjust the significant imbalances it accumulated in 2021. In the central scenario, the economy will grow below its potential for several more quarters, so that the gap will continue to narrow and become negative starting at the end of this year. In this scenario, GDP will see an annual variation between 1.75 and 2.25% this year, between -1.5 and -0.5% in 2023 and between 2.25 and 3.25% in 2024. For this three-year period, the projection contemplates a fiscal spending path consistent with that described in the last Public Finances Report.

Activity outlook foresees that private consumption will continue to adjust, a result that stems largely from the end of the massive income support measures adopted in 2021, as well as from the tightening of monetary policy. For investment, weak performance is anticipated through the remainder of 2022 and all of 2023, reflecting less favorable financial conditions, increased business pessimism, a higher RER and slowly declining uncertainty.

The current account deficit will decline in the coming quarters, in line with the continued adjustment of spending on tradables and a savings-investment balance that is much more favorable than in 2021. Not repeating the income stimulus measures will cause both public and household savings to improve drastically with respect to last year's figures, so the current account deficit will fall significantly from the second half of this year onwards. Higher interest rates, the high exchange rate and lower international transportation costs will also contribute to this. By the end of 2022, it will be reduced by more than 2pp of GDP —accumulating 6.3% in the year— and by 2023 it will be between 3% and 4% of GDP. Measured at trend prices, the deficit reduction will also be rapid and significant: from around 9% in 2021 to around 3% in 2023.

The impulse that the Chilean economy will receive from abroad will decrease mainly because of worsened financial conditions and terms of trade, combined with lower world demand. The central scenario anticipates that the Fed's monetary policy will move to somewhat more contractionary and longer-lasting levels than it communicated in the June Fed dots, which will result in tighter financial conditions internationally for a protracted period of time (Box I.1). This is the main factor behind the lower growth forecast for our trading partners, which will be 2.6% this and next year. The copper price will also be lower than previously projected, averaging around US$3.5 per pound next year (US$3.7 in June).

This projection contemplates no changes in the structural parameters. The Chilean economy has been subject to important shocks in the last couple of years and the degrees of uncertainty about their medium-term scope are significant. This has made it complex to evaluate its implications for estimating the structural parameters. In any case, even considering the level of uncertainty, the structural parameters will be evaluated in the December Monetary Policy Report.

After the decision of the September Meeting, the MPR is around the maximum level considered in the central scenario of this Report. Future movements of the policy rate will depend on the evolution of the macroeconomic scenario and its implications for the convergence of inflation to the target. The Board will be especially vigilant of the upward risks for inflation, not only because of the high level it has reached but because inflation expectations two years ahead remain above 3%.

The upper part of the MPR corridor reflects sensitivity scenarios where the global inflationary problem calls for a more aggressive response of monetary policies around the world, particularly the Federal Reserve. In such an event, there would be a sharp deterioration in global financial conditions and growth, with sharp declines in commodity prices and a further appreciation of the dollar. In a scenario where domestic inflation and expectations remain high, further peso depreciation would require a tighter monetary policy response than that in the central scenario. The same would occur if, irrespective of the cost pressures of the external scenario, local inflationary dynamics were more persistent as a result of the high medium-term inflationary expectations of households and businesses.

The lower part of the MPR corridor depicts scenarios where inflationary pressures subside faster. This could be the case if the contraction of activity and demand is more intense, because of a faster adjustment of private consumption and/or weaker investment, which would also negatively affect the performance of the labor market. Nor can it be ruled out that the external scenario will see a reduction in global cost pressures and inflation easing in most economies, including Chile. In this case, the Fed's monetary policy response would be less restrictive than in the central scenario, which would give way to better financial conditions, a less appreciated dollar globally and milder external inflationary pressures.

The projections of the central scenario consider that the pace of price increases will decrease in the coming months and annual inflation will begin to decline. However, the risk of observing a more persistent inflationary phenomenon is a concern for the Board. If materialized, they could lead to greater monetary restrictiveness, outside the upper limit of the MPR corridor. This risk is especially relevant in a context where inflation has surprised on the rise for several quarters and inflation expectations remain above 3% two years ahead. Quickly recovering macroeconomic balances will help reduce this risk, while allowing the Chilean economy to adequately face a further deterioration in the external scenario.

Individuals and businesses are paying a high cost because of inflation, which affects especially those with lower access to resources. Prolonging the current inflationary situation would be extremely costly, since as households and businesses begin to get used to and anticipate faster price increases on a permanent basis, the costs of reducing inflation —reflected in the reduced ability to create jobs, increase wages, and improve general welfare— increase substantially. Bringing inflation back to the target, and thus avoiding adverse effects on the population, especially the most vulnerable, necessarily involves reestablishing macroeconomic balances and, in this case, what is required is a reduction in the level of activity and demand. Monetary policy will continue to contribute to this necessary adjustment occurs in an efficient and orderly manner.

TABLE 1 : INFLATION (1)
(annual change, percent)

	2021	2022 (f)		2023 (f)		2024 (f)	
	MP Rep.	MP Rep. June 22	MP Rep. Sep. 22	MP Rep. June 22	MP Rep. Sep. 22	MP Rep. June 22	MP Rep. Sep. 22
Average CPI	4.5	10.8	11.4	5.0	6.1	3.0	3.1
December CPI	7.2	9.9	12.0	2.7	3.3	3.0	3.0
CPI in around 2 years (2)						3.0	3.0
Average core CPI	3.8	9.1	9.2	6.4	7.3	3.1	3.5
December core CPI	5.2	9.7	10.5	3.8	4.7	3.0	3.0
Core CPI around 2 years (2)						3.1	3.1

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

(2) For june 2022 MP Report corresponds to inflation forecast for the second quarter of 2024, for september to inflation forecast for the third quarter of 2024.
(f) Forecast.

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

TABLE 2 : INTERNATIONAL BASELINE SCENARIO ASSUMPTIONS

	2021	2022 (f)		2023 (f)		2024 (f)	
	MP Rep.	MP Rep. June 22	MP Rep. Sep. 22	MP Rep. June 22	MP Rep. Sep. 22	MP Rep. June 22	MP Rep. Sep. 22
			(annual change, percent)				
Terms of trade	11.8	-4.0	-5.6	-4.1	-2.6	-0.2	-0.3
Trading partners (e)	6.4	2.7	2.6	2.9	2.6	3.1	3.1
World GDP at PPP	6.3	2.6	2.5	2.7	2.4	3.2	3.2
Developed GDP at PPP (e)	5.1	2.4	2.3	1.5	0.7	1.7	1.7
Emerging GDP at PPP (e)	7.1	2.6	2.7	3.5	3.4	4.2	4.2
				(levels)			
LME copper price (US$cent/pound)	423	425	400	370	350	345	340
Oil price, average WTI-Brent (US$/barrel)	69	104	100	92	89	83	81

(f) Forecast.

Source: Central Bank of Chile.

TABLE 3 : INTERNAL SCENARIO

	2021	2022 (f)		2023 (f)		2024 (f)	
	MP Rep.	MP Rep. June 22	MP Rep. Sep. 22	MP Rep. June 22	MP Rep. Sep. 22	MP Rep. June 22	MP Rep. Sep. 22
GDP	11.7	1.5-2.25	1.75-2.25	-1.0 / 0.0	-1.5 / -0.5	2.25-3.25	2.25-3.25
Domestic demand	21.6	1.4	1.2	-3.4	-4.7	2.5	2.2
Domestic demand (w/o inventory change)	18.0	1.0	0.9	-3.4	-4.6	2.5	2.6
Gross fixed capital form	17.6	-4.8	-3.3	-2.2	-4.7	3.0	2.9
Total consumption	18.2	2.8	2.2	-3.7	-4.6	2.4	2.4
Private consumption	20.3	2.1	1.4	-4.1	-5.7	2.5	2.5
Goods and services exports	-1.5	1.3	1.3	5.7	5.5	3.0	3.0
Goods and services imports	31.3	0.0	-1.4	-3.0	-5.5	2.3	1.2
Current account (% of GDP)	-6.6	-6.6	-6.3	-4.5	-3.6	-4.0	-3.3
Gross national saving (% of GDP)	18.8	18.4	18.9	20.0	20.0	20.1	19.9
Gross national investment (% of GDP)	24.0	23.3	23.5	22.8	22.2	22.4	22.2

(f) Forecast. Source: Central Bank of Chile.

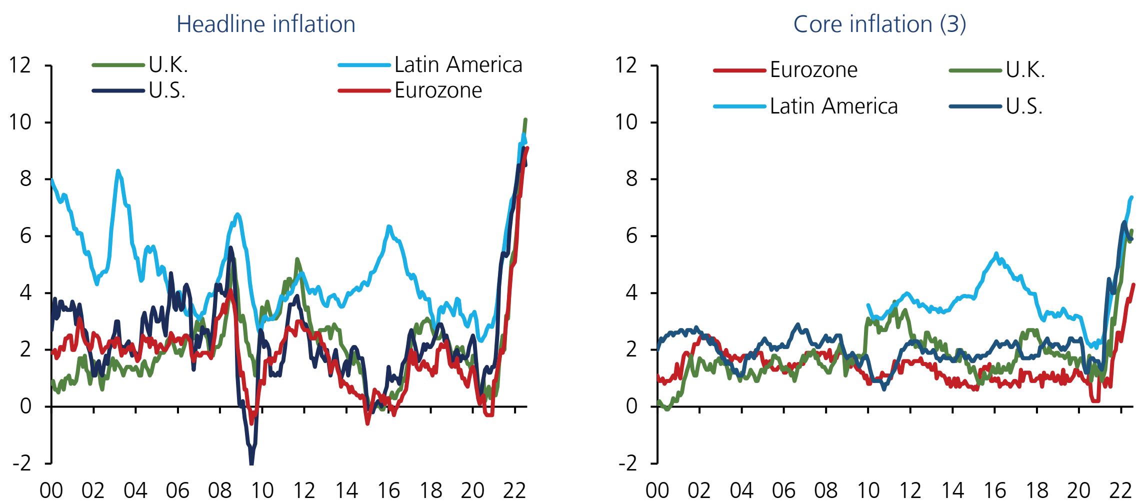
I. RECENT EVOLUTION OF THE MACROECONOMIC SCENARIO

Global inflation has continued to escalate and exhibits greater persistence, which has reinforced a more contractionary response by central banks. This has negatively affected global financial conditions, with episodes of high volatility associated mostly with the uncertainty regarding the pace of rate hikes to be conducted by the Federal Reserve (Fed). In local markets, the depreciation of the peso since the last Report has more than offset the reduction in the world prices of energy and foods, influencing the upward surprises in local inflation in recent months. Most CPI components have continued to rise in annual terms, to figures not seen in several decades, while inflation expectations rose again. At the same time, expectations for the Monetary Policy Rate (MPR) also posted new increases. As for economic activity, recent data confirm that the economy has continued to adjust in a process that began early this year, after the record-high spending levels of 2021, which continue to be reflected in some macroeconomic imbalances, such as the large current-account deficit. On the margin, a more noticeable adjustment in private consumption stands out, the fundamentals of which suggest that it will intensify in the months ahead.

THE INTERNATIONAL SCENARIO

Inflation has risen further around the world and shows signs of increased persistence (figure I.1). In June, the U.S. posted its highest inflation rate in four decades, to decline somewhat in July, thanks mainly to the lower fuel prices, while the labor market continues to tighten. In the Eurozone, prices are still rising across the board, with sharp increases in foods, core items, and electricity, the latter linked to high gas prices. In the United Kingdom, prices of services and core goods have continued to drive inflation to record highs, against a backdrop of intensifying wage pressures. In Latin America, foods and energy continued to drive inflation, which has spilled over to goods and services. Along these lines, the global inflation outlook has been revised upwards for 2022 and 2023.

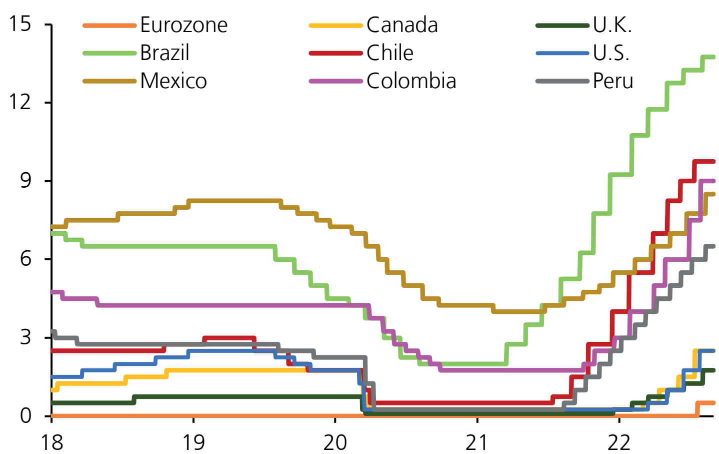
FIGURE I.1 WORLD INFLATION (1) (2)
(annual change, percent)



(1) For Latin America, simple average of annual inflation of Brazil, Mexico, Peru, and Colombia. (2) For the Eurozone, August data is preliminary. (3) Excludes foods and energy.
Source: Bloomberg.

Given the persistence of inflation and high inflationary expectations, central banks have continued and/or accelerated their interest rate increases. Worth noting have been unforeseen magnitude of the Fed's hikes and the change in its statement over recent months (figure I.2). Since June, the Fed has accumulated an increase of 150 basis points (bp) in its benchmark rate, making a significant shift in its communication at the same time (box I.1). The latter went from indicating that inflation responded largely to transitory developments during most of 2021, to pointing out that a substantial and long-lasting adjustment of monetary policy will be necessary to help solve the demand and supply imbalances reflected in the behavior of prices. At its July meeting, the European Central Bank (ECB), after months of cautious monetary policy, launched its normalization process with a larger-than-expected rate hike. The Bank of England (BOE) continued to raise rates and at its August meeting made the largest increase in almost three decades. In Latin America, monetary authorities have continued to raise their benchmark rates in the face of persistent inflation.

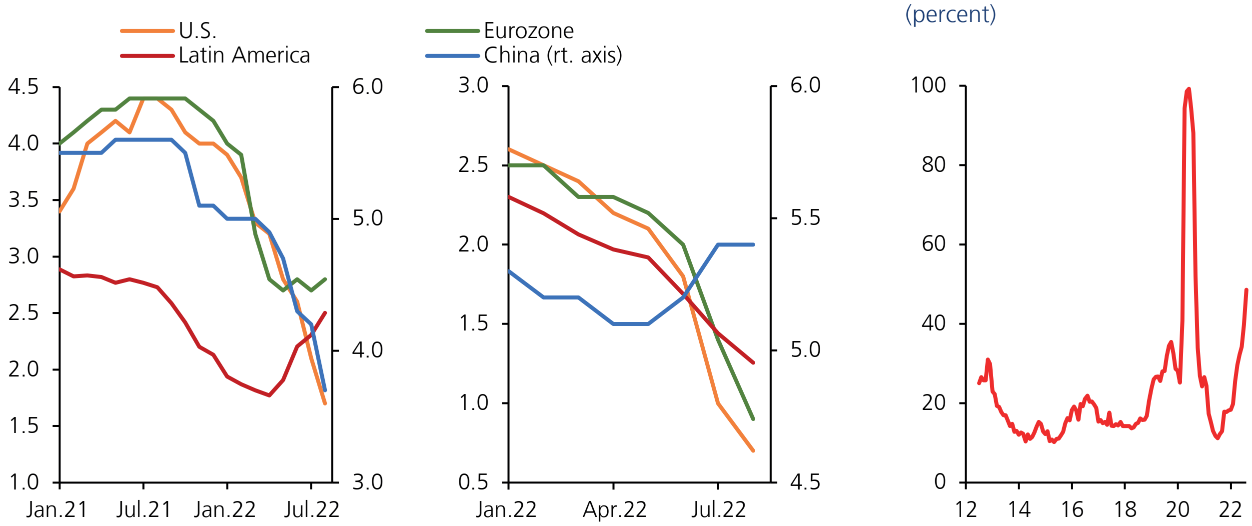
FIGURE I.2 MONETARY POLICY INTEREST RATES
(percent)



Source: Bloomberg.

In this context of tighter financial conditions, global growth prospects have been adjusting downward and the risk of a global recession in 2023 has increased, according to counterparties (figure I.3). In the U.S., second-quarter activity data show a slowing economy, reflected in a deterioration of actual investment and its outlook. Meanwhile, the high cost of living has continued to erode real wages and deteriorate consumer confidence. In the Eurozone, the outlook has worsened considering the uncertainty regarding the course of the Russian invasion of Ukraine and related gas supply problems, which anticipate a slowdown in consumption and investment. In China, consumer confidence remains low and the unemployment rate remains high, suggesting a gradual recovery in consumption, while the outlook for its real estate sector has become more negative, due to imbalances accumulated in the past few years. This situation has led the Chinese government to approve new fiscal and monetary stimulus measures aimed at boosting growth. In Latin America, despite showing more resilient activity than expected, partly due to gaps that have yet to close, expectations for 2023 remain weak, in line with the worsened financial conditions, the reduced dynamism of trading partners, the recent falls in commodity prices and political tensions.

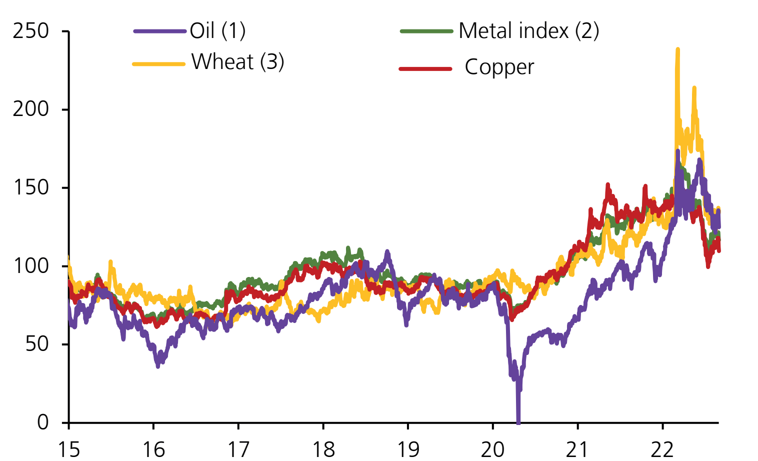
FIGURE I.3



(1) Latin America considers Brazil, Argentina, Peru, Colombia, and Mexico. PPP-weighted growth, shares of each economy according to WEO (IMF). (2) Includes the U.S., U.K., Germany, France, and Japan. Calculated using averaged answers to surveys in countries included.
Sources: Consensus Forecast and Bloomberg.

Commodity prices have fallen generally, influenced mainly by lower expected demand and the appreciating dollar (figure I.4). In this context, the price of an oil barrel has fallen to around US$95 (-17% since the June Report for the WTI-Brent average) while copper, following the general trend of metals, is around US$3.6 per pound (–15% since June). In contrast, the price of lithium has continued to rise, driven by the strong demand linked to the production of electric vehicles, in the face of a limited response capacity of supply. Food prices have also fallen, although in this case the impact of supply factors, including the agreement between Russia and Ukraine to resume grain exports and the improved production prospects in some relevant countries, has had a greater impact. Thus, as of August, the FAO index recorded a monthly drop of 1.9%, although it remains above last year's level.

FIGURE I.4 COMMODITY PRICES
(index, 2010-2022 average=100)

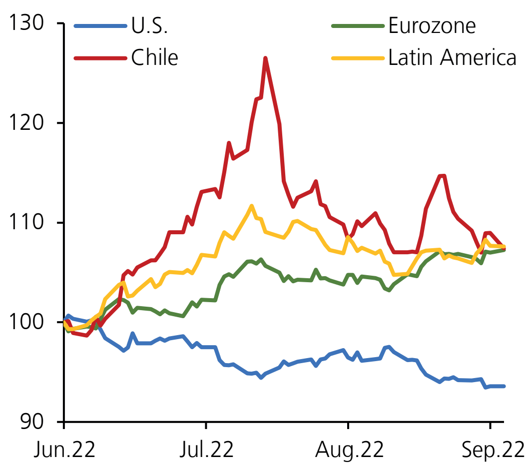


(1) WTI-Brent average. (2) S&P GSCI Industrial Metals. (3) One-month futures prices.
Source: Bloomberg.

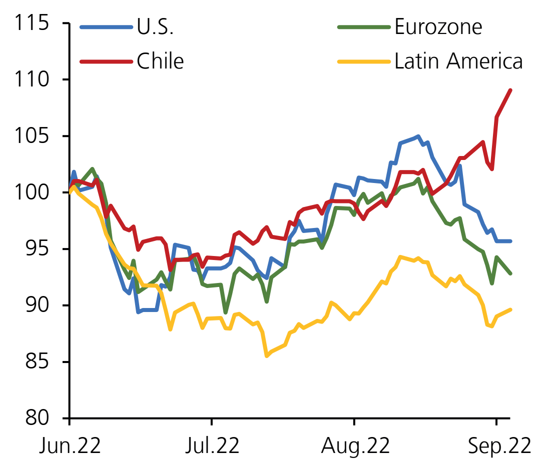
Global financial markets have been highly volatile in recent months, in a scenario of heightened inflation, tighter monetary policies, and fears of a global recession (figure I.5). Uncertainty regarding the future course of U.S. monetary policy has been one of the main sources of volatility (box I.1). This scenario has intensified the markets' sensitivity to data releases or statements by the authorities, which has been reflected in episodes of high volatility since the June Report, as well as in greater risk aversion during part of the quarter. All this has resulted in interest rate hikes, stock market slumps and a global strengthening of the dollar. Actually, the dollar was at its highest since 2002. In the Eurozone, there were also fears about the increase in sovereign spreads of the bloc's peripheral economies and a possible financial fragmentation, which have been receding since the ECB approved the Transmission Protection Instrument (TPI).

FIGURE I.5 FINANCIAL CONDITIONS (1)

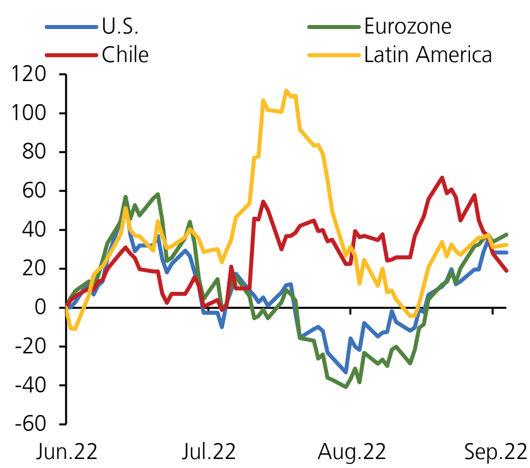
a) Currencies (2)
(index, 01.Jun.22=100)



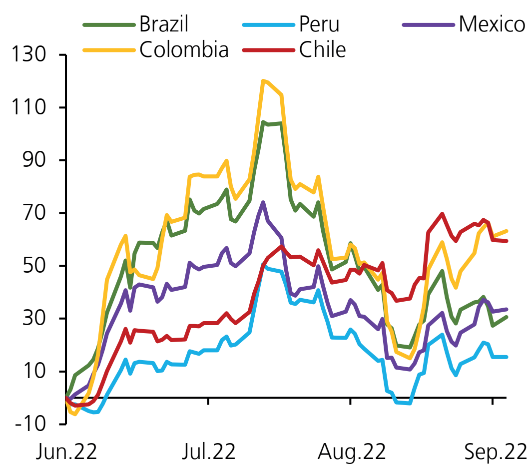
b) Stock markets (2)
(index, 01.Jun.22=100)



c) Interest rates on 10-year nominal bonds (2)
(difference with respect to 01.Jun.22, basis points)



d) Risk premiums by country (5-year CDS)
(difference with respect to 01.jun.22, basis points)



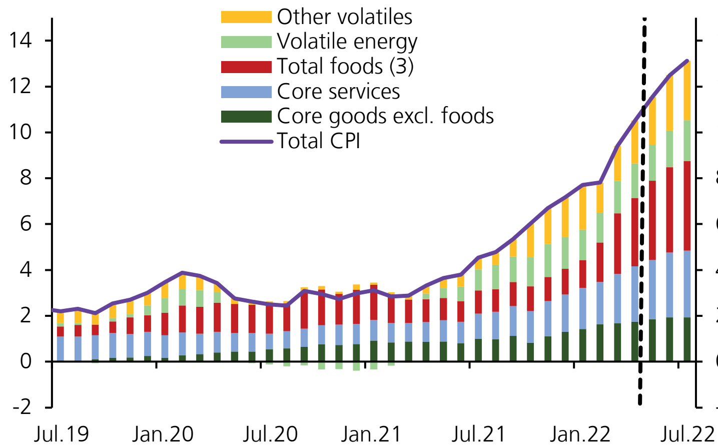
(1) Considers data up to 5 September. (2) For Latin America, simple average of Brazil, Mexico, Colombia, and Peru is used.
Source: Bloomberg.

THE DOMESTIC SCENARIO

In the local financial market, variables such as the exchange rate, interest rates and the risk premium have shown movements that exceed those observed in some comparable economies (figure I.5). Towards mid-July, the exchange rate fluctuated with unusually high intensity and volatility, which strained price formation in the forex market and led the Central Bank to announce an intervention program on 14 July (box I.2). After the announcement, the parity dropped significantly, and with less volatility than before the intervention. At the statistical close of this Report, the exchange rate had increased by nearly 10% compared with the June Report. The real exchange rate, meanwhile, has risen in recent months, standing between 3% and 4% above its second-quarter average.

Inflation continued to rise and reached 13.1% annually in July, with widespread increases in the different basket aggregates (figure I.6). In recent months, increases in food prices —both volatile and non-volatile— continued to stand out, accounting for nearly 4 percentage points (pp) of annual inflation in July. Energy prices also rose, driven by fuels and, most recently, by the new correction of electricity rates. Core inflation —measured by the non-volatile CPI— rose to 10% annually in July, with a higher contribution from services and foods. Excluding foods, core goods prices have shown some moderation and their incidence has remained constant in the latest CPI records, coinciding with greater inventory build-up in the second quarter.

FIGURE I.6 INFLATION INDICATORS (1) (2)
(contributions to annual change, percentage points)

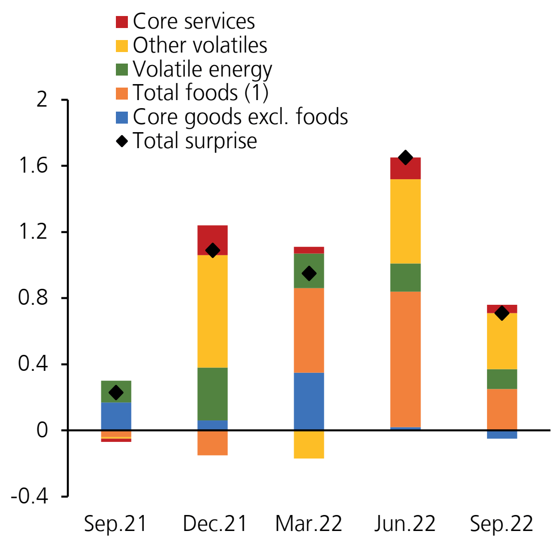


(1) Dashed vertical line indicates statistical closure of June 2022 Report. (2) For more detail on the different groupings and their shares in the total CPI basket, see box IV.1 in December 2019 Report, Carlomagno and Sansone (2019), and Economic Glossary. (3) Considers sum of volatile and non-volatile food items.
Sources: Central Bank of Chile and National Statistics Institute (INE).

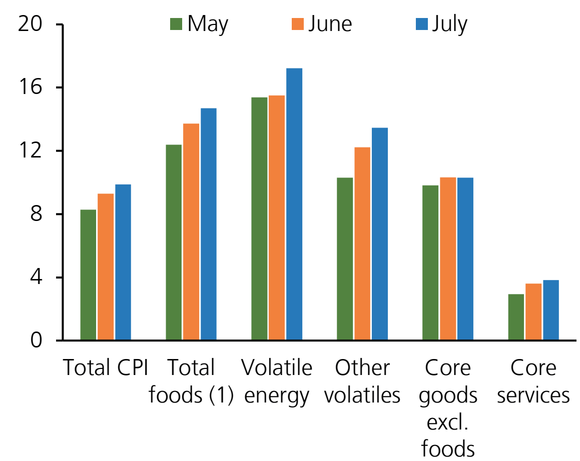
Inflation accumulated between May and July exceeded forecasts in the June Report. This surprise was largely explained by the pass-through of the greater depreciation of the peso. By components, inflation was concentrated in volatile items and foods (figure I.7). The May-July inflationary surprise was 0.71pp, most of it explained by the aggregate of volatile items (+0.34pp) and specifically by the air transportation item. Another fraction was due to foods —volatile and non-volatile items combined—, which contributed 0.25pp, including the higher meat prices. The rest of the surprise was led by energy (+0.12pp), mainly linked to the increase in fuel prices and the update of the weekly adjustment threshold of its stabilization mechanism (Mepco). On the other hand, both core goods inflation —excluding foods— and services inflation were in line with projections. Nevertheless, and beyond the recent surprises, all the aggregates in the basket continue to exhibit annual variations well above their historical trend.

FIGURE I.7

Cumulative inflationary surprises in each MP Report (percentage points)



Deviations of annual inflation from historical average (2) (percentage points)

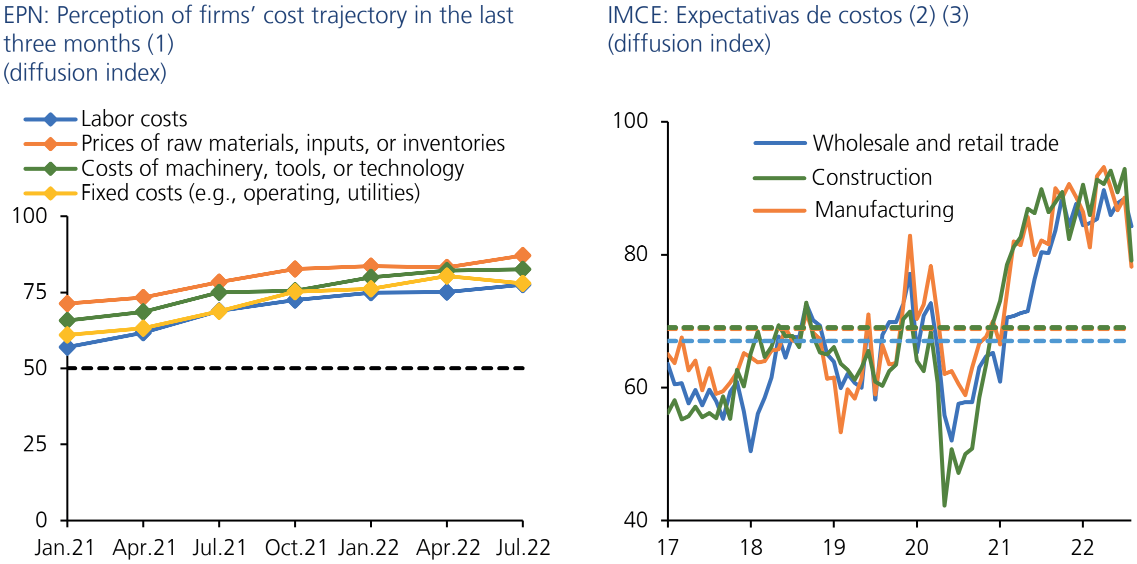


(1) Sum of volatile and non-volatile foods. (2) Historical average of annual inflation between 2001 and 2021 for each grouping.
Sources: Central Bank of Chile and National Statistics Institute (INE).

The economy continues to face significant cost pressures (figure I.8). The INE transportation cost index continued to rise in July, accumulating a 24.8% annual variation, largely driven by fuels. The Industrial Producer Price Index (INE) also continued to rise, accumulating a 21% annual variation during July. In the August Business Perceptions Report (IPN), companies noted the persistence of cost increases, despite the fact that pressures related to the availability of inputs and inventories had eased with respect to the previous quarter. Businesses underscored the effects of the higher dollar price on imported inputs and products, as well as a faster rise in the prices of items such as fuels, foods, and some construction materials. The cost outlook reported by firms —as measured by the IMCE—, despite some recent moderation, continues to be above historical averages in every sector.

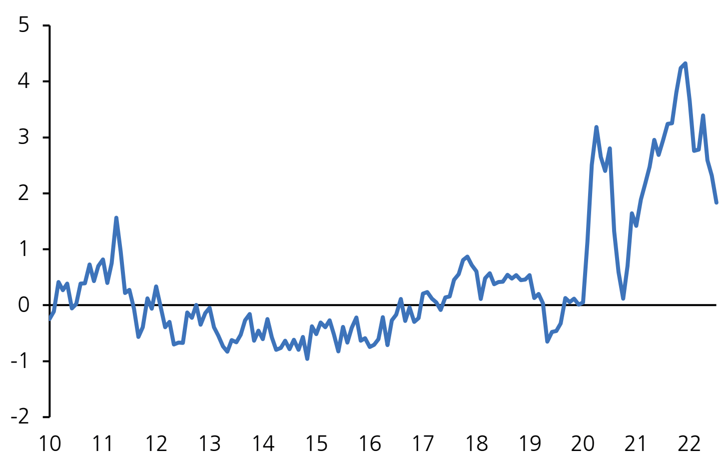
External cost pressures remain high, despite some normalization of global supply chains and declines in commodity prices (figure I.9). Bottlenecks have been easing as China has loosened restrictions in the face of declining contagion and a slowing trend in global demand for goods. However, the risks of new quarantines remain latent given the country's zero-Covid policy. Furthermore, the pass-through of lower commodity prices will be offset by the higher exchange rate. For oil, it should be added that the pass-through of the recent decrease in oil prices to the local market will be somewhat delayed in line with Mepco standards.

FIGURE I.8 COST PRESSURES



(1) Value above (below) 50 means larger share of increase (decline) responses. (2) Value above (below) 50 indicates expected expansion (contraction). (3) Dashed horizontal lines show historical averages between January 2004 and August 2022.
Sources: Central Bank of Chile and Icare/Universidad Adolfo Ibáñez.

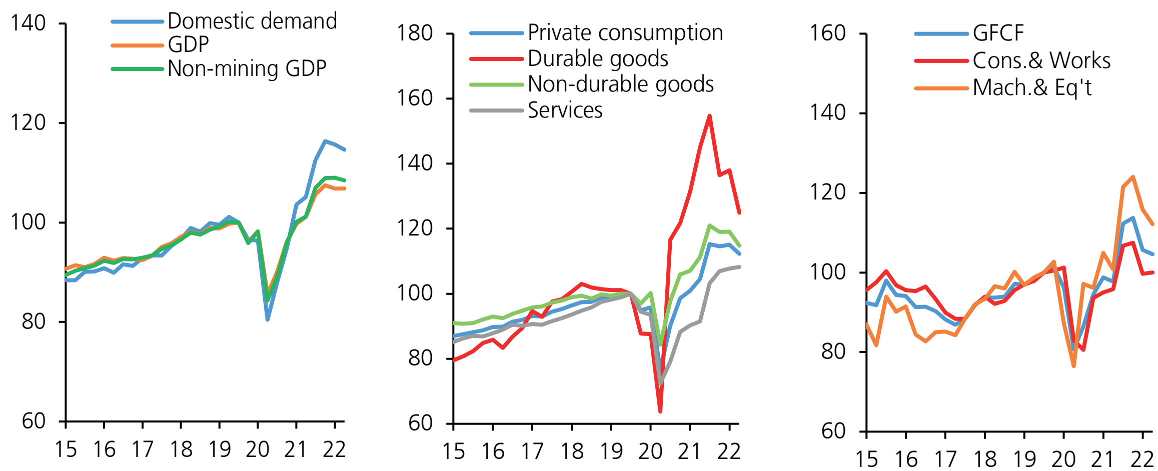
FIGURE I.9 GLOBAL SUPPLY CHAIN PRESSURE INDEX (*)
(standard deviations)



(*) Standard deviations with respect to historical average. For further detail, see Global Supply Chain Pressure Index.
Source: GSCPI, Fed NY.

Activity has continued to lose dynamism, in the midst of an adjustment process necessary to resolve the imbalances accumulated in the economy during 2021. Discounting seasonality, non-mining GDP fell by 0.5% in the second quarter compared to the first (figure I.10). By sectors, the fall in trade activity (–1.7% q/q) and personal services (–2.0% q/q) stood out. This more than offset the greater dynamism of other services, such as restaurants and hotels (+1.4% q/q), and housing and real estate (+1.5% q/q). The non-mining Imacec for July maintained its downward trend, falling 0.8% monthly in its seasonally-adjusted series.

GRÁFICO I.10 ACTIVITY AND DEMAND INDICATORS
(index, 2019Q3 = 100, seasonally-adjusted series)

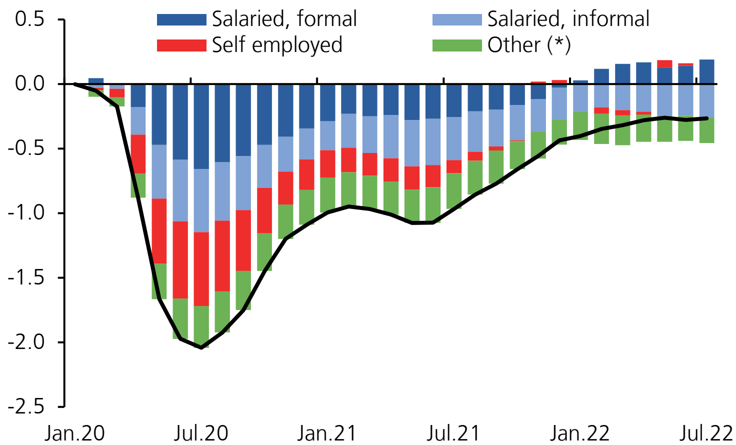


Source: Central Bank of Chile.

Private consumption has also continued to adjust from the high levels of 2021, in line with the evolution of its fundamentals (figure I.10). In the second quarter, seasonally adjusted, private consumption fell 2.4% with respect to the first. This occurred in a scenario where real wages showed annual declines, a slowdown in job creation, and depleting liquidity from the 2021 stimulus measures in the face of a still high real exchange rate. The decline in consumption affected mostly goods, especially durables, coinciding with the exchange rate depreciation and a significant build-up of inventories. The latter is confirmed by the perceptions of firms (IMCE), which show that inventories are above the levels they consider desirable. Accordingly, retail respondents to the August IPN noted that, in the face of dwindling sales, they have preferred to accumulate inventories rather than liquidate, due to the high cost of replenishment. On the other hand, consumption of services increased by less than in the previous quarter, showing signs of an incipient deceleration.

The performance of consumption is partly justified by the stagnation of the labor market (figure I.11). Between April and July, aggregate employment grew very little. By categories, there was a drop in informal salaried jobs, contrasting with an increase in formal salaried and self-employed jobs and employers. By sectors, the largest job creation concentrated in services-related activities, construction, and manufacturing, offset by trade and all other economic lines. All in all, the unemployment rate remained below its averages of the past two decades, standing at 7.9% in July.

GRÁFICO I.11 EMPLOYMENT BY OCCUPATIONAL CATEGORY
(difference with January 2020, million persons)

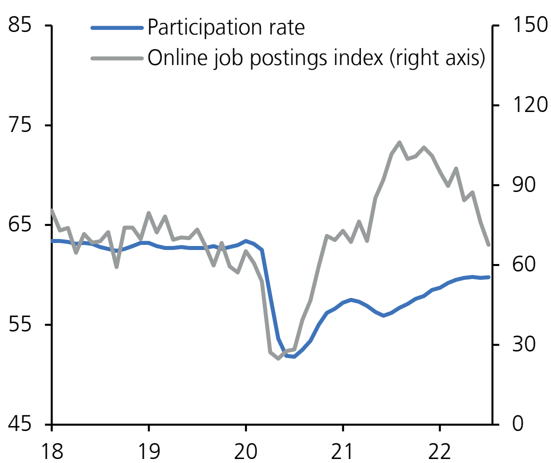


(*) Includes household help, employers, and non-remunerated family work.
Source: National Statistics Institute (INE).

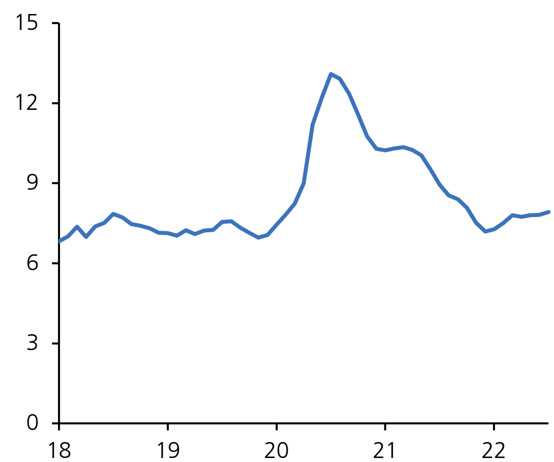
Job creation has slowed in a context in which labor demand has been shrinking (figure I.12). The Online Job Postings index (IALI) has been dropping month over month since March, while firms' expectations (IMCE) regarding three-month employment have continued to deteriorate and remain in pessimistic territory. According to the August Business Perceptions Survey (EPN), 30% of businesses expect their workforce to be smaller in twelve months' time and only 15% expect it to be higher. However, as can be observed in the August IPN results, the difficulty for firms to recruit workers has decreased, something in which the lower demand seems to play an important role.

GRÁFICO I.12 LABOR MARKET INDICATORS

Indicators of labor demand and supply
(index; index January 2015 = 100, quarterly mov. avg.)



Unemployment rate
(percent)

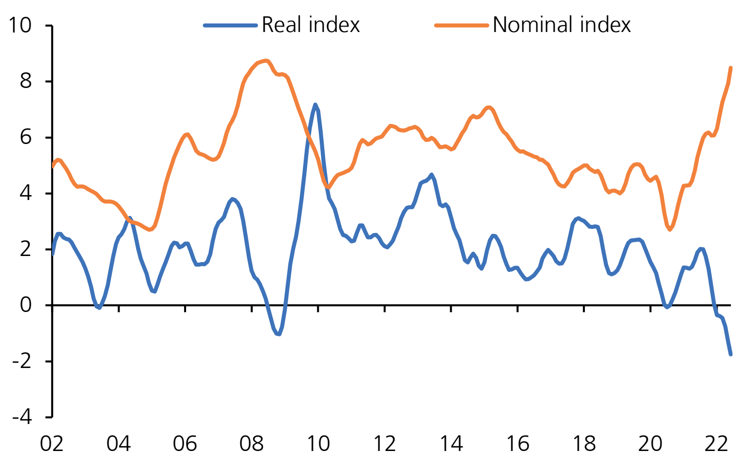


Sources: Central Bank of Chile and National Statistics institute (INE).

The labor supply has slowed its recovery (figure I.12). The participation rate has stagnated in recent months and is still below its pre-pandemic level, still lagging behind other economies (box I.3). This is mainly linked to the delayed recovery of employment among workers under 25 and over 54 years of age, in a context in which women participation continues to lag well behind men (49.9% and 70.1%, respectively). According to INE information, among the reasons for not participating, family and personal responsibilities, studying, and retirement are at the top of the list.

Real wages have continued to decline given the tightening of the labor market and the significant increase in inflation (figure I.13). The fall in real wages (measured by the INE Remuneration Index (IR)) is the steepest in more than two decades, amid historically high variations in nominal wages. This is consistent with the information gathered in the August IPN: although businesses perceive an increase in their labor costs, in general wage monetary corrections are below the CPI increase, and have become less frequent. With the exception of mining, this evolution of real income is transversal to most sectors, among which the sharp drop in construction and communal services stands out. By occupational group, the biggest drops have occurred in the higher-paid jobs.

GRÁFICO I.13 WORKERS COMPENSATION INDEX
(percent, annualized quarterly velocity, moving one-year average)

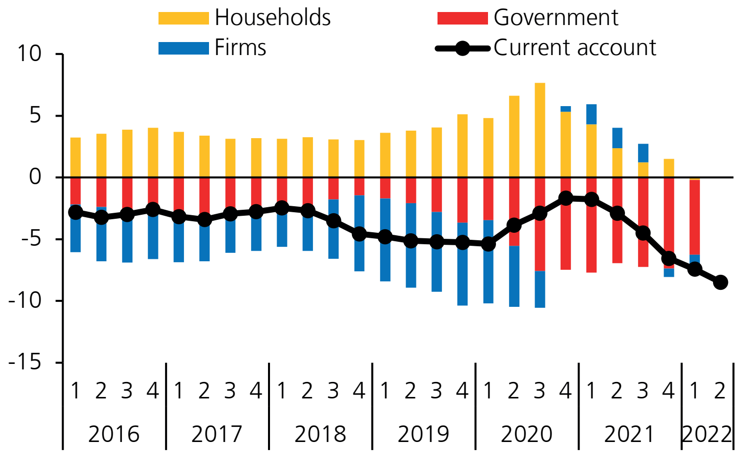


Source: Central Bank of Chile based on data from the National Statistics Institute (INE).

Investment continued its downward correction, in line with the uncertain scenario (figure I.10). During the second quarter, gross fixed capital formation (GFCF) fell by 1.0% with respect to the previous quarter in its seasonally-adjusted series. This movement was marked by a 3.2% drop in the machinery and equipment component, partly offset by a 0.4% rise in construction and other works. GFCF was somewhat better than expected, with a positive surprise concentrated in engineering works, where the execution of certain large-scale initiatives, such as the deployment of the 5G network in Chile and some mining projects, had a significant impact.

In line with the economy's high level of spending of recent quarters, the current-account deficit continues to be at record-highs. In the second quarter, the current account of the balance of payments posted a cumulative deficit of 8.5% over the last twelve months as a proportion of GDP, the largest in more than two decades (figure I.14). This result responds largely to the loss of national savings during 2021 associated with fiscal measures in the midst of the pandemic and the pension fund withdrawals. In fact, Chilean savings stood at 18.2% of GDP in the second quarter (moving one-year average), the lowest in twenty years.

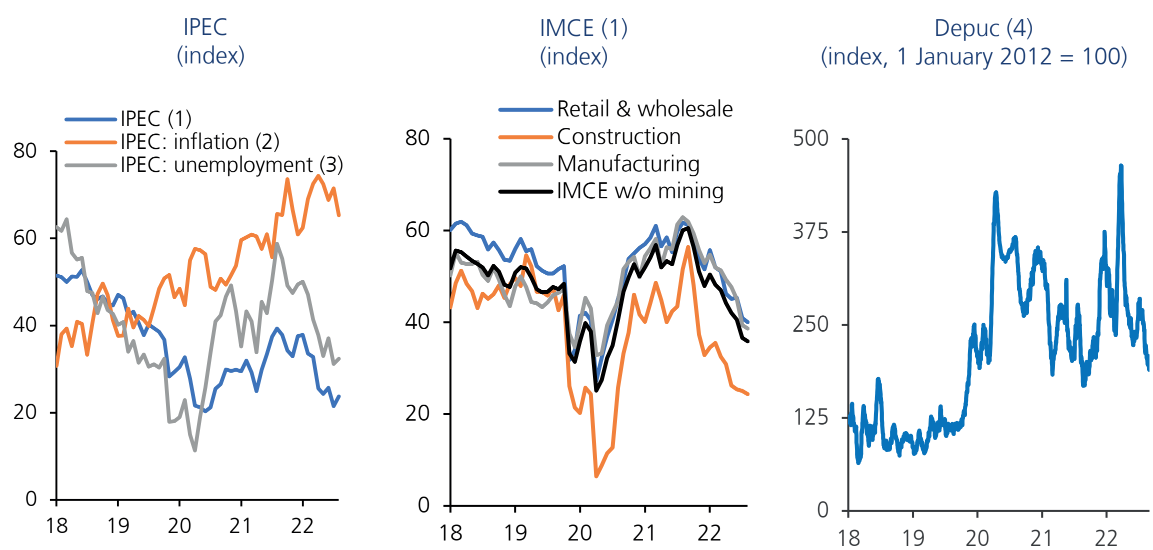
GRÁFICO I.14 CURRENT ACCOUNT BY INSTITUTIONAL SECTOR
(percent of GDP, moving one-year average)



Source: Central Bank of Chile.

Business and consumer confidence has continued to deteriorate, in a scenario of high inflation and adjustment of activity (figure I.15). The IPEC reflects that consumer pessimism is similar to the degree it showed in mid-2020, among its worst ever. Worth noting is the deterioration in the outlook for inflation and unemployment. At the same time, business confidence (IMCE) has continued on the downward trend that has been evident since the beginning of the year in all sectors surveyed, where the negative perceptions in construction must be singled out. This coincides with levels of economic uncertainty (Depuc) that continue to be high in a historical comparison, despite a decrease in recent months.

GRÁFICO I.15 PERSPECTIVES AND UNCERTAINTY INDICATORS



(1) Value above (below) 50 indicates optimism (pessimism). (2) Percent of respondents who believe that prices will rise "a lot" in the next 12 months. (3) Lower (higher) value indicates more (less) unemployment. (4) Moving 30-day average. As from December 2021, the index includes an update to the dictionary of words used for its construction, as a way to factor in new elements that influence local conditions.
Sources: Gfk/Adimark, UAI/ICARE, and Central Bank of Chile based on Becerra and Sagner (2020).

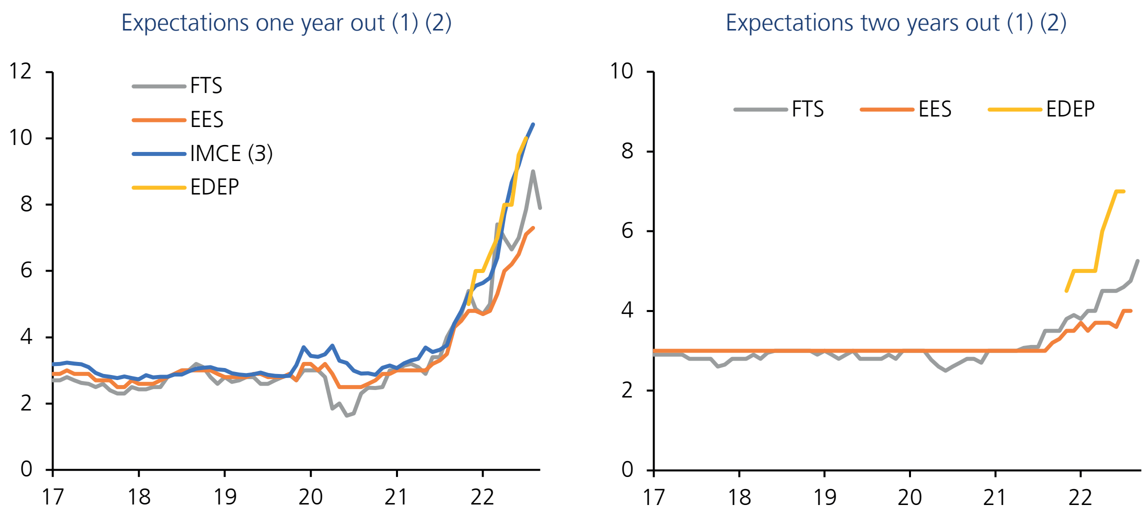
Lending remains subdued, in a scenario of uncertainty and rising benchmark rates. The Bank Lending Survey (BLS) for the second quarter showed that supply has become more restrictive and demand is weaker in all portfolios. On the demand side, the August EPN showed that only about 15% of firms have applied to a loan (25% in the same month a year before). In addition, over half of them considered that financial conditions had worsened over the last six months, which they attributed mainly to the increase in interest rates. Between January and July, nominal rates for commercial and consumer loans have risen about 450 and 410bp, averaging 13.8% and 27.1%, respectively. It is worth noting that the rolling credit rates stood at 31.1% in July. The UF-indexed housing loan rates have remained high in recent months, averaging 4.3% in July, which has affected loans in this portfolio. As of August, real mortgage loan flows had fallen 43% in annual terms. Meanwhile, delinquencies have been rising since the beginning of 2022, although they remain below their average of recent years. In line with this and with the deterioration of economic expectations, provisions have continued to increase.

ECONOMIC EXPECTATIONS

Expectations for activity changed, reflecting faster growth in the short term and slower in the medium term. In the August Economic Expectations Survey (EES), median expectations for 2022 GDP rose to 1.9% (1.5% in May) and fell to –0.5% for 2023 (0.5% in May).

Short-term inflation expectations have continued to rise in line with recent surprises in actual data and with the evolution of the exchange rate (figure I.16). Inflation expectations one year ahead in the latest surveys of specialists —the August EES and the FTS prior to the September Meeting— stood at 7.3% and 7.9%, respectively (6.2% and 6.8% in the surveys prior to the June Report). Business expectations show a similar evolution. In the Survey of Price Determinants and Expectations (EDEP) of July and in the IMCE of August, inflation is expected to be close to 10% in twelve months (8% in the previous Report). In any case, the significant dispersion in the answers of all these surveys should be noted. In the same horizon, the implicit perspectives in inflation insurance contracts have also increased, reflecting values close to 7.8%.

GRÁFICO I.16 SURVEYED INFLATION EXPECTATIONS
(annual change, percent)

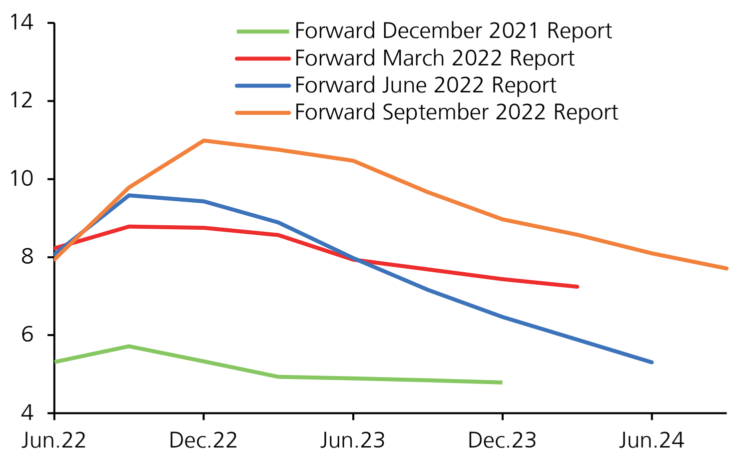


(1) For the Financial Traders Survey (FTS), Economic Expectations Survey (EES), and Price Determinants and Expectations Survey (EDEP), median responses are shown. (2) The FTS uses the survey from the first two weeks of each month through January 2018. From February 2018 onwards, it considers the last survey published in the month, including the one prior to the September 2022 MP meeting. In months with no survey published, the latest available one is considered. (3) Considers the average between wholesale & trade and manufacturing.
Sources: Icare/Universidad Adolfo Ibáñez and Central Bank of Chile.

For the end of the monetary policy horizon, inflation expectations have continued to exceed 3% (figure I.16). In two years, the EES and FTS surveys anticipate values of 4.0% and 5.3%, respectively. Meanwhile, breakeven inflation points to inflation at 6.1% and 4.2% two and five years ahead, respectively[1]/. However, it should be taken into account that this measure responds to term, liquidity, and risk premiums and other elements that are magnified in periods of uncertainty such as the current one and that do not necessarily affect nominal and UF-indexed instruments to the same extent.

The outlook for the MPR trajectory rose with respect to the previous Report (figure I.17). Both the EES and the FTS reflect an increase in the terminal level of the MPR, both at 11% (9.0% and 9.5%, respectively, in the surveys prior to the June Report), which would be reached before the end of this year, to then start a downward trajectory. Thus, in two years' time, the rate would be 5.5% according to the EES and 6.0% according to the FTS. Meanwhile, at the statistical close, the expectations implicit in financial prices predicted a similar trajectory, also with a maximum value of 11%, which would be observed in December.

GRÁFICO I.17 MPR EXPECTATIONS (1) (2)
(percent, quarterly average)



(1) Calculated by extracting the implicit MPR considering the forward curve on the overnight index swap curve up to two years, discounting the fixed rates of each maturity at the simple accrual of ICP. (2) Quarterly average as of 7 December 2021, 23 March 2022, 1 June 2022, and 31 August 2022, respectively.
Source: Central Bank of Chile.

[1]/ At two years breakeven inflation is 1 in 1. At five years, it is 3 in 2.

BOX I.1:

The outlook for monetary normalization in the United States

The intensity and duration of monetary tightening in the U.S. is one of the most relevant sources of uncertainty in the external scenario. This economy's high inflation, which has become more persistent than was thought before, is largely driven by demand-side factors[1]/ and the labor market is tighter than it has been in several decades, which will probably continue to intensify wage cost pressures. In addition, beyond reversals in volatile prices linked to fuels and other commodities, core inflation measures are close to 6% annually, accelerating with respect to the beginning of the second quarter (figure I.18).

In this context, inflation is unlikely to decline to values around 2% without significant monetary tightening over several quarters. Actually, in the Federal Reserve Chair Jerome Powell's recent address at Jackson Hole, he emphasized that i) low and stable inflation is the Fed's primary objective and monetary policy can and should be used to achieve a better balance between excess demand and supply; ii) that inflation expectations play a central role in the process of inflation convergence, and that their de-anchoring significantly raises the costs of bringing inflation down toward the 2% target; and iii) that, for these reasons, the Fed will move the federal funds rate (FFR) to more contractionary levels and persevere in its mission to reduce high inflation even if this "will bring some pain" to households and businesses in the short term.

In the central scenario of this Report, the FFR is expected to increase to 4.25% in 2023, on a trajectory that lies between 50 and 75 basis points higher than that of the latest Fed dots and current market prices (figure I.19). This is supported, on the one hand, by the prescription provided by different simulations of the Taylor rule (figure I.20) and, on the other hand, by the analysis of previous episodes of declining inflation in which the FFR attained a significantly higher level than that of the latest dots[2]/ (Bertinatto et al., 2022). In this scenario, financial conditions for emerging markets are less favorable than was expected in June, thus worsening global growth prospects and affecting the expected path of Chile's real exchange rate.

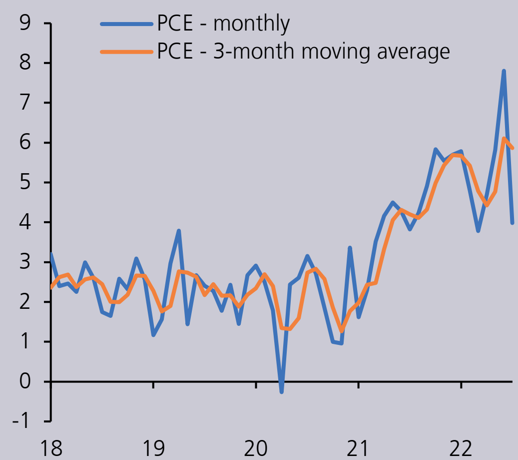
However, there are several risks involved in this scenario. On one side, a reduction in global cost pressures and rapidly easing inflation in most economies cannot be ruled out, which would lead to a less contractionary Fed monetary policy than assumed in our central scenario. On the opposite side of the spectrum, it is also possible that in the face of more persistent inflation, the Fed would implement FFR hikes significantly above market consensus and this Report's central scenario. Due to the depreciation pressures that this would trigger, in an environment of already very high local inflation, the MPR would be placed at the ceiling of the MPR corridor described in chapter II.

All in all, the markets' reaction to FFR hikes and changes in Fed communication have been a major source of volatility in recent months. While interest rates expectations based on financial asset prices have been adjusting to the Fed's dots, it is likely that there will be several episodes of volatility and abrupt adjustments in asset prices throughout this process.

[1]/ See Shapiro (2022); Di Giovanni, Kalemli-Özcan, Silva, and Yildrim (2022).

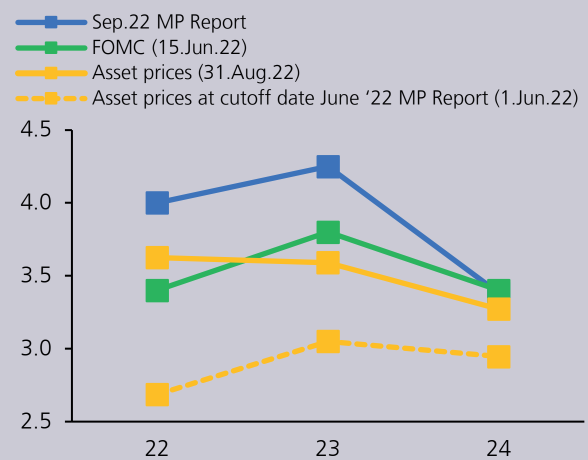
[2]/ See Blanchard (2022); Bolhuis, Cramer, and Summers (2022).

FIGURE I.18 CORE MEASURES OF U.S. PCE (*)
(annualized monthly change, percent)



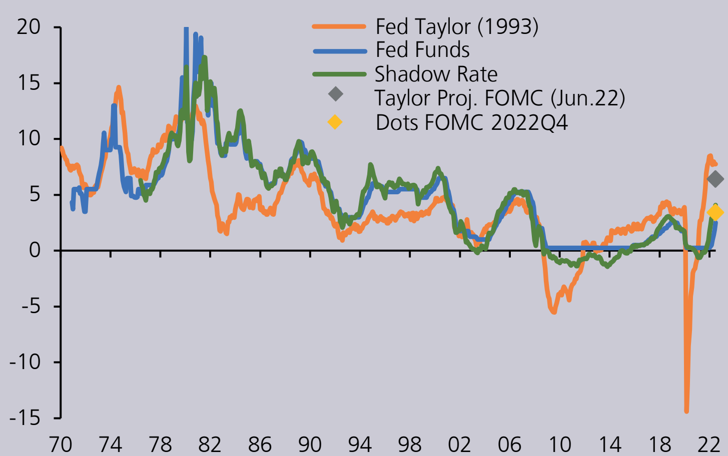
(*) Simple average of PCE core (BEA), PCE median (Fed Cleveland), PCE trimmed mean (Fed Dallas), and PCE Cyclical Core (Fed San Francisco).
Sources: Bureau of Economic Analysis, Fed Cleveland, Fed Dallas, Fed San Francisco and Bloomberg.

FIGURE I.19 FORWARD FED FUNDS RATE
(percent)



Sources: Central Bank of Chile, FOMC and Bloomberg.

FIGURE I.20 TAYLOR RULE AND FED FUNDS RATE (*)
(percent)



(*) For the Taylor rule, the nominal neutral rate is constructed with the long-run FFR from the FOMC dots since January 2012, and 3% for the previous period, target inflation is 2%. For the NAIRU, the CBO estimates are used. Shadow rate calculated through the loadings of the first three main components of the 2, 3, 5, 7, 10 and 20-year rates and their coefficients in a regression with the FFR, for the 1976-2007 sample, a period prior to the more frequent usage of unconventional monetary policy tools. For more details, see Bertinatto et al. (2002).
Sources: Bloomberg, FOMC, Fed Cleveland and CBO.

BOX I.2:

Exchange rate interventions of the Central Bank of Chile

Chile has had a floating exchange rate regime since September 1999. Essentially, the nominal exchange rate is determined by supply and demand in the foreign exchange (forex) market, without the participation of the Central Bank. In a context of financial integration, the floating exchange rate allows for an independent monetary policy and facilitates the adjustment of relative prices in the face of shocks, which mitigates their consequences on the real economy and avoids prolonged exchange rate misalignments.

That said, the Central Bank reserves the option to intervene in the forex market in exceptional circumstances if it considers that the smooth functioning of the financial market is at risk; for example, when an overreaction or excessive volatility of the parity damages the confidence of agents or gives misleading price allocation signals[1]/. Thus, foreign exchange interventions are, *per se*, exceptional measures whose design and implementation respond specifically to the conditions that have generated them. Moreover, they are not aimed at maintaining an exchange rate level, but rather at helping in the economy's adjustment process in circumstances in which a high degree of instability in the forex market may hinder the correct operation of the financial market and the price formation process.

Interventions are typically monetarily sterilized, which means that the change in the amount of money resulting from the purchase or sale of dollars is reversed through another financial operation. The purpose of sterilization is to avoid affecting the conduct of monetary policy aimed at inflation targeting. International evidence suggests that, if there are imbalances in the foreign exchange market, sterilized interventions may have an impact on the exchange rate, although this is limited in magnitude and duration, and is mainly associated with reducing its volatility in the short term[2]/.

The present intervention episode

In recent years, the Chilean economy has suffered multiple shocks, of both internal and external origin. Most recently, the global strengthening of the dollar due to the Fed's actions plus a deterioration in the terms of trade led to a significant depreciation of the peso in a relatively short time span[3]/. The impact of these external shocks was exacerbated by a complex local macroeconomic context, with high inflation and a high current-account deficit, coupled with a high degree of local uncertainty over the last few years.

[1]/ In addition, the Central Bank may also participate in the forex market in episodes when market conditions make the option of accumulating reserves attractive and opportune, which allow it to achieve the objective of safeguarding the stability of external payments and to be used in the aforementioned intervention episodes. Since 1999, the Bank has intervened in the forex market on seven occasions. Four of them were to assist the exchange rate adjustment process in exceptional situations with potential financial risks, while the remaining ones sought to accumulate reserves when market conditions were favorable.

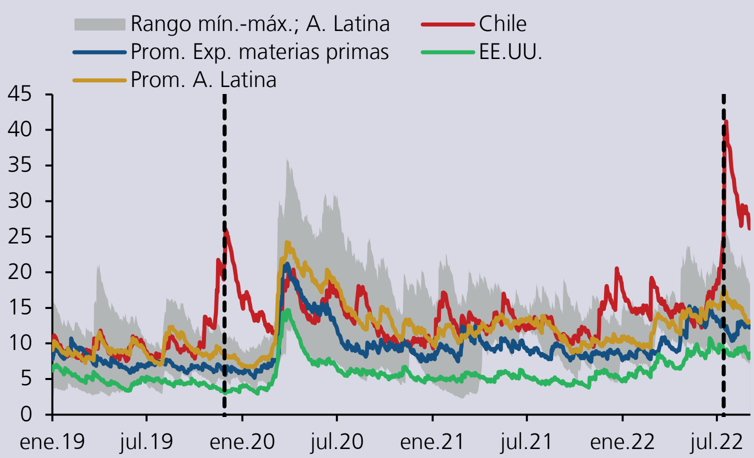
[2]/ Economic theory has identified various mechanisms by which central banks can affect the exchange rate without the need to modify their monetary policy, which are associated with the existence of different frictions in the functioning of the forex market. In particular, three main channels through which effects can exist have been identified: the portfolio channel, the signal channel, and the information/microstructure channel. For a more detailed discussion, see Acevedo *et al.* (2022).

[3]/ Other countries in the region also experienced significant currency depreciations in the same period, although their volatilities were significantly lower (figure I.21).

By mid-July, the depreciation process was accompanied by a sharp increase in exchange rate volatility at a time when agents were finding it difficult to determine the equilibrium price. The abrupt instability in the forex market did not occur in other countries in the region, suggesting that local market tensions were of idiosyncratic nature (figure I.21). This behavior, and the risks it posed to the performance of other markets, such as fixed income, motivated the decision to announce an intervention and liquidity provision program on 14 July. The purpose of this program was to facilitate the adjustment of the Chilean economy to a domestic and external environment with high levels of uncertainty. The program, which began on 18 July, will last until 30 September, and involves an amount of up to US$25 billion, of which up to US$10 billion will be sold in the spot market and up to US$10 billion in hedging instruments, plus a liquidity provision through a swap program for up to US$5 billion[4]/.

Exchange market volatility has decreased significantly since the intervention was announced (figure I.21). This observation is confirmed by formal empirical analysis in the work of Acevedo *et al.* (2022), who find a significant reduction (–6.3%) in the parity in the days immediately after the announcement —controlling for the usual exchange rate determinants—, as well as in volatility indicators with a somewhat longer lag. This suggests that, to date, the ongoing intervention has achieved its objective of assisting the proper functioning of the forex market, facilitating the economy's adjustment to the current external and internal conditions. This supports the notion that, under the right circumstances, exchange rate interventions can reduce the risks associated with highly stressful situations in the forex market and contribute to the proper functioning of markets and the economy. The future trajectory of the exchange rate, however, will depend on the evolution of its fundamentals and the way in which the current sources of uncertainty, in both the external and internal environment, are resolved.

FIGURE I.21 EXCHANGE RATE VOLATILITY (*)
(percent)



(*) Dashed vertical lines indicate intervention announcements published on 28.Nov.19 and 14.Jul.22. Latin America groups Brazil, Colombia, Mexico and Peru. Commodity exporters include Australia and New Zealand. Volatility measured with Riskmetrics methodology, which uses exponentially-weighted moving averages. For each day a weighted average is calculated between the variance of the continuously compounded return and the variance of the previous day, using the same methodology.
Source: Central Bank of Chile.

[4]/ Only the first of these measures (i.e., the spot market sale) compromises Central Bank reserves.

BOX I.3:

Post-pandemic recovery of labor force participation: a cross-country comparison

After the pandemic, the behavior of labor force participation has been heterogeneous across countries (figure I.22). This heterogeneity can be explained by, among other factors, differences in mobility restrictions, fear of contagion, economic recovery, and the type and amount of fiscal assistance provided during the first two years of the crisis. With the passage of time and the recovery of activity and employment in the vast majority of countries, it is possible to evaluate the role that these factors play in labor supply and demand, as well as their implications for the medium-term outlook of the labor market.

Labor participation plummeted at the onset of the pandemic in countries where stricter quarantines were implemented and/or where the pandemic resulted in a higher number of deaths. These factors reduced labor supply by discouraging people from leaving their homes, but also affected demand because of the inability or reluctance of firms to produce. After this initial drop, labor participation recovered in several economies, supported by the lifting of restrictions and the economic recovery that began in the second part of 2020. Through panel estimates and data for about 40 economies, Bertinatto et al. (2022) show that restrictions, fear of Covid-19 infection and the recovery in activity help explain some of the differences in labor participation behavior between 2020 and 2021. Restrictions to mobility had a more significant impact early in the pandemic and, above all, in economies with a higher percentage of informality, which could be explained by the fact that informal labor relations usually require more direct contact or that the impact of the pandemic in countries with greater informality was harsher, causing sharper declines and/or a slower recovery of labor participation.

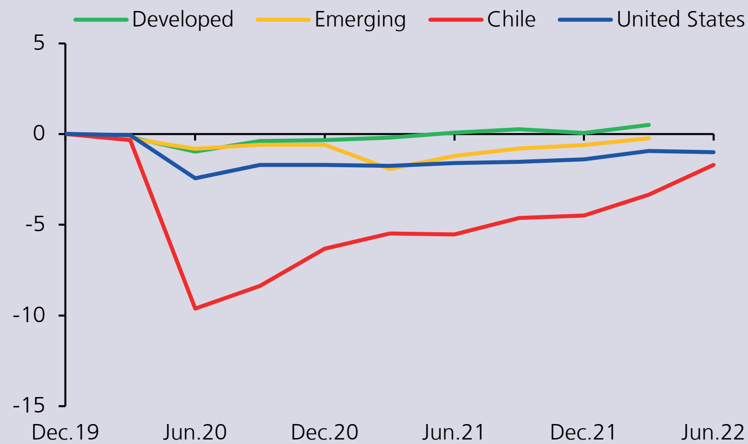
There are, however, other factors behind the differences among countries. In Chile and the U.S., the rapid recovery of activity was not accompanied by a synchronic recovery of the labor force (figure I.23). The econometric results presented in Bertinatto et al. (2022) suggest that the types and amounts of fiscal support explain part of the disparate behavior of labor participation across economies. Those countries that implemented job retention programs observed smaller declines in labor participation. Part of this effect is mechanical inasmuch as protected employment relationships remained categorized as employment, but it may also reflect the positive effect of maintaining employment relationships and avoiding a costly search process that can be a disincentive for many displaced workers.

In turn, those countries where fiscal aid was most generous, while they succeeded in protecting the most vulnerable households, delayed the recovery of their labor force, which could be the consequence of fiscal aid programs that discouraged people from reentering the labor market and look for a job. This negative association between aid and labor participation recovery is more significant in those countries where the fiscal aid was not provided via employment protection plans and those that approved pension fund withdrawals, which increased household liquidity abundantly. These results are in line with recent papers studying the impact of the extension of unemployment insurance in the U.S., although mixed findings are not uncommon in the literature [1/].

The almost full recovery of labor participation in most economies suggests that the impacts on the behavior of the cycle and trend growth would be limited in most countries. However, in some economies such as the U.S., where the early retirement of people close to retirement seems to have been significant, labor supply could remain contained in the short term, increasing the imbalances between labor demand and supply and complicating inflationary convergence.

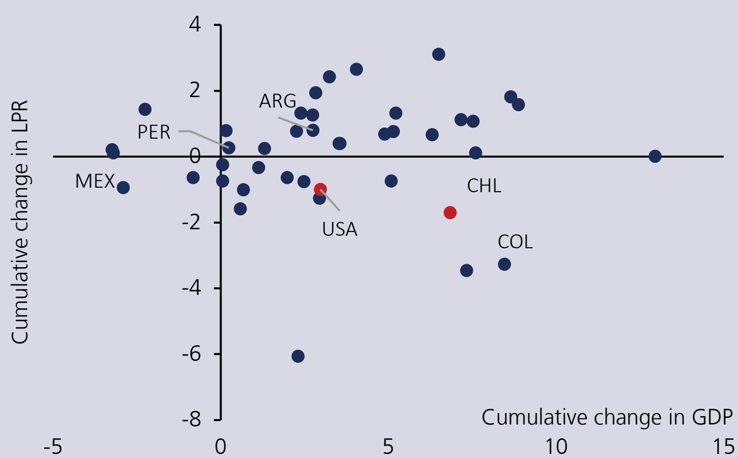
[1/] Arbogast & Dupor (2022), Coombs *et al.* (2021), Ganong *et al.* (2022), Holzer *et al.* (2021), Michaud (2022).

FIGURE I.22 LABOR PARTICIPATION ACROSS ECONOMIES (*)
(cumulative change since 2019Q1; percent)



(*) Developed stands for the median among: Australia, Austria, Belgium, Canada, Cyprus, Denmark, Estonia; Finland, France, Germany, Iceland, Ireland, Italy, Japan, Luxembourg, Malta, Netherlands, New Zealand, Norway, Portugal, Slovakia, Slovenia, Spain, Sweden, Switzerland, United Kingdom and United States. Emerging denotes the median among: Chile, Colombia, Croatia, Czech Republic, Greece, Hungary, Israel, Latvia, Lithuania, Poland, Romania and South Africa.
Sources: World Trade Organization (WTO) and National Statistics Institute (INE).

FIGURE I.23 CHANGE IN LABOR PARTICIPATION RATE AND ECONOMIC GROWTH (*)
(cumulative change since 2019Q4, seasonally-adjusted; percent)



(*) Data updated to 2021Q4 for Argentina. Data updated to 2022Q1 for Austria, Belgium, Colombia, Croatia, Cyprus, Denmark, Estonia, Finland, France, Germany, Greece, Hungary, Iceland, Ireland, Italy, Latvia, Lithuania, Luxembourg, Malta, Mexico, Netherlands, Norway, Peru, Poland, Portugal, Romania, Slovakia, Slovenia, South Africa, Spain, Sweden, Switzerland, and United Kingdom. Data updated to 2022Q2 for Australia, Canada, Chile, Israel, Japan, New Zealand, and United States.
Sources: Bloomberg and World Trade Organization (WTO).

BOX I.4:

The behavior of prices in a high-inflation environment

The frequency and magnitude with which firms pass on cost and demand pressures to their prices are key to inflation dynamics and monetary policy design. If scenarios of high inflation or significant increases in inflation expectations generate changes in price- and wage-setting behavior, this can lead to significant changes in the patterns and lags whereby changes in demand or costs affect inflation. Moreover, if both firms and households persistently modify these decision ranges, inflationary inertia would increase, making it difficult to converge to the 3% target over the two-year policy horizon[1]/.

Despite the importance of monitoring at the firm and household level both inflation expectations and price- and wage-setting behavior, the scarcity of disaggregated data in the vast majority of countries prevents such analysis with the degree of granularity necessary to verify these behavioral patterns. Fortunately, microdata from digital invoicing and unemployment insurance allow us to perform such analysis for Chile.

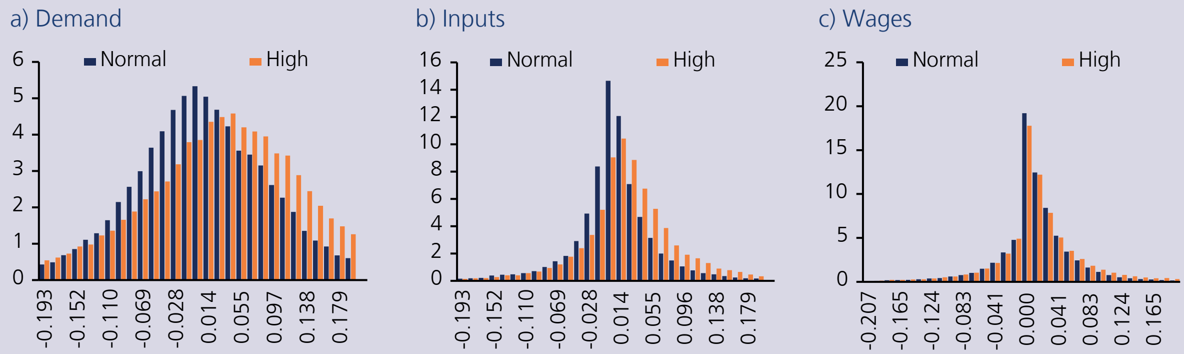
In the period spanning from the third quarter of 2019 to the last quarter of 2021, there was an increase in demand and input costs significantly bigger than that verified between the beginning of 2018 and mid-2019. In wages, the difference is less evident (figure I.24). In this context, an increase in the frequency and magnitude of price changes by firms is observed (figure I.25). Albagli *et al.* (2022) estimate the implications of this increased demand and cost pressures on firms' pricing. The results show that in the most recent period —defined as high inflation— the pass-through of input price increases is substantially higher than in a period of "normal" inflation. For demand and wages, the difference is also significant, but somewhat smaller in magnitude (figure I.26). These results are consistent with the evidence from the Central Bank's Survey of Price Determinants and Expectations (EDEP), where respondents say that both their selling prices and input costs are rising[2]/.

In the context of the current high inflation, the greater pass-through of costs to selling prices poses important challenges. Additional nominal shocks, coupled with higher pass-throughs, may lead inflation to react more vigorously than in normal times, which should be factored into the Central Bank's inflation forecasting process. Indeed, such projections have considered a higher degree of exchange rate pass-through since the beginning of 2022, which has contributed, for example, to have small projection errors of the core component of goods inflation. On the other hand, the very fact that the pricing strategy has been modified in response to changes in the macroeconomic environment and higher inflation expectations could introduce more persistence in inflation dynamics and hinder convergence to the target. The rise in corporate inflation expectations confirms the relevance of this factor. This concern has largely guided projections and risk analysis.

[1]/ Mackowiak and Wiederholt (2009) show that the transmission of aggregate shocks depends on the degree of attention that firms pay to them. In a context of volatile nominal shocks, prices respond more strongly and with greater speed to these shocks. Alvarez *et al.* (2011) show that the frequency of firms' price changes increases in the presence of larger nominal shocks. Thus, an environment with more volatile and more persistent nominal shocks would lead to greater price changes and higher inflation than in times of low nominal volatility.

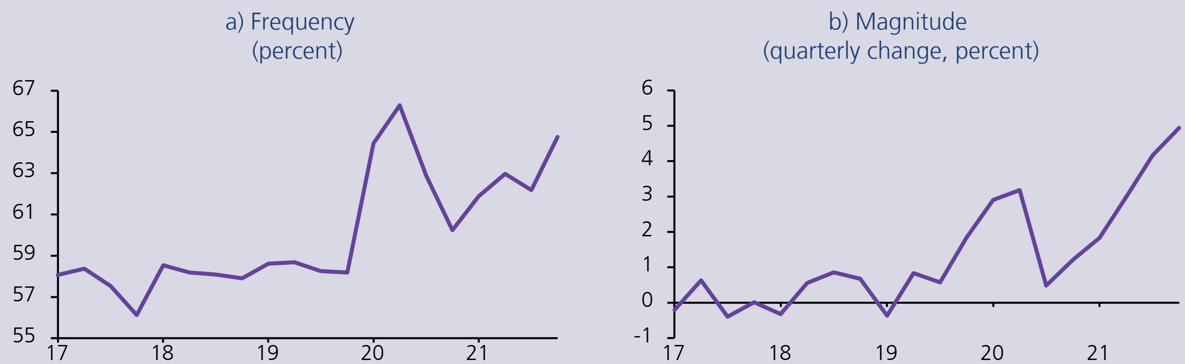
[2]/ Similar results are found in other countries. Amiti *et al.* (2022), report that in the U.S. the pass-through from wages and inputs to prices was higher in 2021 than in previous years. Nakamura and Zerom (2010), find that in years of low inflation the pass-through coefficients are similar to those presented in figure I.26. Taylor (2000) points out that the higher degree of pass-through could be attributed to higher inflation and persistence of negative supply shocks. Burstein and Gopinath (2014) and Amiti *et al.* (2019) suggest that firms' pass through cost increases partially in order not to move away from their competitors' prices.

FIGURE I.24 NOMINAL SHOCKS HISTOGRAMS (*)
(density)



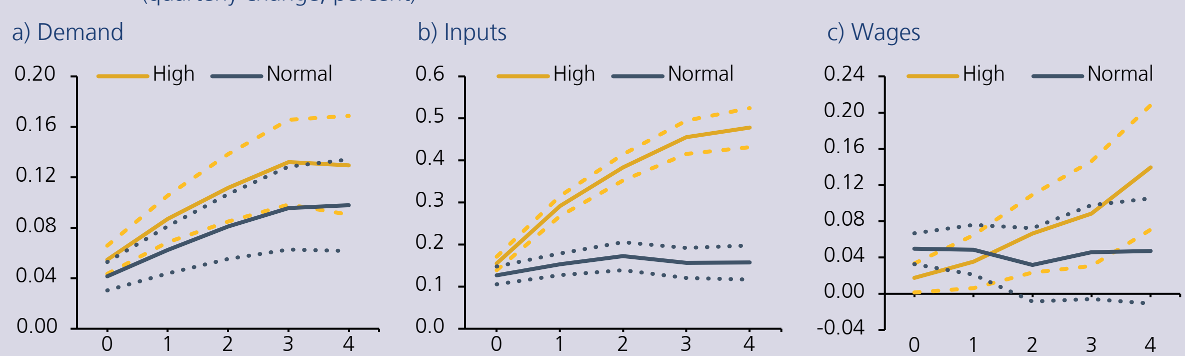
(*) Histograms of a quarterly variation index of demand, input prices and wages at the firm level. Blue bars indicate the period 2018Q1-2019Q3 and orange bars indicate the period 2019Q4-2021Q4.
Source: Albagli *et al.* (2022).

FIGURE I.25 RECENT EVOLUTION OF FREQUENCY AND MAGNITUDE OF PRICE VARIATIONS (*)



(*) Average time series across firms: a) share of products that the firm reprices, and b) average percent change in repriced products in a firm. Both measures are constructed in quarterly frequency.
Source: Albagli *et al.* (2022).

FIGURE I.26 PASS-THROUGH OF NOMINAL CHANGES (*)
(quarterly change, percent)



(*) Pass-through of a 1% change to demand, input prices and wages in high-inflation times, 2019Q4-2021Q4, and normal times, 2018Q1-2019Q3, contemporaneously (0) and four quarters accumulation. Dotted lines indicate 5%-95% confidence ranges.
Source: Albagli *et al.* (2022).

II. FUTURE EVOLUTION OF MONETARY POLICY

Local inflation has continued to rise, in its headline and core (non-volatile) measures, surpassing what was estimated in the June MP Report. A significant part of the surprise accumulated in recent months is linked to volatile prices. Our inflation forecast for 2023 is, on average, around 1 percentage point (pp) higher than expected in June, a correction that combines a more depreciated peso in real terms and the effect of higher inflation expectations of households and businesses on its persistence. In the central scenario, considering monetary policy actions and the solution of the imbalances that accumulated in the economy in 2021, inflation will return to 3% during 2024, i.e., within the two-year monetary policy horizon. This includes that the economy will see a negative activity gap for several quarters, a scenario in which GDP will vary between 1.75% and 2.25% this year, between -1.5% and -0.5% next year, and between 2.25% and 3.25% in 2024. After the decision of the September Meeting, the Monetary Policy Rate (MPR) is around the maximum level considered in the central scenario of this Report. Future movements of the policy rate will depend on the evolution of the macroeconomic scenario and its implications for the convergence of inflation to the target. The Board will be especially vigilant of the upward risks for inflation, not only because of the high level it has reached but because inflation expectations two years ahead remain above 3%.

MONETARY POLICY STRATEGY

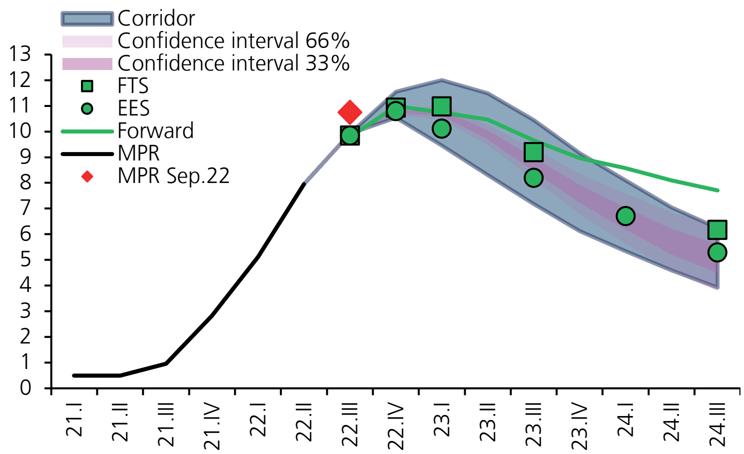
Inflation continued to rise in recent months, exceeding the projections in the last Report. Although the differences are concentrated in the volatile items, the core component maintains generalized increases (Chapter I). Both components posted annual variations of 18.8% and 10% as of July, respectively, values not seen in several decades (total CPI of 13.1%) (figure I.6).

The exchange rate increase is a major factor behind the higher inflation outlook in the central scenario. This scenario assumes that the real exchange rate (RER) will remain above the June estimate over the entire projection horizon. The depreciation of the local currency occurs in a context of tightening external financial conditions, with a strengthening of the dollar at a global level, although idiosyncratic elements continue to influence its behavior (figure I.5a). The projections of this Report consider the information publicly available until Thursday September 1. However, an exception is made this time for the exchange rate. Considering the movement it had in the last couple of weeks, the inflation projections use as a starting point a nominal exchange rate of $890 per dollar, which is close to the dollar average observed in the week prior to the release of this Report.

Upward risks to inflation are relevant, highlighting that two-year-term inflation expectations remain above 3%. A year ahead, those in expert surveys and inflation insurance rose to values hovering between 7% and 8%. Business outlooks contained in the IMCE and the Survey of Price Determinants and Expectations (EDEP) exceed said range. At two years, all measurements remain above 3% (figure I.16). This evidence is complemented by that of price adjustments at the firm level, which indicate an important behavioral change (Box I.4).

After the decision of the September Meeting, the MPR is around the maximum level considered in the central scenario of this Report (figure II.1). Future movements of the policy rate will depend on the evolution of the macroeconomic scenario and its implications for the convergence of inflation to the target. The Board will be especially vigilant of the upward risks for inflation, not only because of the high level it has reached but because inflation expectations two years ahead remain above 3%.

FIGURE II.1 MPR 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 smoothed forward curve of quarter to 31 August. 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

Activity has continued to decline from the high levels of 2021, with the pace of adjustment becoming more pronounced in recent months as household consumption slowed down more sharply. After virtually null variation in the first quarter, non-mining GDP posted a quarterly decline of 0.5% in the second quarter (seasonally-adjusted series). The fall in trade has had an impact on this trend, although it persists well above pre-pandemic levels. This occurs in a context in which the reduction in the consumption of goods —especially durables— stands out, which also coincides with significant build-up of inventories. Partial third-quarter figures, such as digital invoiced sales or the sectoral Imacec, reflect that private consumption continues to moderate strongly, while the services component remains more resilient (figure I.10).

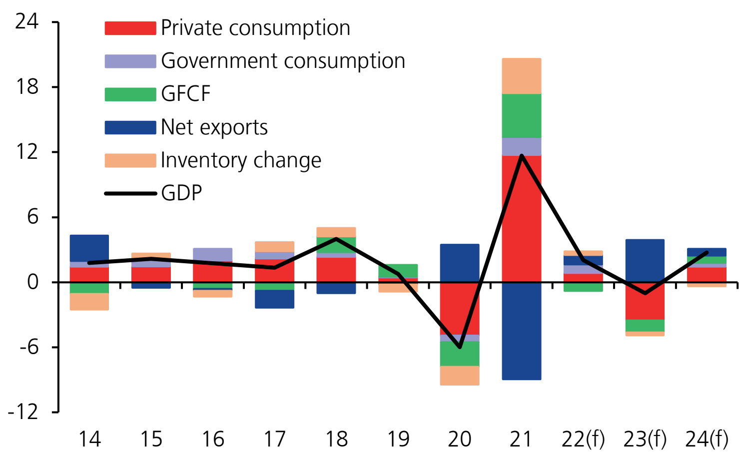
In the central scenario, the economy will grow between 1.75% and 2.25% this year (11.7% in 2021) (table II.1). Private consumption will close 2022 with an expansion of 1.4%, after reaching record growth of over 20% last year. This is mostly due to the drop in the durable goods segment, which led growth in 2021, supported by exceptional stimulus measures. Investment will contract by 3.3%, with declines in machinery and equipment as well as in construction and works (figure II.2).

TABLE II.1 ECONOMIC GROWTH AND CURRENT ACCOUNT

	2021	2022 (f)	2023 (f)	2024 (f)
	(annual change, percent)			
GDP	11.7	1.75-2.25	-1.5 / -0.5	2.25-3.25
National income	15.9	2.1	-1.5	2.8
Domestic demand	21.6	1.2	-4.7	2.2
Domestic demand (w/o inventory change)	18.0	0.9	-4.6	2.6
Gross fixed capital form	17.6	-3.3	-4.7	2.9
Total consumption	18.2	2.2	-4.6	2.4
Private consumption	20.3	1.4	-5.7	2.5
Goods and services exports	-1.5	1.3	5.5	3.0
Goods and services imports	31.3	-1.4	-5.5	1.2
Current account (% of GDP)	-6.6	-6.3	-3.6	-3.3
Gross national saving (% of GDP)	18.8	18.9	20.0	19.9
Gross national investment (% of GDP)	25.3	25.2	23.6	23.3
GFCF (% of nominal GDP)	24.0	23.5	22.2	22.2
GFCF (% of real GDP)	24.3	23.0	22.1	22.2
	(US$ million)			
Current account	-20,307	-19,600	-11,500	-11,400
Trade balance	10,528	7,200	12,100	13,000
Exports	94,677	98,800	99,200	103,000
Imports	84,148	91,600	87,100	90,000
Services	-11,979	-13,500	-10,200	-10,200
Rent	-18,423	-15,000	-14,300	-15,200
Current transfers	-433	1,700	900	1,000

(f) Forecast.
Source: Central Bank of Chile.

FIGURE II.2 GDP GROWTH AND AGGREGATE DEMAND COMPONENTS CONTRIBUTIONS (*)
(annual change, percentage points)



(*) For 2022-2024, it considers the midpoint of the GDP growth ranges projected in the central scenario of this Report.
(f) Forecast.
Source: Central Bank of Chile.

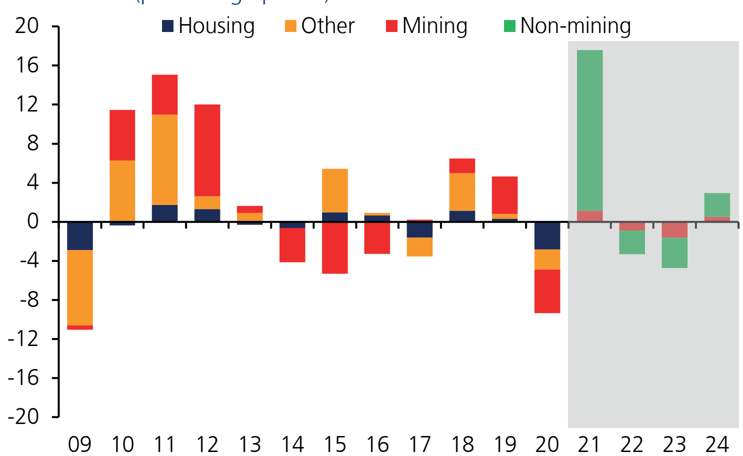
An economic contraction is still being projected for 2023 (-1.5%/-0.5%; -1.0%/0.0% in June), to later approach its expansion rates that are consistent with trend GDP growth (table II.1 and figure II.2). This result is based on a reduction in private consumption and investment of 5.7% and 4.7%, respectively (-4.1% and -2.2% in June). As a counterpart, net exports will contribute substantially from this year onwards, mainly due to a decline in imports, reflecting the ongoing adjustment of domestic spending. For 2024, we continue to anticipate an expansion of GDP between 2.25% and 3.25%.

The recent dynamics of private consumption are in line with the evolution of its fundamentals, suggesting that it will continue to weaken in the near future. On the one hand, according to the IPEC, consumers have become more pessimistic, with expectations indicators near record lows. On the other hand, worth noting is the end of the large-scale support measures implemented last year and the negative effect of rising inflation on household income, with real wages on a declining path (figure I.13). An important group of companies in the Business Perceptions Report (BPR) reported zero or less-than-inflation wage adjustments, and less frequent than they used to. Furthermore, household financing conditions have worsened, including higher interest rates, which in turn have been a catalyst for the increase in time deposits and fundraising, as shown by the balances of these accounts.

The labor market has shown signs of slowing down, as job creation has remained stagnant most recently and hiring expectations have deteriorated. Labor demand has been weakening, as proven by the lower expected staffing levels of firms (BPR) or the more pronounced decline in Internet job postings (figure I.12). Labor participation has been recovering from the shocks endured during the course of the pandemic, which has partially remedied the difficulties in the search for personnel reported by businesses in previous quarters. However, labor force participation remains below pre-pandemic levels, and its recovery has been losing momentum in recent quarters (Box I.2).

The outlook for gross fixed capital formation (GFCF) remains particularly pessimistic, beyond the contraction expected for this year due to specific factors (figure II.3). The entry of some new initiatives of engineering works and the reactivation of some existing ones played a part in the positive surprise of the construction & works component in the second quarter and are the main element behind the upward revision of GFCF for the rest of this year. All in all, it continues to adjust downwards in most components, as do their prospects. The latest survey of the Capital Goods Corporation reduced the investment forecast mainly in public works, mining, and energy projects. Indicators such as the sales of homes and building materials, and the monthly index of the sector's activity (Imacon) confirm this weakness.

FIGURE II.3 REAL ANNUAL CONTRIBUTION TO GFCF (*)
(percentage points)



(*) The Other GFCF component is treated as a residue. Until 2020 effective data is used and for 2021 is an estimate. For 2022-2024, forecasting models from the Central Bank and sectoral sources are used, such as investment plans and the CBC Survey.
Source: Central Bank of Chile.

The steeper fall in business expectations as well as tighter local and external financial conditions, amid high uncertainty (Chapter I), reinforce this view of a sharper deterioration of investment in the next two years. The IMCE has seen new declines, where the pessimism in construction stands out (figure I.15). As noted in the second-quarter Bank Credit Survey, credit access requirements became even more stringent for large companies and SMEs, with the less favorable perception of the economic environment and higher portfolio risk being some of the causes of the greater restrictions. For BPR firms, the latter is mainly due to higher interest rates. The rates of longer-term loans, including mortgages, continue to reflect the impact of the shocks to which the capital market has been subject in recent years. The BPR reports that the proportion of businesses that need a loan but have been unable to apply for one has risen, with an increase in those that cite a heavy financial burden as the reason. The most persistent increase in the RER will especially affect the machinery and equipment component, due to the increase in the cost of capital goods, whose imports have recently fallen sharply.

Market projections for activity and demand exceed those of the central scenario, especially for 2023. The differences are especially noticeable in the case of private consumption. Both the Economic Expectations Survey (EES) and Consensus Forecasts anticipate that it will fall by 1.5% that year. For GDP and investment, both sources forecast declines of around 0.5% and 2.5%, respectively. In cumulative terms, the estimates for private consumption and investment in this Report are about 5 and 2.5% lower at the end of 2023 than those taken from the EES median (table II.2).

TABLE II.2 PRIVATE CONSUMPTION AND GFCF FORECASTS (*)
(annual change, percent)

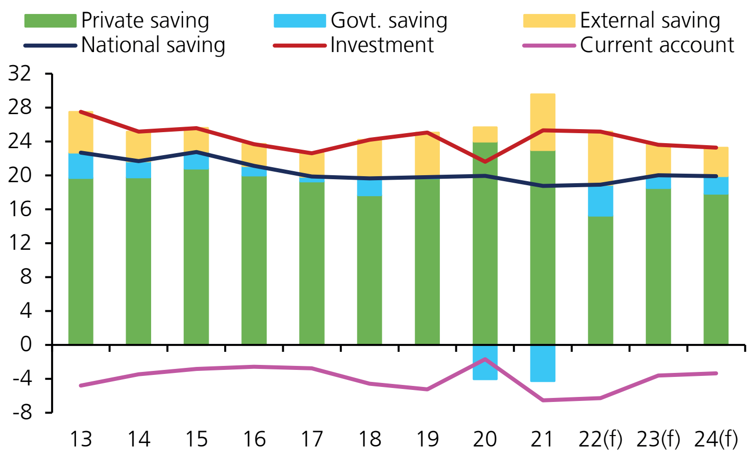
	Private consumption				GFCF			
	Sep.22 Report	EES	CF	Difference Sep.22 Rep.-EES	Sep.22 Report	EES	CF	Difference Sep.22 Rep.-EES
2022	1.4	2.0	3.2	-0.6	-3.3	-3.2	-2.6	-0.1
2023	-5.7	-1.5	-1.5	-4.2	-4.7	-2.5	-2.6	-2.2
2024	2.5				2.9			
Accum. 2022-2023	-4.3	0.5	1.7	-4.8	-8.0	-5.7	-5.2	-2.3

(*) The EES and CF correspond to the August measures and consider the median and mean of the responses, respectively.
Sources: Central Bank of Chile and Consensus Forecasts.

The fiscal scenario foreseen for the period 2022-2024 is consistent with the Public Finances Report (IFP) for the second quarter, which assumes higher fiscal expenditure than estimated in the June MP Report, although it will remain in substantially lower levels than its 2021 peak. The latest IFP anticipates a decrease of 24.1% this year in real terms, which represents 0.8pp of GDP higher than that reported in the previous IFP. This correction includes, among other things, the adoption of measures to further mitigate the impacts of the sanitary crisis. The actual fiscal deficit is estimated at 0.1% of GDP in 2022, its lowest since 2012. In 2023 and 2024, fiscal expenditure is assumed to show a level consistent with the path projected for the balance cyclically adjusted in the latest IFP. According to the authority, all this is part of the process of normalization of public finances to safeguard their medium-term sustainability.

The central scenario incorporates a reduction of the current-account deficit in the projection horizon, in line with the prospects of a more intense fall of local expenditure in its tradable part. This will allow rebuilding national savings and will contribute to adjusting the imbalances incubated in recent years. Significant government spending resulting from the support measures and the decline in private savings due to pension fund withdrawals resulted in a substantial drop in national savings, which amounted to 18.8% of GDP in 2021, well below historical averages. The end of fiscal support of the scale observed last year will lead to an increase in government savings of roughly 8pp of GDP in 2022. Private savings will increase by about 3pp of GDP next year, mainly due to a reduction in demand for tradables. This is in line with the expected decline in imports, which will have an impact on the expected improvement in the trade balance of goods and services from 2023 onwards. The services balance will be favored by the fall in global transportation costs, which also had an important influence on the bigger current-account deficit since last year. Thus, after peaking in the second quarter (8.5% of GDP accumulated in twelve months), the negative balance of the current account is projected to decline rapidly from the current half year onwards, to values of 6.3, 3.6, and 3.3% of GDP in 2022, 2023 and 2024, respectively (6.6, 4.5 and 4.0% in June). Measured at trend prices[1]/, this will reach 5.8% in 2022, 2.7% in 2023 and 2.7% in 2024 (6.7, 4.1 and 3.4% in June, respectively) (figure II.4).

FIGURE II.4 CURRENT ACCOUNT: SAVINGS AND INVESTMENT (*)
(percentage of annual GDP)



(*) The government saving component considers the general government balance as effective data until 2021; for 2022 to 2024, government saving from the central government balance are used as a projection. (f) Forecast. Source: Central Bank of Chile.

The impulse that the Chilean economy will receive from abroad is revised downwards once again. The main changes come from the more contractionary tone that monetary policy has consolidated at a global level, given the high inflation and its greater persistence, especially in the U.S. This will maintain tighter international financial conditions. In line with the change in the Federal Reserve (Fed)'s message, external markets have continued to factor in expectations of further monetary policy tightening in the U.S. and in other countries (Box I.1). More contractionary monetary policy is one of the main elements behind the more negative outlook for global economic performance. Since the June Report, the strengthening of the dollar against all other currencies, which posted its strongest appreciation in two decades, has been the main highlight in our Report. Long-term interest rates remain above those of the beginning of this year and spreads have widened further in the emerging world (figure I.5). The context where this is taking place is marked by sharp financial swings, mostly reflecting the markets' high sensitivity to the evolution of the data or the statements of the authority.

[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 Box V.2 in MP Report of September 2012, and Box V.3 in MP Report of June 2021).

The impact of more contractionary monetary conduct on global activity, together with a revaluation of the impacts of the war in Ukraine and the weak economic situation in China, reduces the growth forecast for our trading partners in 2022 and 2023: 2.6% on average (2.8% in June) (table II.3). In the U.S., the deterioration of credit conditions as a result of the Fed's adjustments and communication will continue to affect investment, which fell significantly in the second quarter. Also, the decline in household confidence is expected to have a negative impact on consumption, which has been more resilient given the strength of the labor market. Similar fundamentals apply in the downgraded outlook for the rest of the developed world, which in the case of the Eurozone —beyond the positive surprise in second-quarter GDP— also incorporates the direct impacts of the Russian invasion of Ukraine. In China, the fragility of the real-estate market and the scope of the zero-Covid policies confirm a weaker outlook going forward, with indicators of unemployment, expectations, and credit performance having fallen in recent months. In Latin America, despite better-than-expected figures for the first half of the year, pessimism remains, amid worsened financial conditions for emerging economies, lower external demand, and political tensions, among other things.

TABLE II.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	2.5	2.4	3.2
World GDP at market exchange rate	3.1	-3.3	6.0	2.4	2.0	2.7
Trading partners	3.9	-2.0	6.4	2.6	2.6	3.1
United States	2.3	-3.4	5.7	1.7	0.3	2.1
Eurozone	1.4	-6.5	5.3	2.7	0.7	1.4
Japan	1.2	-4.6	1.7	1.4	0.9	1.0
China	7.7	2.2	8.1	3.2	5.1	4.9
India	7.1	-6.6	8.7	7.0	5.9	7.0
Rest de Asia	4.7	-2.3	4.2	4.0	3.5	3.8
Latin America (excl. Chile)	1.8	-7.5	6.2	2.3	1.0	1.7
Commodity exp.	2.2	-4.1	4.9	3.3	1.9	1.9

(*) For definitions, 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.

The outlook for commodity prices is lowered, reflecting the effects of the anticipated further weakening of the global economy and a more appreciated dollar. Food prices, with the exception of meat, are the most downwardly revised. They accumulated a decline of more than 12% between May and August (FAO index) and their correction extends over the entire projection horizon. The higher expected supply, which includes the resumption of grain shipments from Ukraine, and the fall in the prices of fertilizers are behind this projection.

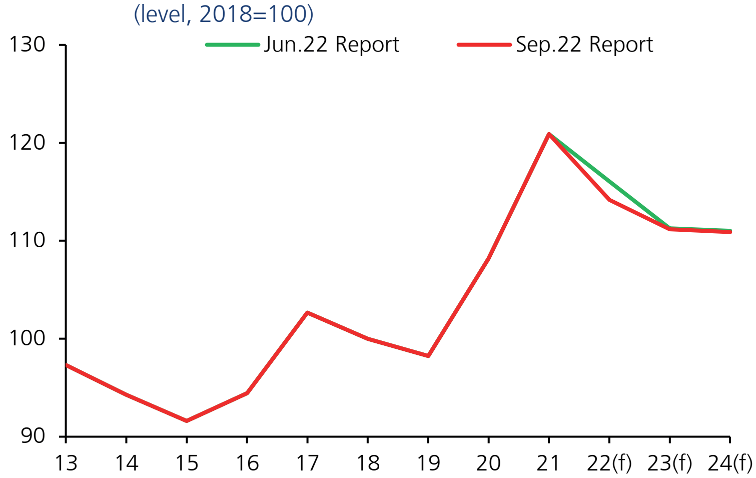
Copper and oil are revised downward despite the continued constraints in their respective markets. These adjustments combined result in a deterioration of the terms of trade (table II.4 and figure II.5). Copper and oil prices have declined between 15 and 20% since the June Report, in a context where inventory levels continue to be around record lows in both cases and where supply disruptions are still occurring (figure I.4). The revisions are mainly concentrated in the short term, with terminal values at the end of the two-year horizon not very different from those assumed in June. The copper price is expected to average US$3.6 per pound in the three-year period 2022-2024 (US$3.8 in June) and the oil price (WTI-Brent average) to average US$90 per barrel (US$93 in June).

TABLE II.4 INTERNATIONAL BASELINE SCENARIO ASSUMPTIONS

	Avег. 10-19	2020	2021	2022 (f)	2023 (f)	2024 (f)
			(annual change, percent)			
Terms of trade	1.0	10.1	11.8	-5.6	-2.6	-0.3
External prices (in US$)	0.6	-1.1	9.3	4.9	2.8	3.5
			(levels)			
LME copper price (US$cent/pound)	306	280	423	400	350	340
WTI oil price (US$/barrel)	72	39	68	98	86	79
Brent oil price (US$/barrel)	80	42	70	103	91	84
Gasoline parity price (US$/m3) (*)	610	333	579	852	683	629
Federal Funds Rate (%)	0.7	0.5	0.3	1.8	4.2	3.8

(*) For definition, see Economic Glossary.
(f) Forecast.
Source: Central Bank of Chile.

FIGURE II.5 TERMS OF TRADE
(level, 2018=100)



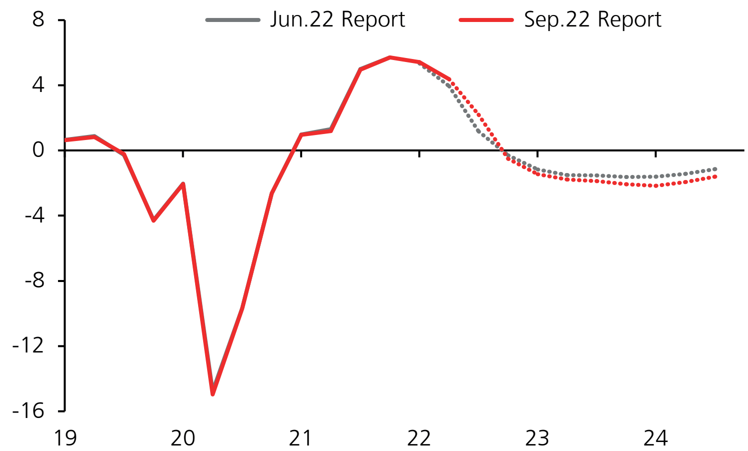
(f) Forecast.
Source: Central Bank of Chile.

ACTIVITY GAP AND INFLATION'S CONVERGENCE TO THE TARGET

In the central scenario, the activity gap will continue to narrow, reaching more negative values in the medium term than those estimated in the last Report. In the immediate term, the gap will be somewhat wider than the gap forecast at that time, which will be affected by positive surprises in some non-mining GDP sectors, mainly services. By the end of this year, the gap will turn negative and, from then on, will remain below the trajectory outlined in June, given the economy's more intense contraction expected (figure II.6). These projections are consistent with the return of activity to the growth trajectory it exhibited prior to the Covid-19 crisis, and assume potential GDP[2]/ growth of around 3% on average in 2022-2024. At the same time, it does not consider any change in the structural parameters, which will be revaluated for the December Report.

[2]/ The concept of potential GDP refers to the level of GDP consistent with stable inflation and is therefore appropriate for measuring the activity gap associated with short-term inflationary pressures.

FIGURE II.6 ACTIVITY GAP (1) (2)
(level, percentage points)



(1) Dotted lines show forecast. (2) Forecast assumes structural paramenters updated in June 2021 Report (trend GDP) with methodological review of potential GDP.
Source: Central Bank of Chile.

The inflation outlook is again revised upward. Higher inflationary persistence going forward is a determining factor in the revision, given its influence through second-round effects and indexation. The increase in published figures will continue to have an impact through the adjustment of the prices of goods and services, in a context in which the various agents' inflation expectations have continued to rise (figure I.16). This has also led to more frequent price changes by firms in response to the increases in demand and costs in the last two years (Box I.4). At the same time, according to different measures, businesses continue to point to their squeezed margins, after their compression of the past year (box I.3, June 2022 MP Report).

Another element behind this adjustment is the further depreciation of the exchange rate. This depreciation is one of the factors behind the inflationary surprise after the last Report. The higher RER levels in the projection horizon, with respect to the June estimates, will keep the costs of imported goods and inputs higher. The latter is already a concern for a considerable fraction of businesses, according to BPR interviews.

The impact of the increase in the price of the dollar is partially offset by lower actual and expected trajectories of the world prices of some foods and fuels. In general, commodity prices have declined, although they are still above their averages of recent years (figure I.4). In the case of fuels, there is also the lags in the operation of these price stabilization mechanism (Mepco), which means that fuel price declines will be somewhat slower than those of oil prices. Other factors linked to external cost pressures, such as bottlenecks and shipment rates, have also tended to ease in recent months, although they are far from being completely normalized (figure I.9).

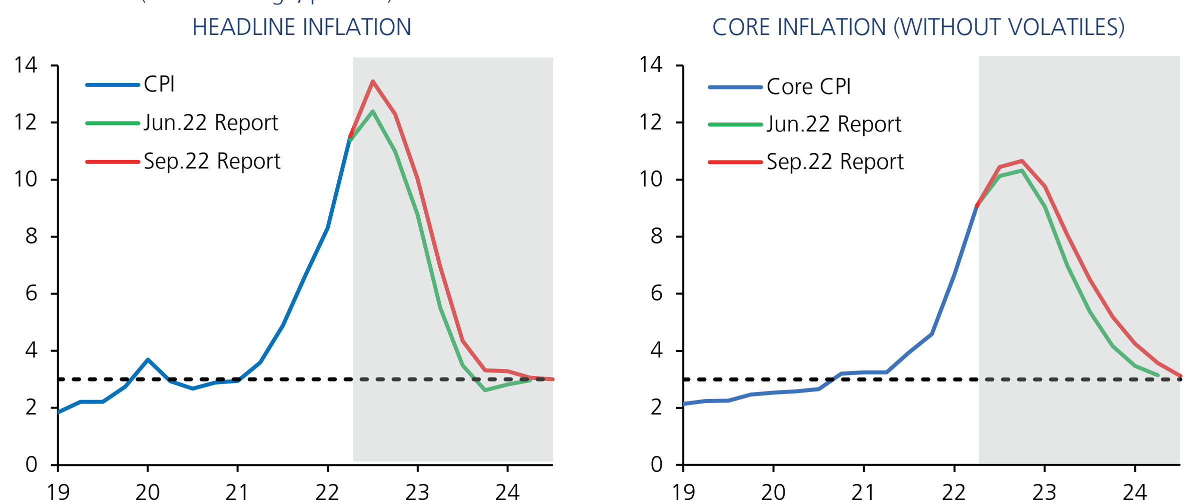
The central scenario of this Report again forecasts that the annual CPI change will peak during the third quarter of this year. It will then decline, closing 2022 at 12% (9.9% in the June Report) and converging to the target within the two-year horizon (table II.5 and figure II.7). The pace of price increases is expected to decelerate as the slowdown in the local economy consolidates and the significant imbalances that accumulated in 2021 are corrected. The decline in inflation will also allow the impacts associated with its greater persistence in second-round effects and indexation to subside. Thus, the return of local elements, which are the ones that most influenced the increase in inflation since 2021, will again explain the bulk of the decline from its peak up until the end of the projection horizon (figure II.8). The RER reduction —despite the fact that its trajectory exceeds what was anticipated in June and the average of the last 15-20 years— as well as the reduction of commodity prices will also help to reduce inflation.

TABLE II.5 INFLATION (1)
(annual change, percent)

	2021	2022 (f)	2023 (f)	2024 (f)
Average CPI	4.5	11.4	6.1	3.1
December CPI	7.2	12.0	3.3	3.0
CPI in around 2 years (2)				3.0
Average core CPI	3.8	9.2	7.3	3.5
December core CPI	5.2	10.5	4.7	3.0
Core CPI around 2 years (2)				3.1

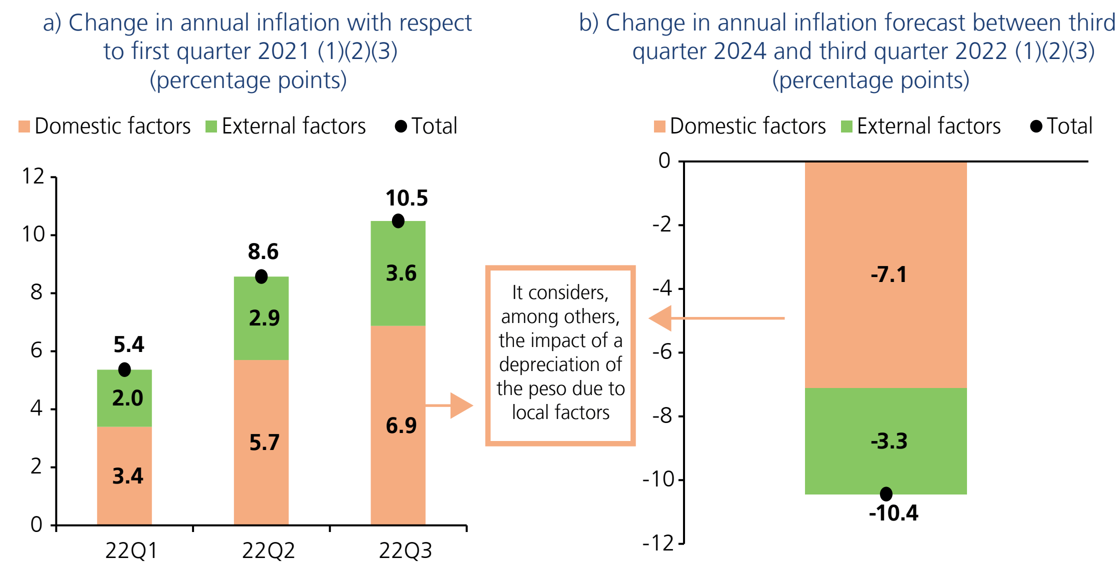
(1) Core inflation is measured using the CPI without volatiles.
(2) Inflation forecast for the third quarter of 2024.
(f) Forecast.
Sources: Central Bank of Chile and National Statistics Institute (INE).

FIGURE II. 7 INFLATION FORECAST (*)
(annual change, percent)



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

FIGURE II.8 STRUCTURAL DECOMPOSITION OF THE CPI



(1) Domestic factors: demand, cost pressures in goods and services, and inflationary persistence explained by second-round and indexation effects. Includes effect associated with idiosyncratic exchange rate depreciation. External factors: effect of higher oil price, imported food and other commodities, external inflation and less favorable external financial conditions. (2) Factor decomposition is based on the structural projection models of the Central Bank of Chile (XMAS-MSEP). (3) Data for the third quarter of 2022 and the third quarter of 2024 are forecasts. Sources: Central Bank of Chile and National Statistics Institute (INE).

Core inflation will end the year at 10.5% annually (9.7% in the June Report). Again, its decline is expected to occur at a slower pace than that of the total measure. This is consistent with the signs of greater persistence that inflation has been exhibiting. Core CPI will approach up to 3% by mid-2024.

SENSITIVITY AND RISK SCENARIO

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

The upper part of the corridor is defined by sensitivity scenarios where higher inflation persistence globally leads to a more aggressive monetary policy response, particularly in the United States. This would lead to a bigger rate hike by the Federal Reserve which, as has occurred in past cycles, would cause a drop in commodity prices, a decline in global activity and a deterioration of international financial conditions, including a widespread depreciation of emerging currencies against the U.S. dollar, including the Chilean peso. This would increase inflationary pressures for the Chilean economy, especially in the short term, requiring a greater increase in the MPR than assumed in the central scenario.

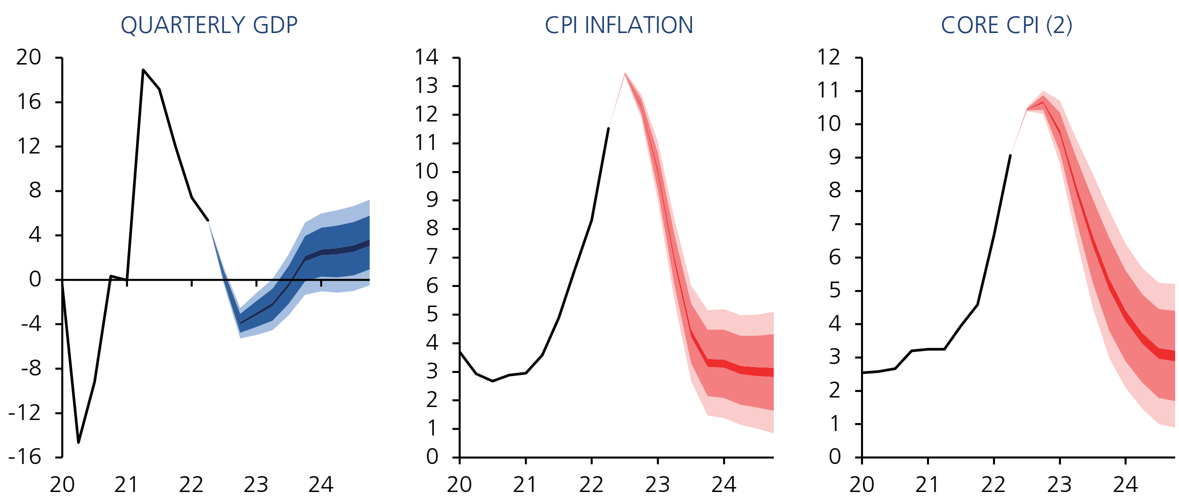
The lower part of the corridor shows inflationary pressures easing faster, requiring a less contractionary monetary policy adjustment than in the central scenario. This could occur if local activity and demand contract more strongly than anticipated, given the impact on consumption and investment of a weaker the labor market, lower household and business confidence, and tighter financial conditions.

There are other scenarios that would place the MPR trajectory within the boundaries of the corridor. It is possible that global cost pressures will be alleviated sooner, contributing to a decrease in local inflation. The smaller monetary adjustment that this would require in the various economies, including Chile, would favor world growth and the development of international markets. In the opposite direction, a greater persistence of local inflation cannot be ruled out if there is a smaller adjustment in spending, in a context in which inflation expectations have been escalating at different horizons. This would require increases in the MPR that would exceed those in the central scenario.

In addition to the sensitivity exercises, scenarios are analyzed in which changes in the economy would be more significant and where the monetary policy reaction would exceed the limits of the MPR corridor (figure II.9).

The risk of observing a much more persistent inflationary phenomenon is a concern for the Board. If materialized, they could lead to greater monetary restrictiveness, outside the upper limit of the MPR corridor. This risk is especially relevant in a context where inflation has surprised on the rise for several quarters and inflation expectations remain above 3% two years ahead. Quickly recovering macroeconomic balances will help reduce this risk, while allowing the Chilean economy to adequately face a further deterioration in the external scenario.

FIGURE II.9 GROWTH AND INFLATION FORECASTS (1)
(annual change, percent)



(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).

ANNEX A:

The Central Bank of Chile balance sheet[1]/

This appendix presents an analysis of the recent evolution of the Central Bank of Chile's balance sheet. First, the evolution of the balance sheet for the first half of 2022 is reviewed. Secondly, the composition of the balance sheet is analyzed. Finally, long-term projections are presented.

EVOLUTION DURING FIRST HALF OF 2022

As compared to the year-end 2021, the first half of this year saw a slight decrease in assets and liabilities, and a drop in net worth as a percentage of GDP (table A.1). Hence, between December 31, 2021, and June 30, 2022, total assets decreased by $1,011 billion, from 32.8% down to 30.4% of GDP, while liabilities dropped by $928 billion, from 31.4% down to 29.1% of GDP. As a result, the Central Bank saw its net worth decrease in 6 months from $3,252 billion (equivalent to 1.4% of GDP) to $3,168 billion (equivalent to 1.2% of GDP), supported by earnings from exchange rate variation (peso depreciation).

The decrease in the assets that make up the balance sheet, close to 2.4% of GDP during the first half of 2022 (table A.1), was mainly explained by a drop in international reserves of $1,490 billion, from 18.1% down to 16.5% of GDP between December 2021 and June 2022[2]/. This was due to decreased overnight deposits by commercial banks for $2,027 billion, partially offset by a higher value of the investment portfolio by $480 billion, as a result of the depreciation of the peso (8.2%). In turn, assets in local currency increased marginally by $43 billion due to the higher value of bank bonds ($23 billion), despite the fact that during this half-year there were maturities for $422 billion. The positive variation is mainly explained by the increase in the value of the UF. Likewise, the value of the fiscal transfers balance (Law 18,401) increased by $19 billion, also due to the variation in the UF. All in all, assets in local currency went from 14.5% to 13.7% of GDP.

As a counterpart, liabilities decreased 2.3% of GDP, where the monetary base declined by $1,914 billion, from 8.9% to 7.6% of GDP between December 2021 and June 2022. Secondary market promissory notes increased by $2,375 billion—Central Bank Discountable Promissory Notes (PDBC) increased by $2,615 billion and long-term debt decreased by $240 billion—, from 17.8% to 17.6% of GDP in the same period. In addition, policy instruments with banks (essentially the Standing Deposit Facility, FPD) increased by $612 thousand, from 1.9% to 2.0% of GDP between December 2021 and June 2022. Separately, other liabilities with banks (mainly overnight deposits of commercial banks) had a decline of $2,030 billion, from 1.5% to 0.6% of GDP (table A.1).

At the end of the period, a positive net worth of $3,168 billion (1.2% of GDP) was booked, explained by starting capital and other reserves totaling $2,165 billion (0.8% of GDP) and net income for the year of $1,004

[1]/ Unless otherwise noted, all amounts are in Chilean pesos. The $ symbol must not be mistaken for any different currency.

[2]/ This is obtained by converting the stock of reserves from US dollars to Chilean pesos, using the period-end exchange rate. GDP is accounted for in Chilean pesos. This ratio may differ from the one used in publications where the U.S. dollar is considered as numerary.

billion (0.4% of GDP). The latter was due to exchange rate gains of $2,493 billion, net UF variation of $410 billion (mainly associated to the investment in UF-denominated bank bonds), net interest of -$1,837 billion and non-financial costs of -$63 billion. This is mainly attributable to administrative and personnel expenses of -$36 billion and to the issuance of currency in circulation in the amount of -$25 billion.

The extraordinary measures adopted by the Central Bank of Chile during 2020 and 2021 explain part of the net worth result for the first half of 2022. Regarding assets denominated in local currency, the bank bond portfolio generated total gains for $516 billion, which includes gains from interest and monetary correction for $402 billion and earnings from higher market value for $114 billion. Also, there was interest income from the Credit Facility Conditional on Increased Lending (FCIC) and the Liquidity Credit Line (LCL) for $73 billion (table A.2).

TABLE A.1 CENTRAL BANK OF CHILE BALANCE SHEET: SUMMARY STATEMENTS AND RESULTS (percent of GDP)

	2019	2020	2021	Jun.22
ASSETS	16.5	29.6	32.8	30.4
International reserves (1)	15.4	13.9	18.1	16.5
Fiscal promissory notes and other loans to government	0.2	0.2	0.1	0.1
Monetary policy instruments (2)	0.8	11.0	12.0	11.3
Bank bonds (3)		4.3	2.3	2.2
Term deposits		0.1	0.0	0.0
Other assets	0.2	0.1	0.1	0.3
LIABILITIES	17.3	30.5	31.4	29.1
Promissory notes with secondary market	7.1	10.5	17.8	17.6
Policy instruments with banks	1.6	3.8	1.9	2.0
Other liabilities with banks	2.0	0.6	1.5	0.6
Other liabilities except monetary base (4)	0.4	0.5	1.3	1.2
Monetary base	6.3	15.1	8.9	7.6
NET WORTH (A+B+C)	-0.8	-0.9	1.4	1.2
A. Initial capital	-1.8	-0.6	-1.0	0.8
B. Net results	1.1	-0.2	2.4	0.4
Non-financial	-0.1	0.0	-0.1	0.0
Net interests (5)	0.5	-0.2	-0.1	-0.7
Due to change in exchange rate and UF	0.6	0.0	2.5	1.1
C. Capital contribution	0.0	0.0	0.0	0.0
Payable position in foreign currency (FC) (6)	12.9	12.9	15.4	14.5

(1) International reserves as a percent of GDP, measured in Chilean pesos, may present marginal difference with other measures in dollars.
(2) Includes Credit Facilities Conditional on Increased Bank Lending (FCIC I, II, and III) and Liquidity Credit Line (LCL).
(3) Includes spot purchase and forward sale transactions (CC-VP).
(4) Includes other foreign liabilities (mainly SDR allocations with the IMF).
(5) Difference between interest earned on investments and monetary policy instruments under assets and interest paid on debt certificates and monetary policy instruments under liabilities.
(6) Assets minus liabilities payable in foreign currency.
Source: Central Bank of Chile.

TABLE A.2 NET WORTH EFFECTS OF SPECIAL MEASURES IMPLEMENTED BY THE CENTRAL BANK OF CHILE (1)
(billions of Chilean pesos)

	Amount realized (3)	Profit/Loss
Bank bonds (2)	5,614	516
Loans FCIC - LCL (3)	28,966	73
Total	**34,580**	**589**

(1) Earnings or losses with an impact on net worth of special measures implemented by the Central Bank of Chile during first half of 2022.
(2) Measures announced as of March 2020, due to financial tensions related to Covid-19 and withdrawals from pension funds.
(3) Amounts correspond to stocks at 30 June 2022.
Source: Central Bank of Chile.

In terms of flows and consistent with the above, during the first half of the year, variations in the balance sheet accounted for a $1,914 billion drop in the monetary base (table A.3).

TABLE A.3 FLOWS IN CENTRAL BANK OF CHILE BALANCE SHEET (1)
(billions of Chilean pesos)

	2019	2020	2021	Jun.22
1. Net international reserves	-140	-1,168	9,294	-2,385
2. Policy instruments in local currency	1,862	17,895	-14,066	-2,862
3. Other local currency operations except monetary base (2)	-823	26	-291	948
4. Other operations in foreign currency (3)	-1,684	1,129	-3,737	2,385
Monetary base (variation=1+2+3+4)	-785	17,883	-8,800	-1,914
Payable position in foreign currency (forex operations=1+4) (4)	-1,824	-39	5,557	0

(1) Exchange flows. Corresponding balances are affected also, and where appropriate, by interests, monetary corrections, and price changes.
(2) Servicing of UF tax notes, servicing of subordinated debt, and other local currency transactions.
(3) Fiscal and bank deposits and other operations in foreign currency.
(4) Includes forex market operations related to policy decisions and forex operations with operating purposes of the Central Bank of Chile.
Source: Central Bank of Chile.

In addition to the structure and size of the balance sheet, changes in relevant financial variables were also observed during the first half of 2022. The negative yield gap between assets and liabilities rose to 400 basis points (bp), mainly as a result of the 500 bp hike in the local MPR during that period. In turn, the duration gap between assets and liabilities decreased by 1.3 months, due to the reduction in the duration of assets in local currency. Finally, in both assets and liabilities, the balance sheet exposure to foreign currencies decreased, due to lower overnight deposits from commercial banks. In addition, liabilities increased the exposure relative to the peso, as a result of the increase in Central Bank Discountable Promissory Notes (PDBC) and Standing Deposit Facilities (SDF) (table A.4).

TABLE A.4 MAIN FINANCIAL VARIABLES IN CENTRAL BANK OF CHILE BALANCE SHEET

	Jun.22		Dec.21	
	Assets	Liabilities	Assets	Liabilities
Average rate of return (%)	2.5	6.5	1.2	2.5
Average duration (months) (*)	27.3	0.4	28.5	0.3
Foreign currencies (%)	55	6.4	55.6	8.9
Local currencies, UF (%)	7.5	0.4	7.3	0.5
Local currencies, Chilean peso (%)	37.5	93.2	37.1	90.5

(*) Liabilities include the monetary base with zero duration. UF-denominated assets and liabilities are corrected by a factor of 0.5.

Source: Central Bank of Chile.

COMPOSITION OF THE BALANCE SHEET

At the closing of the first half of 2022, 55% of the assets were denominated in foreign currency (55.6% at the end of 2021). These are made up of US dollars (70.9%), IMF Special Drawing Rights (SDRs) (8.7%), Chinese renminbi (7.7%), euros (4.3%), pounds sterling (3.4%), Australian dollar (2.6%) and South Korean won (2.4%), with the most important asset in foreign currency being the investment portfolio of international reserves (87.5% of the total)[3]/. In absolute terms, assets denominated in foreign currency decreased by $1,055 billion, which is mainly explained by lower commercial bank deposits in the cash portfolio of international reserves. In turn, assets in local currency accounted for 45% of total assets (83.3% in pesos and 16.7% in UF) and, in absolute terms, increased by $43 billion, mainly due to the increase in the value of UF-denominated bank bonds and the balance of fiscal transfers (Law 18,401), which are also denominated in UF.

As a proportion of total liabilities, the share of promissory notes and policy instruments (short-term debt) rose from 62.7% up to 67.4%, consistent with the withdrawal of monetary stimulus. This movement was partially offset by a decrease in the monetary base from 28.4% at year-end 2021 to 26.2% at the end of June 2022. On the other hand, the reduction in the monetary base was mainly explained by a fall in the circulating currency, specifically in the balance of banknotes and coins, amounting to $1,628 billion.

LONG-TERM BALANCE SHEET PROJECTION

In the short term, the Bank's equity is projected to return to negative. However, in the central scenario of the long-term projection, the profitability of both international reserves and local assets and the lower relative cost of debt will gradually decrease the net worth deficit of the Central Bank of Chile. Thus, it is projected that the net worth will return to positive by September 2037. This projection is based on several assumptions, including: (i) growth in line with the Central Bank's trend GDP projections; (ii) a local inflation tending to 3%; (iii) the real exchange rate converging towards the end of 2025 to its average of the last 10 years, remaining at that level over the projection horizon; (iv) withdrawal of the liquidity infused into the economy through the bank-bond purchase programs—which investments are held in portfolio to maturity—and the special programs FCIC1-LCL, FCIC2 and FCIC3; (v) no long-term debt issuance; (vi) adjustment of the short-term debt to maintain the net worth identity of the balance sheet; and (vii) the growth of assets in local currency is absorbed in liabilities with the PDBC, monetary base, and FPD.

[3]/ The composition of the investment portfolio's benchmark comparator is: US dollar (77%), China's renminbi (8%), euro (5%), pound sterling (4%), Australian dollar (3%), and South Korean won (3%).

On July 14, 2022, the Central Bank of Chile announced a new program of extraordinary measures to be implemented between 18 July and 30 September 2022[4]/. This program consists of two parts—one oriented to foreign exchange intervention including the sale of spot dollars for up to US$10 billion and the sale of foreign exchange hedging instruments for up to US$10 billion. The other part of the program is aimed at providing liquidity in dollars with foreign exchange swaps for up to US$5 billion, complemented with a liquidity program in pesos through REPO transactions with the same maturities.

[4]/ See https://www.bcentral.cl/documents/33528/133208/Comunicado_14072022.pdf/ffa577d9-1565-7b3d-a6b5-4b0f2ad26e71?t=1657847088980

ANNEX B:

International reserves management

International reserves are liquid assets in foreign currency held by the Central Bank of Chile, and they are one of the policy tools the Bank uses to meet its main objectives: safeguarding currency stability and the normal operation of domestic and international payments. They are managed with the aim of efficiently providing secure access to international liquidity in accordance with the legal framework defined in section 38, title III, of its Constitutional Organic Law.

For international reserves to be an effective tool to fulfill the objectives of the Central Bank of Chile, their amount and liquidity must be at an adequate level. When this condition is met, international reserves may fluctuate due to price and parity movements, but such changes would not alter the ability of the Central Bank of Chile to meet its commitments. In this context, the objectives of liquidity and capital preservation are two central pillars for managing reserves, since they provide assurance that the Central Bank, with a reasonable degree of certainty, will be able to have available at any time the amount of resources necessary to achieve its policies, within a limited period of time and at a reasonable cost.

For managing international reserves, the Central Bank of Chile relies on a separation of responsibilities at different hierarchical levels, in line with the relevant international recommendations. Likewise, internal and external audits are conducted periodically to review the different processes. In this way, the decision-making and management-assessment processes within the Bank are well defined and risks are under control.

The principles of segregation of duties are applied in managing the international reserves investments. The Market Operations Area manages the investment and cash portfolios taking into consideration the guidelines provided in the Investment Policy approved by the Board of the Central Bank of Chile. The Strategic Business Area is involved in the design of the investment policy proposed to the Board and is responsible for analyzing the performance of the investments. The Operations and Payment Systems Area is responsible for processing investment operations, that is, their registration and accounting, as well as the generation of all instructions of payment and/or movements of funds ensuring satisfactory fulfillment of undertaken liabilities and rights. These three units functionally report to the Financial Markets Division.

The Corporate Risk Division is responsible for identifying, monitoring, modeling, and measuring the corporate, financial, operational, and strategic risks of the Central Bank of Chile. It also manages the compliance of the Central Bank's financial operations, thus ensuring the availability of appropriate information on compliance with internal policies. In turn, the Corporate Risk Division acts as technical counterparty in the risk management process of the Central Bank's financial operations, by defining policies and associated benchmarks.

The Bank's Comptroller, in turn, reports directly to the Board and is responsible for periodically assessing the efficiency and effectiveness of internal control, operational risk management and the governance of the integrated reserves management process.

The strategic asset allocation, or benchmark, which serves as a guide for reserves management, is reviewed periodically to ensure that the return and risk profile is consistent with the policy framework and strategic objectives set by the Board. The design of the Investment Policy considers, among other variables, the potential liquidity needs of the Central Bank of Chile and the financial effects on its balance sheet.

Under the Investment Policy, the Investment Portfolio (table B.1) is made up of two portfolios: Liquidity (60%) and Diversification (40%). The objective of the former is to ensure the liquidity necessary to comply with the policy mandates, which is why this portfolio is invested only in U.S. Treasury bonds, which is the most liquid fixed-income market in the world. On the other hand, the Diversification portfolio aims at diversifying risks and contributing to obtain additional returns in the medium and long term, consistent with the expected evolution of the Central Bank's balance sheet, although it is intended to maintain the necessary liquidity levels.

TABLA B.1 BENCHMARK STRUCTURE OF INTERNATIONAL RESERVES INVESTMENT PORTFOLIO (1) (2)

Structure	Credit risk	Share	Benchmark comparator
Liquidity portfolio	Sovereign	60%	Bloomberg Barclays Index: Global Aggregate Treasuries. (100% USD)
Diversification portfolio	Sovereign	40%	Bloomberg Barclays Index: Global Inflation-Linked. (27.5% USD), (12.5% EUR), (10.0% GBP) Bloomberg Barclays Index: Global Aggregate Treasuries. (20.0% CNY), (15.0% USD), (7.5% AUD), (7.5% KRW)
Total portfolio	Sovereign	100%	

(1) Global Inflation-Linked EUR index includes only those issued in France, Germany, and Spain.
(2) Global Treasury KRW index includes only Treasury bonds from South Korea.
Source: Central Bank of Chile.

The International Reserves Investment Portfolio, together with the Cash Portfolio (current account balances held by the Public Treasury, public companies and commercial banks) and Other assets (IMF Special Drawing Rights, certified gold, and other), make up the International Reserves Portfolio.

The benchmark makeup of the Investment Portfolio comprises six currencies: U.S. dollar (77%), Chinese renminbi (8%), euro (5%), pound sterling (4%), Australian dollar (3%) and South Korean won (3%). The Liquidity Portfolio is fully invested in U.S. Treasury nominal bonds, while the Diversification Portfolio holds sovereign nominal bonds (50%) denominated in Chinese renminbi (20%), US dollar (15%), Australian dollar (7.5%) and South Korean won (7.5%); and inflation-indexed bonds (50%) denominated in U.S. dollar (27.5%), euro (12.5%) and pound sterling (10%).

In terms of credit risk, the benchmark comparator includes 100% exposure to sovereign risk. The overall interest rate risk of the Investment Portfolio, as measured by duration, is approximately 31.5 months. In turn, the Liquidity Portfolio has a duration of 31.9 months, and the Diversification Portfolio has a duration of 30.9 months (table B.2).

TABLE B.2 BENCHMARK STRUCTURE OF CURRENCIES, TERMS, AND DURATION OF INVESTMENT PORTFOLIO (1) (2) (3)

		Investment portfolio				Total
Currency	**Share/ Duration**	**Liquidity portfolio (LP)**	**LP subtotal**	**Diversification portfolio (DP)**	**DP subtotal**	**Investment portfolio**
USD	Share	60.0%	100.0%	17.0%	42.5%	77.0%
	Duration (months)	31.91		29.41		31.36
CNY	Share			8.0%	20.0%	8.0%
	Duration (months)			31.32		31.32
EUR	Share			5.0%	12.5%	5.0%
	Duration (months)			31.44		30.44
GBP	Share			4.0%	10.0%	4.0%
	Duration (months)			31.08		31.08
AUD	Share			3.0%	7.5%	3.0%
	Duration (months)			37.22		37.22
KRW	Share			3.0%	7.5%	3.0%
	Duration (months)			32.37		32.37
Total	Share			40.0%	100.0%	100.0%
	Duration (months)			30.90		31.51

(1) U.S. dollar liquidity portfolio is comprised of nominal bonds only (100%). U.S. dollar diversification portfolio is composed of nominal (15.0%) and inflation-indexed bonds (27.5%). (2) Euro (12.5%) and pound sterling (10.0%) diversification portfolios are comprised of indexed bonds only. (3) Duration of indexed bonds is adjusted by a factor of 0.5.

Source: Central Bank of Chile at 30 June 2022.

For managing the credit risk related to the investment of international reserves, i.e., definition of eligibility and maximum exposure allowed to countries, supranational entities, commercial banks, and agencies, variables utilized are, among others, risk rating, institutions' equity levels, market size, debt ratios, and explicit guarantees. In turn, a risk budget (tracking error) is mainly used to manage market risk. This risk budget has a limit of 40 basis points (bp) as a monthly average and a limit of 50 bp that cannot be exceeded at any time.

As a complement to the internal management of its reserves, since 1995, the Bank has implemented external management programs for a portion of its reserves. The purpose of these programs has been to have an active benchmark framework to assess the internal management, to add economic value, and to foster the transfer of knowledge and technology.

At the end of the first half of 2022, a portion of the Investment Portfolio (2.8%) was independently managed by two external managers: BNP Paribas Asset Management USA, Inc. (BNPP AM) and Allianz Global Investors GmbH (AGI). These companies commenced their mandate in November 2021, after a thorough selection process that took place during the second half of that year.

In the first half of 2022, the return obtained from the management of international reserves was -3.20% as measured in source currency, excluding any appreciation or depreciation of the portfolio's currencies. As measured in US dollars, the return was -4.71% (table B.3), which includes not only the yields of the assets in the currency of origin, but also the performance of the parities in which the assets are invested with respect to the US dollar.

TABLE B.3 ABSOLUTE AND DIFFERENTIAL RETURNS, INTERNATIONAL RESERVES MANAGEMENT (1) (2) (3) (4)
(percent)

Period	In currency of origin		In US dollars		Differential
	IR	BMK	IR	BMK	
2022	-3.20	-3.32	-4.71	-4.82	0.11
2021	0,58	0.52	-0.13	-0.04	-0.09
2020	2,42	2.39	5.64	5.63	0.02
2019	5,67	6.25	5.39	6.09	-0.70
2018	1,70	1.66	-0.35	-0.32	-0.03
2017	0,77	0.62	4.17	4.06	0.11
2016	0,90	0.90	0.13	0.17	-0.04
2015	0,73	0.90	-3.74	-3.58	-0.16
2014	1,65	1.52	-2.94	-3.14	0.21
2013	0,26	0.21	-0.71	-0.77	0.06
2012	0,66	1.01	1.43	1.77	-0.35

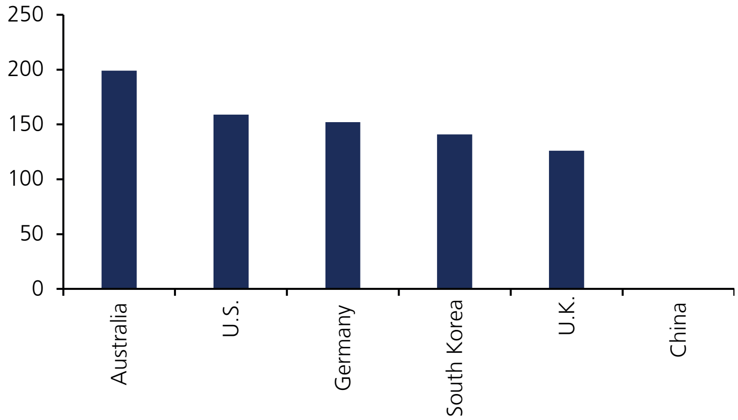
(1) Figures for 2022 are non-annualized and correspond to the first half of the year. (2) Excludes holdings in monetary gold, special drawing rights, reserve position in the IMF, and other reserve assets. (3) As from 2014, the return measured in local currency is considered, which does not include appreciation or depreciation of the portfolio currencies, while between 2012 and 2013 the return expressed in foreign currency is shown as a proxy for the return in local currency. The return in foreign currency is the return expressed in the currency basket of the benchmark comparator and is equivalent to the return in currency of origin inasmuch as the investments adhere to the benchmark. (4) Benchmark comparators had adjustments in 2012, 2019, and 2021.

Source: Central Bank of Chile.

In general terms, the negative return of the portfolio is mainly explained by the increase in interest rates observed in fixed income instruments globally (figure B.1) and by the strengthening of the US dollar against the main currencies, which resulted in a decrease in the value of the assets. The effect of this decrease in the value of the portfolio was partially offset by the accrual of the fixed-income instruments. It should be noted that, as measured in pesos, the first half return was 4.78%, which is mainly explained by the strengthening of the currency basket in which the portfolio is invested with respect to the local currency.

Also, the differential return for the first half of the year attributable to the management of international reserves was 11bp above the performance of the benchmark (table B.3).

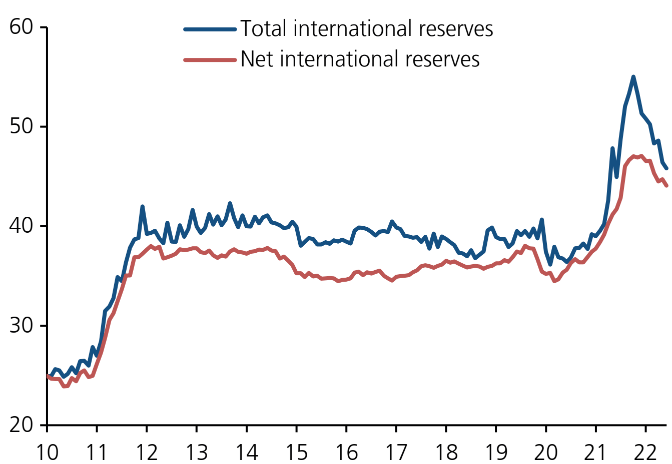
FIGURE B.1 CHANGE IN BENCHMARK RATE ON 10-YEAR GOVERNMENT BONDS (1) (2)
(basis points)



(1) Interest rate change during first half of 2022. (2) Negative (positive) change in interest rates implies an increase (decrease) in value of fixed-income instruments.
Source: Bloomberg.

As of June 30, 2022, international reserves reached US$45,820.5 million (figure B.2). Of these reserves, US$40,095.7 million are held in the Investment Portfolio, US$1,780.0 million in the cash portfolio, and US$3,944.9 million in other assets. Of the total international reserves, 70.7% were invested in US dollars, 4.4% in euros, 2.6% in Australian dollars, and 22.3% in other currencies. It should be mentioned that, within these other currencies, China's renminbi has a 7.6% share.

FIGURE B.2 INTERNATIONAL RESERVES (*)
(stock, USD billion)



(*) Net international reserves exclude cash portfolio. Data up to 30 June 2022.
Source: Central Bank of Chile.

TABLE B.4 INTERNATIONAL RESERVES BREAKDOWN
(USD million)

Type of portfolio	Currency	2021		2022	
		Dec.	%	Jun	%
Investment portfolio		**42,817.8**	**83.4**	**40,095.7**	**87.5**
Currencies and deposits	U.S. dollar	9.2	**0.0**	356.0	**0.8**
	Euro	0.4	**0.0**	0.3	**0.0**
	Canadian dollar	0.0	**0.0**	0.0	**0.0**
	Australian dollar	0.1	**0.0**	0.0	**0.0**
	Other foreign currencies	32.0	**0.1**	10.4	**0.0**
Securities	U.S. dollar	32,919.7	**64.1**	30,256.4	**66.0**
	Euro	2,147.8	**4.2**	2,004.6	**4.4**
	Canadian dollar	0.0	**0.0**	0.0	**0.0**
	Australian dollar	1,297.6	**2.5**	1,189.7	**2.6**
	Other foreign currencies	6,411.0	**12.5**	6,278.2	**13.7**
Totals	U.S. dollar	32,928.9	**64.2**	30,612.4	**66.8**
	Euro	2,148.2	**4.2**	2,004.9	**4.4**
	Canadian dollar	0.0	**0.0**	0.1	**0.0**
	Australian dollar	1,297.7	**2.5**	1,189.7	**2.6**
	Other foreign currencies	6,443.0	**12.6**	6,288.6	**13.7**
Cash portfolio		**4,309.1**	**8.4**	**1,780.0**	**3.9**
Currencies and deposits	U.S. dollar.	4,309.1	**8.4**	1,780.0	**3.9**
Other assets		**4,202.9**	**8.2**	**3,944.9**	**8.6**
Monetary gold	Other foreign currencies	14.3	**0.0**	14.4	**0.0**
IMF SDRs	Other foreign currencies	3,502.4	**6.8**	3,280.2	**7.2**
IMF Reserves position	Other foreign currencies	684.9	**1.3**	648.9	**1.4**
Currencies and deposits	U.S. dollar.	1.3	**0.0**	1.3	**0.0**
Total international reserves		**51,329.8**	**100.0**	**45,820.5**	**100.0**
	U.S. dollar	37,239.3	**72.5**	32,393.8	**70.7**
	Euro	2,148.2	**4.2**	2,004.9	**4.4**
	Canadian dollar	0.0	**0.0**	0.1	**0.0**
	Australian dollar	1,297.7	**2.5**	1,189.7	**2.6**
	Other foreign currencies	10,644.6	**20.7**	10,232.1	**22.3**

Source: Central Bank of Chile.

As of June 30, 2022, international reserves totaled US$5,509.3 million less than at the end of 2021. On the one hand, there was a decrease in the value of the investment portfolio (-US$2,722.1) and in the cash portfolio (-US$2,529.1 million), whose variations reflected changes in the stock of deposits and balances in accounts held by the financial system at the Bank[1]/ Additionally, during this period there was a decrease of US$258.0

[1]/ The decrease in the Cash Portfolio was due to local commercial banks reducing their foreign currency deposits due to a decrease in their technical reserve requirements.

million in other assets, partly explained by lower holdings of IMF Special Drawing Rights (SDR) due to the net result of a number of transactions (table B.4). Among such operations is the capital contribution made by the Central Bank of Chile to the Latin American Reserve Fund (FLAR) on the occasion of its joining this international organization as an associated central bank, which was announced in February 2022[2]/.

Regarding the exposure of the Investment Portfolio by type of risk and country, at the close of this report there were adequate degrees of diversification for the different types of risks in which the international reserves are invested. At the end of June 2022, investments in sovereign risk accounted for 96.5% of the Investment Portfolio and were mainly in the United States (72.7%), China (8.6%), United Kingdom (4.0%) and France (3.2%). At the end of the period, investments in supranational risk represented 2.4%, agency risk 0.2%, and banking risk 0.9% (tables B.5 and B.6[3]/).

TABLE B.5 INTERNALLY MANAGED PORTFOLIO. INVESTMENT BY COUNTRY AND TYPE OF RISK (*)
(USD million)

Country	Sovereign	Banks	Agencies	Supranational	TOTAL
Australia	638				638
Canada	71				71
China	3,361				3,361
Denmark	18	110			128
France	1,236				1,236
Germany	505		31		536
Japan	119				119
Poland	14				14
Qatar	25				25
Saudi Arabia	94				94
South Korea	1,103		24		1,127
Spain	380				380
Supranational				873	873
Sweden	15				15
Switzerland		230			230
United Arab Emirates	63				63
United Kingdom	1,577				1,577
United States	28,465				28,465
Other		3			3
TOTAL	**37,684**	**343**	**56**	**873**	**38,957**

(*) The Other category includes FX operations, balances in correspondent accounts and cash flows payable/receivable.
Source: Central Bank of Chile.

2/ See https://www.bcentral.cl/contenido/-/detalle/banco-central-de-chile-se-integra-al-fondo-latinoamericano-de-reservas-fla-1.

3/ Tables B.5 and B.6 detail the investment portfolio broken down into internal and external management.

TABLE B.6 EXTERNAL MANAGEMENT PORTFOLIO. INVESTMENTS BY COUNTRY AND TYPE OF RISK (USD million)

Country	Sovereign	Banks	Agencies	Supranational	TOTAL
Australia	10				10
Austria	20				20
Belgium	1				1
Canada	5	8			13
China	93	8			101
Finland	8				8
France	38				38
Germany	40		1		41
Israel	6				6
Japan	11				11
Norway		7			7
Poland	11				11
Qatar	3				3
Saudi Arabia	11				11
South Korea	28		3		32
Spain	13				13
Supranational				88	88
United Arab Emirates	6				6
United Kingdom	43				43
United States of America	672		5		677
Total	**1,017**	**23**	**10**	**88**	**1,138**

Source: Central Bank of Chile.

As of June 30, 2022, the currency composition of the Investment Portfolio was: 77.6% in US dollars, 7.7% in Chinese renminbi, 4.5% in euros, 4.2% in pound sterling, 3.0% in South Korean won, 2.7% in Australian dollar, and the remaining 0.3% was invested in other currencies (table B.7).

At the end of June, the external managers BNP PAM and AGI managed a total of US$1,138 million, belonging to the Investment Portfolio.

As complementary information, on this occasion additional background data is presented on the dynamics of the cash portfolio and how the evolution of this portfolio in turn affects the international reserves levels. As already mentioned, the cash portfolio is made up of the current-account balances held by the Treasury, public companies, and commercial banks. The Treasury, represented by the General Treasury of the Republic, and Codelco, mainly, on the side of state-owned companies, keep regular operations in dollars as a result of their own activities. In this context, these entities use the current accounts held at the Central Bank of Chile to deposit balances in dollars and take deposits, typically at very short terms. These resources in dollars are accounted for as part of the cash portfolio of international reserves and constitute, at the same time, a current liability for the Central Bank. This account recording is in line with international best practices.

TABLE B.7 INVESTMENT PORTFOLIO BY CURRENCY (1) (2)
(percent)

Currency	Share (%)
US dollar	77.6
Chinese renminbi	7.7
Euro	4.5
Pound sterling	4.2
South Korean won	3.0
Australian dollar	2.7
Other currencies	0.3
TOTAL	100.0

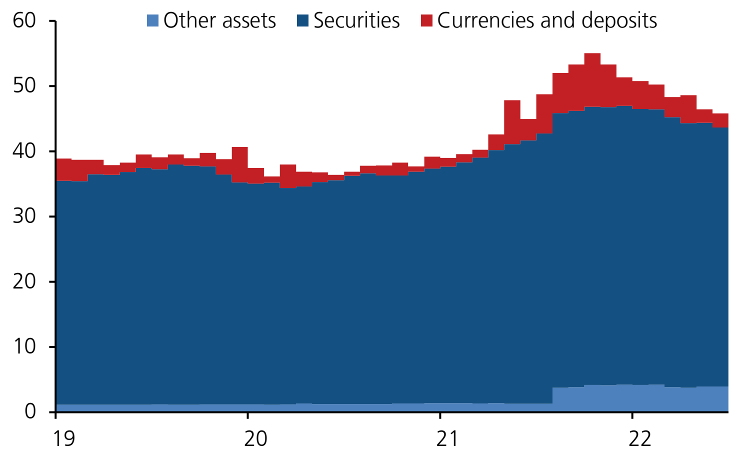
(1) Includes positions in currency forwards.
(2) Excludes positions of cash portfolio and other assets.
Source: Central Bank of Chile.

Additionally, commercial banks hold current accounts in dollars with the Central Bank, which they also use to keep balances and take deposits. Typically, banks use Central Bank accounts for the purpose of complying with regulatory reserve and technical reserve requirements. The behavior of commercial banks has the greatest impact on the evolution of the size and volatility of the cash portfolio pertaining to the international reserves.

By way of example, in mid-October 2021, the cash portfolio exceeded US$10 billion, which compares to the US$1.78 billion at the end of June 2022. This drop of more than US$8 billion implies a decrease of equal magnitude in international reserves. This movement, which is the result of third-party decisions, is not attributable to the possibility of the Central Bank using reserves or to a reduction in the value of the investment portfolio caused by market movements (rates and parities).

The Central Bank of Chile, in its periodic publications (Annual Report and September Monetary Policy Report) systematically presents the information contained in table B.4 of this Appendix to communicate the variations in international reserves attributable to its different components. Figure B.3 shows the recent evolution of the international reserves, separating the "currencies and deposits" component, which is largely associated with the cash portfolio described above. This breakdown can be found in the Central Bank's statistical database.

FIGURE B.3 INTERNATIONAL RESERVES BREAKDOWN
(stock, USD billion)



Source: Central Bank of Chile.

Note that international reserves are the main source of foreign currency liquidity that the Central Bank of Chile has available. However, the Bank has other complementary sources of different types of liquidity. Since August 29, 2022, the Flexible Credit Line granted by the International Monetary Fund (IMF- US$18.50 billion) is available, which is of a precautionary and transitory nature (two years). Additionally, the potential access to the Latin American Reserve Fund (FLAR - up to US$ 1.25 billion) and the resources that could be obtained from the RMB/CLP swap line with the People's Bank of the Republic of China, for US$ 8.0 billion, should be added to this. In this way, the complementary liquidity buffers reach US$ 27.75 billion, which are added to the Bank's own holdings of international reserves (table B.8). This is part of the Central Bank of Chile's strategy to strengthen its liquid position in foreign currency against the risk of external shocks.

TABLE B.8 TOTAL INTERNATIONAL RESERVES AND LIQUIDITY LINES
(USD million)

International reserves (1)	**45,821**
Investment portfolio	40,096
Cash portfolio	1,780
Other assets (2)	3,945
Active liquidity lines	**27,750**
IMF - "Flexible credit line" (3)	18,500
PBoC - "Swap line"	8,000
FLAR - "Balance of Payments"	1,250

(1) At 30 June 2022.
(2) Includes, mainly, positions held with the IMF.
(3) Access to this line was granted on 29 August 2022.
Source: Central Bank of Chile.

ANNEX C:

Mean measures adopted by the Central Bank of Chile during 2022

JANUARY

6. The Central Bank of Chile presented for public consultation, through Agreement No. 2448-01-220106, a proposal for improvements to its general regulations on savings accounts[1]/. Its purpose was to adapt and modernize these regulations, taking into account recent technological developments in the financial industry that have boosted their growth, such as remote transactions via digital channels and the greater possibilities of integration with other financial products or instruments. The main revisions involve making explicit and facilitating remote and online opening of savings accounts and reviewing limits and terms for these products. The final regulatory framework was published on 22 June 2022[2]/.

13. Pursuant to Agreement No. 2449-01-220113, the Board approved the Central Bank of Chile's 2022 Debt Plan.

20. Through Agreement No. 2450-04-220120, the Board approved the incorporation of the Central Bank of Chile as an Associate Central Bank to the Latin American Reserve Fund (FLAR), upon its submitting a Membership Application. The resolution abided by the following terms: Capital to be subscribed: US$500,000,000 (five hundred million US dollars). Capital to be paid-in: US$500,000,000 (five hundred million US dollars). Institutional reserves to be paid-in: US$58,600,000 (fifty-eight million, six hundred thousand US dollars). The payment of the above amounts was made using their equivalent in Special Drawing Rights, which are part of the Central Bank of Chile's international reserves.

25. Through Agreement No. 2450-05-220120, the Central Bank of Chile published a new regulation authorizing the creation and governing the operation of the Clearing Houses for Low Value Payments. All this aims at attaining its legal mandate to ensure the normal operation of domestic and international payments, and at streamlining the regulatory framework and facilitating developments and innovations in low-value means of payment.

This new regulatory framework has been developed with the purpose of adapting to different operating models on a flexible basis, allowing for innovation and, at the same time, progressing in a greater convergence towards the implementation of international risk management standards. For these purposes, the design of the regulations considers an incremental development, so that over time proportional requirements for stakeholders are configured and various operating models are admitted[3]/.

[1]/ Revisions to the Chapters of Title III.E of its Compendium of Financial Regulations (CNF). For more details, see https://www.bcentral.cl/contenido/-/detalle/banco-central-de-chile-publica-para-consulta-propuesta-que-moderniza-su-regulacion-sobre-cuentas-de-ahorro-a-plazo.

[2]/ See https://www.bcentral.cl/contenido/-/detalle/banco-central-de-chile-moderniza-regulacion-sobre-cuentas-de-ahorro-a-plazo.

[3]/ See https://www.bcentral.cl/contenido/-/detalle/banco-central-publica-nueva-regulacion.

26. At its Monetary Policy Meeting, the Board of the Central Bank of Chile decided to raise the monetary policy rate (MPR) by 150 basis points (bp), to 5.5%. The decision was adopted by the unanimous vote of the Board members present at the meeting[4]/.

FEBRUARY

16. As part of its actions to strengthen the country's international liquidity position, the Central Bank of Chile announced the approval of its request to join FLAR[5]/, which was approved on the same date by the Assembly of said organization, whose member countries are Bolivia, Colombia, Costa Rica, Ecuador, Paraguay, Peru, Uruguay, and Venezuela.

The Fund's objectives are to support the balance of payments of its member countries by granting credits or securing third-party loans; to improve the investment conditions of international reserves held by member countries; and to contribute to the harmonization of the exchange, monetary and financial policies of its member countries.

In this sense, joining FLAR not only allows the Central Bank of Chile to expand its sources of foreign currency liquidity, but also helps strengthen the regional financial safety net, thus contributing to the process of consolidating regional financing lines, as is the case in other continents. It also expands the opportunities for collaborative work, through technical assistance and the exchange of best practices in different areas of interest[6]/.

MARCH

8. The Central Bank of Chile published, through Resolution No. 2456-02-220303, a new regulation on liquidity risk management in the banking system. This is part of the process of aligning the Central Bank's regulations with Basel III standards. This process is being completed and deepened through the amendments that have been published[7]/.

The main adjustments involve: i) gradual incorporation of a regulatory limit on the Basel III Net Stable Funding Ratio (NSFR) indicator, adoption of a minimum Liquidity Coverage Ratio (LCR) of 100%, and repeal of limits on maturity mismatches; ii) perfecting the recognition of the Technical Reserve (RT) when measuring the LCR; and iii) incorporation of the liquidity self-assessment process.

29. At its Monetary Policy Meeting, the Board of the Central Bank of Chile decided to raise the MPR by 150bp, to 7%. The decision was adopted by the unanimous vote of the Board members[8]/.

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[4]/ See https://www.bcentral.cl/en/content/-/detalle/comunicado-rpm-enero-2022.

[5]/ Request agreed through Resolution N°2451-06-220127. For further information, see https://www.bcentral.cl/contenido/-/detalle/2451-06-220127.

[6]/ See https://www.bcentral.cl/contenido/-/detalle/banco-central-de-chile-se-integra-al-fondo-latinoamericano-de-reservas-fla-1.

[7]/ Amendments to Chapter III.B.2.1 of its Compendium of Financial Regulations (CNF). For further information, see https://www.bcentral.cl/contenido/-/detalle/banco-central-de-chile-publica-nueva-regulacion-sobre-gestion-de-riesgos-de-liquidez-del-sistema-bancario.

[8]/ See https://www.bcentral.cl/en/web/banco-central/content/-/detalle/comunicado-rpm-marzo-2022.

APRIL

7. By Agreement No. 2464-04-220407, the Board of the Central Bank of Chile appointed Ms. Natalia Aránguiz Berríos as substitute for the position of subrogate member of the Committee for the Setting of Exchange Rate Limits, created by Law No. 21,365, to be appointed by the Bank.

14. The Central Bank of Chile, through Agreement No. 2466-03-220414, repealed Chapter VIII of the Compendium of Foreign Exchange Regulations and the Manual of said Compendium. This is thus because there are alternative sources of information through which the Central Bank can have easier access to this data. This repeal came into effect on July 1, 2022[9]/.

18. The Board of the Central Bank of Chile, by virtue of the principle of probity in the exercise of public functions and its institutional transparency policy, by means of Resolution No. 2466-01-220414, decided to adopt and publicize a Code of Conduct that sets forth rules, obligations, and prohibitions to which the Board Members must adhere in performing their duties. This is in addition to the minimum required by the legislation in force, in accordance with the Central Bank's commitment to apply the highest standards of integrity in fulfilling its mandate. This Code was published on the Bank's website on 18 April 2022[10]/.

21. The Central Bank of Chile, through Resolution No. 2466-04-220414, launched a public consultation on new access requirements and operating rules for the Formal Exchange Market (MCF). These changes constitute the third stage of the process of streamlining the Central Bank's foreign exchange regulatory framework, as envisaged in its Strategic Planning 2018-2022.

Essentially, the requirements applicable to nonbank entities to join the MCF are simplified, thus making it easier for stockbrokers, securities brokers, and foreign banks with presence in Chile under the supervision of the Financial Market Commission (CMF), to access the MCF. In addition, MCF institutions using digital transactional platforms shall verify that they comply with minimum operating standards and public, objective and non-discriminatory access rules[11]/.

MAY

2. In the context of the continuous review and update of the security requirements and standards applicable to the High-Value Payment System operated by the Central Bank, also known as the Real-Time Gross Settlement System (LBTR), it was informed that as of 5 September 2022, additional security requirements would be adopted for connection and communication between the LBTR participants' proxies and said payment system.

The corresponding regulatory changes were adopted in the Operating Regulations for the LBTR subsystems, in local currency and in dollars, contained in the Bank's Compendium of Financial Regulations (CNF)[12]/.

5. At its Monetary Policy Meeting, the Board of the Central Bank of Chile decided to raise the MPR by 125bp, to 8.25%. The decision was adopted by the unanimous vote of all the Board members[13]/.

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[9]/ See https://www.bcentral.cl/contenido/-/detalle/2466-03-220414.

[10]/ See https://www.bcentral.cl/contenido/-/detalle/consejo-del-banco-central-aprueba-codigo-de-conducta.

[11]/ See https://www.bcentral.cl/contenido/-/detalle/banco-central-de-chile-abre-consulta-publica-sobre-nuevos-requisitos-de-acceso-y-normas-de-funcionamiento-del-mercado-cambiario-formal.

[12]/ See https://www.bcentral.cl/contenido/-/detalle/cc679.

[13]/ See https://www.bcentral.cl/en/content/-/detalle/comunicado-rpm-mayo-2022.

11. The Central Bank of Chile published on this date the report "Issuance of a Central Bank Digital Currency in Chile," in which it conducts its first analysis of the potential benefits and challenges of issuing a digital currency of this kind in our country (MDBC).

The Central Bank's interest in exploring the possibility of issuing Chilean pesos in digital format comes in a context of growing digitalization of payments, which has been driven by the fast technological progress and the incorporation of new instruments and stakeholders into the payments market.

The report highlights that issuing an MDBC would enhance the benefits of digital transformation, while mitigating some of its risks. Specifically, an MDBC could contribute to the development of a more competitive, innovative, integrated, inclusive and resilient payments system. However, the report concludes that a final decision on the matter requires a deeper analysis of its costs and benefits, as well as a more thorough comparison with other policy alternatives addressing the same challenges[14]/.

12. The Compendium of Monetary and Financial Regulations of the Central Bank of Chile (CNMF) was streamlined, by Resolution No. 2470-02-220512, to include Credit Unions supervised by the CMF complying with the provisions of Chapter III.C.2 of the CNF in the list of financial institutions or agents with similar characteristics, which may operate in the primary market of debt instruments issued by the Central Bank[15]/[16]/.

12. The Board of the Central Bank of Chile appointed, by Resolution No. 2470-03-220512, Ms. Bárbara Pamela Ulloa Llanos as substitute for the position of subrogate member of the Committee for the Setting of Exchange Rate Limits ("Committee"), created by Law No. 21,365, to be appointed by the Central Bank.

13. On this date, the amendment to the Regulations for the Operation of the Board of the Central Bank of Chile was published[17]/.

This was done in order to adopt the Financial Policy Meetings (RPF) scheme to implement the decision-making process related to the Countercyclical Capital Buffer (RCC), provided for in section 66 of the General Banking Law (LGB), incorporated by Law No. 21,130 on Modernization of Banking Legislation. It should be noted that this legal provision confers on the Central Bank the responsibility for activating, maintaining or de-activating the RCC, determining the level and term for its adoption, as the case may be[18]/.

The RCC is conceived as a macroprudential requirement, whose purpose is to increase the system's resilience to severe stress scenarios resulting from systemic risks.

In turn, two ordinary RPF are planned to be held each year, the dates of which shall be announced annually by the Bank, with the possibility of holding extraordinary or special meetings, notwithstanding.

13. Likewise, through the aforementioned Resolution, the CNMF was streamlined to allow the pledging of securities with partial maturities during the life of the same operation in Intraday Liquidity Facility (FLI) operations conducted by means of the Pledged-secured Credit Line (LCGP)[19]/[20]/.

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[14]/ See https://www.bcentral.cl/contenido/-/detalle/banco-central-publica-informe-emision-de-una-moneda-digital-de-banco-central-en-chile.

[15]/ Chapter 1.3 of the CNMF, together with Operating Regulation No. 2 of its Manual.

[16]/ See https://www.bcentral.cl/contenido/-/detalle/cc680.

[17]/ Resolution No. 2470-01-220512.

[18]/ See https://www.bcentral.cl/contenido/-/detalle/2470-01-220512.

[19]/ Chapter 2.3 of the CNMF, together with Operating Regulation No. 6 of its Manual.

[20]/ See https://www.bcentral.cl/contenido/-/detalle/cc681.

17. At its first Financial Policy Meeting, held as an ordinary session, the Board of the Central Bank of Chile agreed not to initiate the RCC. The decision was adopted by the unanimous vote of the Board members[21]/.

17. The Board of the Central Bank of Chile appointed, effective 1 June, Mr. Javier Cruz Tamburrino as Compliance Officer, a position that was created this year[22]/.

The main responsibilities of this new position —which reports to the Legal Counsel's Office— include designing and implementing an Annual Compliance Plan, coordinating and collaboratively articulating compliance activities to ensure the correct accomplishment of its goal. It will also evaluate the existing compliance elements and their integration into the compliance program (whistleblower channels, declaration system, among others).

20. By Agreement No. 2473E-01-220520 and by virtue of the provisions of Section 38 N°3 of the Constitutional Organic Law of the Central Bank of Chile, the Board authorized the opening of a Short-Term Liquidity Line (LLCP) by the International Monetary Fund (IMF) in favor of the Central Bank of Chile, for an amount equivalent to 145% of Chile's quota in IMF for a term of one year, renewable[23]/.

JUNE

7. At its Monetary Policy Meeting, the Board of the Central Bank of Chile decided to raise the MPR by 75bp, to 9%. The decision was adopted by the unanimous vote of the members of the Board[24]/.

16. By Agreement No. 2482-01-220616, the Board approved the execution of the "Accession Agreement - RMB Liquidity Arrangement for Central Banks" (RMBLA) with the Bank for International Settlements (BIS), pursuant to Section 38 Nos. 3 and 7 of the Constitutional Organic Law of the Central Bank of Chile[25]/.

16. By Resolution No. 2482-02-220616, the Board of the Central Bank of Chile appointed Ms. Natalia Aránguiz Berríos as substitute for the position of regular member of the Committee for the Setting of Exchange Rate Limits, created by Law No. 21,365, to be appointed by the Bank.

22. The Central Bank of Chile published the rules that streamline its rules on savings accounts, which were put out for consultation on 6 January this year[26]/[27]/.

23. As a result of a sustained effort to expand the available statistical information, the Central Bank published, for the first time ever, regional GDP (PIBR) statistics on a quarterly basis. On this occasion, the information was for the PIBR for the first quarter of 2022[28]/.

[21]/ See https://www.bcentral.cl/en/web/banco-central/content/-/detalle/comunicado-rpf-mayo-2022.

[22]/ See https://www.bcentral.cl/contenido/-/detalle/banco-central-designa-a-javier-cruz-tamburrino-como-oficial-de-cumplimiento.

[23]/ See https://www.bcentral.cl/contenido/-/detalle/suscripcion-de-chile-a-la-linea-de-liquidez-de-corto-plazo-llcp-del-fondo-monetario-internacional.

[24]/ See https://www.bcentral.cl/en/web/banco-central/content/-/detalle/comunicado-rpm-junio-2022.

[25]/ See https://www.bcentral.cl/contenido/-/detalle/banco-central-suscribe-acuerdo-de-liquidez-con-el-banco-de-pagos-internacionales.

[26]/ Revisions to the Chapters of Title III.E of its Compendium of Financial Regulations (CNF) as per Resolution No. 2482-03-220616.

[27]/ See https://www.bcentral.cl/contenido/-/detalle/banco-central-de-chile-moderniza-regulacion-sobre-cuentas-de-ahorro-a-plazo.

[28]/ See https://www.bcentral.cl/contenido/-/detalle/banco-central-publicara-por-primera-vez-pib-regional-con-frecuencia-trimestral.

JULY

4. The Central Bank of Chile published a survey addressed to the general public and specialized counterparties to explore the potential benefits and challenges of issuing an MDBC in Chile. This initiative is expected to deepen the evaluation process initiated in May with the publication of a first report by the Central Bank on the issuance of an MDBC. In this context, the Issuing Institute declared its interest in gathering opinions from all parties that may be interested in a potential MDBC issuance, from the perspective of citizens and of the different institutions and companies involved in the payments chain, the financial and technological sectors[29]/.

13. At its Monetary Policy Meeting, the Board of the Central Bank of Chile decided to raise the MPR by 75bp, to 9.75%. The decision was adopted by the unanimous vote of the Board members[30]/.

14. To facilitate the adjustment of the Chilean economy to uncertain and changing domestic and external conditions, the Board of the Central Bank of Chile decided to implement a program of foreign exchange intervention and preventive liquidity provision in dollars for an amount of up to US$25 billion starting next Monday, 18 July and through 30 September 2022.

Specifically, the intervention in the foreign exchange market considers: sales of spot dollars for up to US$10 billion, sales of foreign exchange hedging instruments for up to US$10 billion, and a foreign exchange swap program for up to US$5 billion, among other measures[31]/.

In accordance with its transparency policy, the Central Bank of Chile will announce the amount and other terms and conditions of the upcoming week's auctions through a press release at the end of each week. Likewise, the Central Bank will publish in due time information about the operations conducted, showing the amounts of these operations in an aggregate format.

These exceptional measures are consistent with the monetary policy framework, which is based on an inflation target and exchange rate flexibility. In this sense, the Board of the Central Bank confirmed that it will continue to use all the tools available to it to achieve the objectives stipulated by law, in particular, to maintain the normal operation of domestic and international payments, and to keep inflation within the 3% target over the two-year policy horizon.

25. The Central Bank announced that it would publish gender and regional statistics in its Statistical Database and website[32]/ the first of which will be on 29 July of this year.

28. The Central Bank of Chile published its new Payment Systems Report, which will be published annually.

By publishing this report periodically, it hopes to convey, clearly and systematically, how the Central Bank operates, its main developments and its vision on payment systems, in line with the Constitutional Organic Law of the Central Bank, which establishes the Bank's obligation to ensure the normal operation of domestic and international payments[33]/.

[29]/ See https://www.bcentral.cl/contenido/-/detalle/encuesta-sobre-potenciales-beneficios-y-desafios-de-emitir-monedas-digitales-de-banco-central.

[30]/ See https://www.bcentral.cl/en/content/-/detalle/comunicado-rpm-julio-2022.

[31]/ See https://www.bcentral.cl/contenido/-/detalle/comunicado-14072022.

[32]/ See https://www.bcentral.cl/contenido/-/detalle/banco-central-publicara-estadisticas-genero-regionales-base-datos-estadisticos-sitio-web.

[33]/ See https://www.bcentral.cl/contenido/-/detalle/banco-central-de-chile-publica-su-nuevo-informe-de-sistemas-de-pago.

AUGUST

25. By Resolution No. 2497-03-220825, the Board approved a new Chapter III of the Compendium of Foreign Exchange Regulations (CNCI), which sets forth the rules regarding the institutions authorized to be part of the MCF and the operation of the said market. These amendments seek to allow more efficient access to the MCF for financial intermediaries supervised by the CMF and to simplify the process of submitting information for nonbank MCF entities. In addition, requirements are added for MFC entities that use electronic transactional platforms, so that it can be verified that they comply with some basic access and operational risk mitigation requirements[34]/.

29. The Central Bank of Chile, jointly with the Ministry of Finance, subscribed the IMF Flexible Credit Line (LCF) for US$18.5 billion, and at the same time cancelled the LLCP for US$3.3 billion[35]/.

SEPTEMBER

6. At its Monetary Policy Meeting, the Board of the Central Bank of Chile decided to raise the MPR by 100 bp, to 10.75%. The decision was adopted with the votes of Governor Ms. Costa and Board members Mr. Naudon and Mr. Céspedes. Vice-Governor Mr. Garcia voted to raise the MPR by 125bp. Board member Ms. Griffith-Jones voted to raise it by 75bp[36]/.

[34]/ See https://www.bcentral.cl/contenido/-/detalle/banco-central-modifica-normas-que-regulan-el-acceso-y-funcionamiento-del-mercado-cambiario-formal.

[35]/ See https://www.bcentral.cl/contenido/-/detalle/banco-central-suscribe-linea-credito-flexible-fondo-monetario-internacional.

[36]/ See https://www.bcentral.cl/en/content/-/detalle/comunicado-rpm-septiembre-2022.

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