MONETARY POLICY REPORT

September 2020

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*/ This Monetary Policy Report uses data available as of 26 August 2020, unless otherwise indicated. The Report also takes into account the monetary policy decision announced on 1 September.

PREFACE

The Central Bank of Chile (CBC) conducts its monetary policy on the basis of inflation targeting and a floating exchange rate. This framework incorporates a commitment to using the available instruments to ensure that the two-year inflation forecast is 3%, independently of the current inflation level. Controlling inflation is the means through which monetary policy contributes to the population's welfare. Low, stable inflation promotes economic activity and growth while preventing the erosion of personal income. Moreover, focusing monetary policy on achieving the inflation target helps to moderate fluctuations in national employment and output.

The Monetary Policy Report serves three central objectives: (i) to inform and explain to the Senate, the Government, and the general public the Central Bank Board's views on recent and expected inflation trends and their consequences for the conduct of monetary policy; (ii) to publicize the Board's medium-term analytical framework used to formulate monetary policy; and (iii) to provide useful information that can help shape market participants' expectations on future inflation and output trends. In accordance with Article 80 of the Bank's Basic Constitutional Act, the Board is required to submit this report to the Senate and the Minister of Finance.

The Monetary Policy Report is published four times a year, in March, June, September, and December. It analyzes the main factors influencing inflation, which include the international environment, financial conditions, output and aggregate demand, and recent price and cost developments. The last chapter presents the considerations underlying the monetary policy strategy for the coming quarters and describes how the monetary policy reaction could change in the face of particular changes in the baseline scenario. Some boxes are included to provide more detail on issues that are relevant for evaluating inflation and monetary policy.

This Report was approved at the Board's meeting on 1 September 2020 for publication on 2 September 2020.

The Board

Summary

The evolution of the macroeconomic scenario continues to be determined by the unfolding of the Covid-19 pandemic and the containment measures necessary to protect the population's health. After a sharp fall early in the second quarter, in recent months the Chilean economy has shown signs of stabilization, combining a timid improvement in some sectors and marginal deterioration in others. This has been accompanied by an improved sanitary response, a faster adaptation to new operating conditions in several activities and the boost from the various measures adopted. Still, the negative impact caused by the pandemic is very significant, as evidenced by lost income for a large number of people and companies. Reversing the loss of jobs, addressing the fall in household income and the deterioration of consumption, plus maintaining a flow of credit aligned with companies' needs for working capital and investment are the biggest challenges for economic recovery and for the role of public policy in achieving it. Considering actual activity data for the first half of the year and the rebound associated with the measures adopted for a gradual withdrawal of sanitary controls and support to household income, our estimates are that GDP will end 2020 with a drop between 4.5% and 5.5%. The underlying assumptions are that the second half of the year will see a significant recovery, but the capacity gaps created over this period will close and inflation will converge to the target only in 2022. This scenario, however, remains surrounded by high levels of uncertainty and exposed to high risks. The Board will continue to maintain a highly expansionary monetary policy stance and will remain vigilant to avert risks to financial stability.

The control of the pandemic varies across countries: in some the outlook is more favorable, while in others there are new outbreaks, and yet others are still struggling to control the spread of the disease. Some countries that have improved their sanitary response have avoided reinstating the tighter restrictions on mobility in the face of new epidemic outbreaks. Latin America, as a whole, continues to show high rates of infection, but with large differences between countries. As indicators have improved in Chile, the authority has decided to gradually lift confinement measures on a national level. This process, however, is not exempt from possible setbacks, as has occurred in other parts of the world and some regions of the country.

INTERNATIONAL BASELINE SCENARIO ASSUMPTIONS

	Avg. 10-19	2020 (f)	2021 (f)	2022 (f)
	(annual change, percent)			
Terms of Trade	1.3	4.1	-0.5	0.3
Trading partners GDP (*)	3.8	-3.5	4.7	4.5
World GDP at PPP (*)	3.8	-4.6	4.9	4.6
World GDP at market exchange rate (*)	3.1	-5.2	4.6	4.4
Developed economies' GDP at PPP (*)	1.9	-7.2	4.1	4.1
Emerging economies' GDP at PPP (*)	5.1	-2.5	5.5	5.0
External prices (in US$)	0.6	-2.3	4.4	2.0
		(levels)		
LME copper price (US¢/lb)	306	270	280	290
WTI oil price (US$/barrel) del petróleo	72	40	45	47
Brent oil price (US$/barrel)	80	43	48	51
Gasoline parity price (US$/m3) (*)	610	336	362	405
Fed Fund Rate (%)	0.7	0.5	0.3	0.4

(*) For definition, see glossary.
(e) Estimation.
(f) Forecast.
Source: Central Bank of Chile.

The relaxation of confinements and increased mobility have helped world activity to leave behind its minimums of April and May. Production, sales and expectations show improvements in some countries. Notably, China's second-quarter data outperformed expectations. Financial markets and commodity prices have been favored by these trends and by the highly expansionary monetary policies implemented by the main central banks. The copper price has fluctuated around US$3 per pound and the volatility of the markets has seen significant reductions from its March and April peaks.

The Chilean economy posted a contraction of 14.1% annually in the second quarter, its worst record in several decades. The sharpest month-on-month drop occurred in April. More recently, activity has seen some upturn in sectors that had been hit particularly hard, such as retail and certain services. In contrast, construction has suffered greater and unexpected consequences, as quarantines have been extended in terms of both duration and territory.

Because of the high risk of infection, the pandemic caused a particularly sharp contraction in areas most intensive in social contact, directly affecting the income of related businesses and workers. This contraction has seen its impact amplified through a fall in self-employment—mostly in services requiring social interaction—which has been unable to perform its traditional containment role in the present circumstances. On the aggregate demand side, consumption and investment have been depressed by income losses, limited social interaction and high uncertainty.

Nonetheless, the outlook for consumption has improved thanks to a number of support measures that have been deployed in the third quarter and which are reflected in improved business—particularly retail—and consumer expectations. Among them, a significant number of direct aid programs, subsidies, payment deferrals, tax breaks and the approval of the withdrawal of a portion of pension savings. The latter is estimated to involve resources in the order of 6% of GDP, of which nearly half will be spent in consumption. In any case, its impact will be limited because of its transitory nature and the weight of imported goods in the composition of the increased demand.

The Central Bank has adopted a variety of measures aimed at providing liquidity to the markets and stimulating the flow of credit toward the productive sector, in order to avoid a more severe disinflationary cycle and prevent risks to financial stability, which could escalate the economic and social cost of the current shock. After the June Monetary Policy Meeting, interest rates at different terms declined significantly, in line with the boost to the monetary stimulus via the purchase of assets and the announced phase 2 of the FCIC. The decline in long-term rates was temporarily reversed during the final stage of the Congress debate on the individuals' withdrawal of part of their pension savings, consistent with the fall in the prices of the assets in which they are invested. However, after a package of measures was announced by the Central Bank and the regulators, and the Pension Funds implemented a portfolio management strategy that mitigated the impact on the local markets, volatility has declined and interest rates have fallen again. Stock market valuations, meanwhile, have followed a trajectory below that of their foreign counterparts.

The liquidity provided by the Central Bank, coupled with state guarantees, various regulatory adjustments and the adequate solvency of the banking system, have contributed to commercial loans breaking down their usual relationship with the business cycle, showing higher than 10% growth rates by mid-year. Linked to these instruments, to date nearly 230 thousand loans have been granted to small and medium-sized enterprises. The analysis at the individual level shows that a large number of these loans have reached the companies whose sales have been most affected by the pandemic. There is evidence that this access to credit has sustained the operational continuity of these businesses and helped mitigate the drop in investment. In turn, the asset purchase program announced in June has improved financing conditions in the corporate- and bank-bond market. In this context, the prospects for investment have also improved with respect to the last Monetary Policy Report, supported by the recent evolution of imports of machinery and equipment, large-scale projects associated with the energy sector and the recent announcements of public investment and reactivation measures.

Considering the performance of the economy in the second quarter, the gradual relaxation of the most stringent sanitary measures and the temporary boost to income support policies, the projection scenario limits the economic contraction foreseen for 2020. Thus, it is estimated that GDP will fall between 4.5% and 5.5% this year, still within a wider range than usual, reflecting the greater uncertainty surrounding the effects of the pandemic. Towards 2021 and 2022, GDP will grow between 4% and 5% and between 3% and 4%, respectively. These growth rates are consistent with a sanitary scenario that permits a gradual deconfinement process, where economic sectors continue to adapt their operations to carry out their activities and where credit continues to flow to sustain the recovery process. Our forecasts also assume an institutional channeling of the social crisis evidenced at the end of last year.

Inflation will converge to 3% by 2022, and its level will not fall below 2% annually in the short term. Although in the short term this trajectory runs somewhat above our June forecast, largely due to the projected growth in private consumption, into the medium term

ECONOMIC GROWTH AND CURRENT ACCOUNT

	2019	2020 (f)	2021 (f)	2022 (f)
	(annual change, percent)			
GDP	1.1	-5.5/ -4.5	4.0-5.0	3.0-4.0
National income	0.8	-4.3	4.8	3,6
Domestic demand	1.0	-7.1	5.6	2,7
Domestic demand (w/o inventory ch.)	1.5	-5.6	7.0	2,4
Gross fixed capital formation	4.2	-10.6	8.0	4,9
Total consumption	0.8	-4.2	6.8	1,7
Goods and services exports	-2.3	-2.2	5.0	4,8
Goods and services imports	-2.3	-9.4	8.6	2,2
Current account (% of GDP)	-3.9	-1.4	-2.5	-1.7
Gross national saving (% of GDP)	18.9	18.5	16.8	18.2
Gross national investment (% of GDP)	22.8	19.9	19.3	19.9
GFCF (% of nominal GDP)	22.4	21.0	21.8	22.2
GFCF (% of real GDP)	21.8	20.6	21.2	21.5
	(US$ million)			
Current account	-10,900	-3,400	-6,800	-5,100
Trade balance	4,200	11,200	8,200	10,500
Exports	69,900	67,800	72,700	77,700
Imports	65,700	56,600	64,500	67,200
Services	-5,100	-5,200	-5,200	-5,300
Rents	-11,400	-10,700	-10,900	-11,600
Current transfers	1400	1300	1,100	1300

(f) Forecast.

Source: Central Bank of Chile

INFLATION (1)

	2019	2020 (f)	2021 (f)	2022 (f)
	(annual change, percent)			
Average CPI	2.3	2.8	2.6	2.9
December CPI	3.0	2.4	2.8	3.0
CPI in around 2 years (2)				3.0
Average core CPI	2.3	2.5	2.7	2.9
December core CPI	2.6	2.5	2.8	3.0
Core CPI in around 2 years (2)				3.0

(1) Core inflation is measured using CPI excluding volatile

(2) Inflation forecast for the third quarter of 2022.

(f) Forecast.

Source: Central Bank of Chile.

its main determinant continues to be the lower accumulated activity. The core measure will remain above 2.5% in the short term, to gradually converge to 3%, also in 2022. Two-year inflation expectations remain around 3%.

Monetary policy will remain highly expansionary, combining the MPR kept at its 0.5% minimum with unconventional measures. These will be renewed or expanded if the economic recovery and the convergence of inflation so require. In turn, the MPR will remain at its lower bound over most of the two-year monetary policy horizon.

The macroeconomic scenario continues to show more uncertainty than normal. Projections recognize that social distancing will alter the way of operating in areas where social interaction is key for a long time. Nevertheless, more negative than estimated impacts would have particularly harmful effects on the recuperation of the labor market, because of the many people employed in these activities. This would further weaken demand and negatively affect growth and the inflationary convergence, calling for a stronger monetary impulse. On the other hand, the picture of sanitary risks looks somewhat more balanced. The accumulated experience, the prevention measures applied and reinforced sanitary systems reduce the probability that, in the event of a virus resurgence, the worst episodes of the pandemic are repeated and strict quarantines have to be re-imposed. Thus, deconfinement could proceed at a somewhat faster pace, allowing activity and employment to rebound more quickly. In such a case, the monetary impulse needed for inflation's convergence could be of slightly shorter duration.

The possibility of more negative risk scenarios, associated especially with the economic scars inflicted by the pandemic, is still present. Varied measures have allowed maintaining credit flowing in line with working capital and investment needs, breaking down the pro-cyclical relationship of credit. Going forward, the materialization of investments, the productive adjustments in sectors that have been forced to make profound changes in their operation, and the increase in activity, will continue to require this financing channels. For this reason, it is essential to ensure a steady flow of credit, in order to avoid a deterioration of the financial system's capitalization and liquidity levels, whether due to regulatory changes and/or a more pronounced deterioration in the repayment capacity of households and businesses. Should this be the case, the financial sector could not be able to sustain credit growth, becoming an amplifier of the recession as has been known to happen in the past. The Board is committed to maintain the strong monetary impulse for an extended period of time and to increase it if it deems it is necessary for the achievement of its objectives of controlling inflation, as well as taking the measures to safeguard financial stability.

MONETARY POLICY DECISIONS IN THE LAST THREE MONTHS

JUNE MEETING

For the June Monetary Policy Report, the evolution of the COVID-19 pandemic and the actions taken to contain it constituted a massive, unprecedented shock to the world economy. The immediate impact was severe, the duration longer than expected, and the long-term repercussions as yet unknown. The deterioration of output and employment had been worse than projected, and there was a high degree of uncertainty regarding the evolution of the pandemic and the most appropriate strategies for combatting it. No country in the world had escaped this phenomenon, and the majority were expected to suffer a significant output decline this year. Chile was no exception: the 2020 forecast featured the largest contraction in over 30 years.

In Chile, output had fallen sharply in April, by around −14%. Consumption and investment had decreased significantly, and inflationary pressures were drastically lower. The labor market had recorded substantial job losses—to some extent temporary—and a reduction in income, although the Job Protection Law had allowed a considerable share of laid-off workers to maintain their employment relationship. Business liquidity had also been severely affected. However, the combination of the liquidity measures implemented by the Central Bank, the COVID-19 loan guarantee plan (through FOGAPE) by the Finance Ministry, and regulatory adjustments by the Financial Market Commission (FMC) had supported an increase in commercial lending, in particular to smaller firms.

The high degree of uncertainty on the evolution of the pandemic made it difficult to estimate the depth and duration of the economic impact. Therefore, the Monetary Policy Report gave a wider-than-normal range for the GDP forecast range for 2020 and 2021.

Thus, the central scenario incorporated a GDP contraction of 5.5 to 7.5% annually, together with a drop in investment of nearly 16% and reduced consumption of around 4% annually. For 2021 and 2022, the growth forecast ranged from 4.75 to 6.25% and from 3.0 to 4.0%, respectively

The central scenario considered that the strictest containment measures would gradually be lifted in the third quarter, although social distancing would continue. This would lead to a gradual, though uneven, recovery, with a slower rebound in economic sectors characterized by more personal contact. For 2021 and 2022, the growth forecast considered that the pandemic would be under control, which would reduce social distancing measures, thereby allowing the free performance of economic activities and the related increase in employment and income. Other factors in the forecast included the strong fiscal stimulus, the continuation of large investment projects, and a bigger external boost as the world economy also recovered from the onslaught of the pandemic.

The drastic reduction in inflationary pressures would cause annual headline and core inflation to drop to around 2% in the coming quarters, converging to the 3% target toward the end of the policy horizon, in the second quarter of 2022.

In this scenario, the Board voted unanimously to hold the monetary policy rate (MPR) at 0.5%, signaling that the rate would stay at this level throughout the policy horizon. In addition, the Board voted to add an additional unconventional stimulus equivalent to 10% of GDP, through the implementation of a second phase of the Conditional Financing Facility for Increased Loans (FCIC), for US$16 billion over eight months, and a special asset purchase program, for up to US$8 billion over six months. All the Board Members emphasized the need to broaden the Bank's facilities and instruments for acting in the face of higher-risk scenarios.

JULY MEETING

For the July meeting, the evolution of the internal and external macroeconomic scenario was in line with the baseline scenario in the June Report. Domestically, the available data for the second quarter confirmed that the economy had suffered a significant contraction. The IMACEC index had fallen 15.3% annually in May, with reductions in almost all sectors. Exports had been more resilient than projected, while imports had stabilized to a degree in levels, after declining in previous months. Business and consumer expectations remained markedly pessimistic. The strict pandemic containment measures continued affecting large segments of the country, although health indicators had evolved favorably, which had allowed some regions to start opening back up.

In the labor market, different sources of quantitative information—surveys and administrative sources—indicated a sharp deterioration, particularly in terms of the job contraction and a reduction in hours worked and wages. Preliminary qualitative information, collected in the framework of the Business Perceptions Report, confirmed this assessment and revealed concern on this front. Nevertheless the implementation of government measures to mitigate the loss of income had intensified since June. The evolution of consumption continued to be affected by these dynamics, in particular the sale of non-essential goods. In this context, the median of private expectations reported in the July Economic Expectations Survey projected an annual GDP contraction of 6.1% this year, in line with the range of the central scenario in the last Report, although there was still a large dispersion in the estimates. In June, annual headline inflation dropped to 2.6%, while core inflation CPI excluding volatile items reached 2.5%, with persistent weakness in service-related lines.

Internationally, short-term data had improved in the main economies, coinciding with their gradual reopening. This was evident in industrial and retail trade sectors, in the labor market, and in household and business expectations. Central banks and governments had maintained their efforts or made additional economic policy announcements, conserving a highly expansionary tone. All of the above had favored a better tone in the financial markets and an increase in commodity prices. Nevertheless, all these variables remained far below their pre-pandemic levels, and there were important risks for output performance going forward, mainly associated with fresh outbreaks of COVID-19 in various countries.

Local financial markets reflected both the somewhat more positive tone of the external scenario and the greater domestic monetary policy stimulus. With regard to credit, commercial loans had continued to increase in real annual terms, while consumer loans had continued to decline. Interest rates remained low in all segments. This was unfolding in a context in which most of the banking sector had used all the available resources in the first phase of the FCIC program and now had access to the resources of the second phase. The Bank Lending Survey for the second quarter reflected tighter lending conditions, explained in part by the risk in the customer portfolio. On the demand side, household credit demand had fallen substantially. Among firms, the main trends were an increase in the demand for funds to cover working capital needs and a drop in borrowing to finance investment projects.

All the Board Members agreed that although the data for the past few months were in line with projections, the magnitude of the shock was causing a lot of damage—for both households, due to the loss of jobs and income, and firms, due to solvency problems and/or the need to make more permanent adjustments to their way of doing business in some sectors. In the Board's opinion, this heightened the importance of the role of public policy. All the Board Members called attention to the potential effects on the economy of the bill authorizing the withdrawal of pension fund savings, due to its impact on both the financial markets and domestic demand. The consensus was that the policy response was not obvious, beyond the importance of implementing the necessary measures to safeguard against excessive volatility so as not to compromise financial stability while the funds were being liquidated.

In this scenario, the Board voted unanimously to hold the MPR at 0.5%, signaling that the rate would stay at this level for some time. They also voted to maintain the unconventional liquidity and credit support measures.

I. INTERNATIONAL SCENARIO

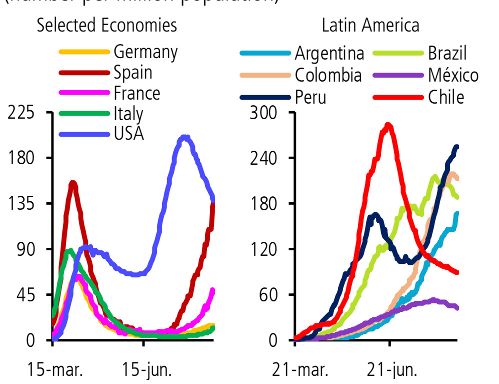
This chapter analyzes the recent evolution of the world economy and the outlook for the next two years and describes the most probable external scenario and the main risks

The course of the world economy continues to be determined by the development of the COVID-19 pandemic and the necessary containment measures to protect public health. In line with the forecast scenario in the June Monetary Policy Report, after historic declines early in the second quarter, global output is showing signs of an incipient recovery in response to the gradual opening of a large group of countries. Despite fresh outbreaks following the lifting of restrictions, the authorities have avoided reimposing strict confinement measures, such that the performance of the different economies has not been compromised as sharply as at the start of the pandemic. Central banks and governments have provided a new stimulus in recent months, albeit with different emphases and magnitudes. This has all favored the performance of the financial markets and commodity prices. In this context, the outlook for world GDP has been revised slightly upward for the 2020–21 period, although a strong contraction is still projected for this year, with a slow recovery starting this half.

The evolution of the pandemic has varied considerably among countries, even as the public health response has improved at the global level. Some show a more controlled panorama, thanks to preventive measures (both mandatory and voluntary), the reinforcement of health systems, and the accumulated experience in managing the disease. This has allowed a relevant share to move forward on lifting confinement measures. At the same time, several countries have seen new outbreaks, albeit with varying intensity. Other countries continue to be hard-hit. In the United States, the epicenter of the pandemic has been shifting to states that were less affected initially, recording new peaks in the number of cases, a situation that has eased in recent weeks. Latin America maintains high contagion rates, with significant differences among countries in terms of the containment of the epidemic. Brazil continues to lead the region in total cases, with relatively lax restrictions on mobility vis-à-vis the rest. In contrast, Argentina, Colombia, and Peru, which have implemented tighter quarantines for a longer time, report an acceleration of new cases in recent weeks (figure I.1).

Figure I.1

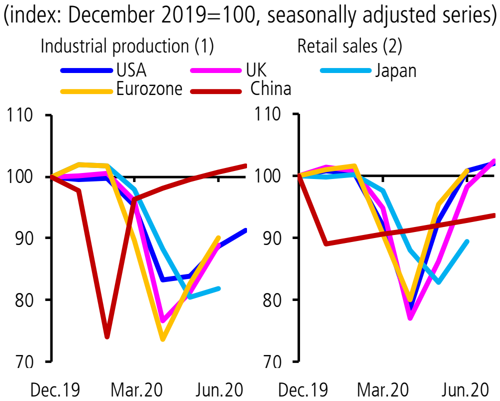
Daily new confirmed cases of COVID-19 (*)
(number per million population)



(*) Two-week rolling average.
Sources: European Centre for Disease Prevention and Control (ECDC) and Ministry of Health of Chile.

Figure I.2

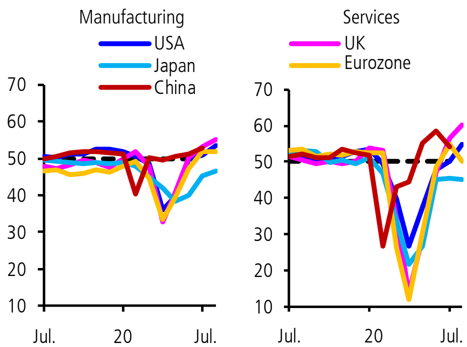
Output indicators
(index: December 2019=100, seasonally adjusted series)



(1) Real series. (2) Nominal series.
Sources: Bloomberg y Eurostat.

Figure I.3

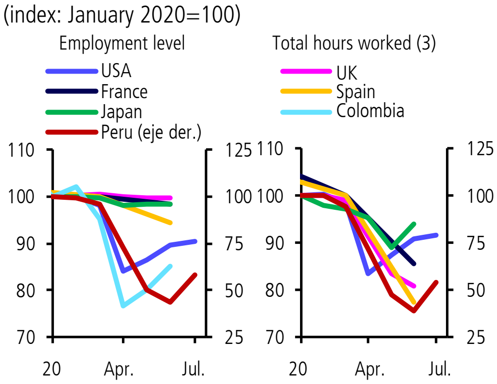
PMI (*)
(diffusion index)



(*) A value under (over) 50 indicates pessimism (optimism). Source: Bloomberg.

Figure I.4

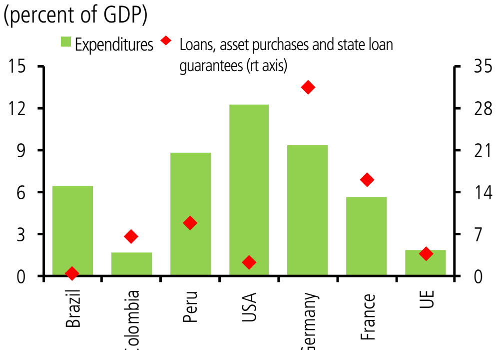
Labor market indicators (1) (2)
(index: January 2020=100)



(1) Monthly data, except for Spain and France which are quarterly and for which the fixed-base index is 2020Q1=100. (2) Seasonally adjusted series, except for Colombia, Spain, and Peru. (3) For France, housrs worked are calculated as average hours times total workers in the period. Sources: Bloomberg and statistical offices of each country.

Figure I.5

Fiscal programs
(percent of GDP)



Sources: International Monetary fund and corresponding national authorities.

The relaxation of confinement measures and the increase in people's mobility have contributed to raising global output above the lows reached between April and May. Industrial production and retail sales have improved notably in several economies (figure I.2). The drop in foreign trade has slowed, and the World Trade Organization has stated that the more pessimistic scenario projected in April has become less probable.

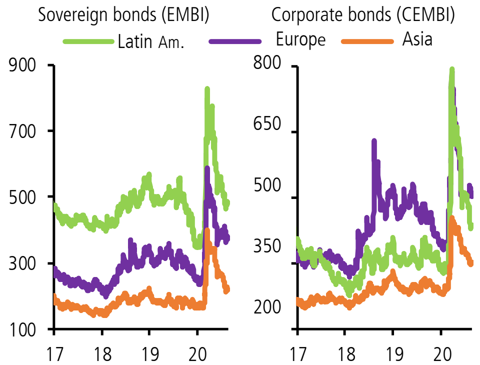
Business expectations (PMI) have also risen, returning to expansionary territory for manufacturing and services sectors in an important group of economies (figure I.3). In services, however, real monthly activity data indicate that the recovery has been relatively slower, since these sectors involve more interpersonal interaction.

With varying intensity, the pandemic has caused labor market adjustments in a large number of countries. Depending on the individual characteristics of each economy, the respective social protection framework, and the special measures implemented by their authorities, there have been sharp contractions in employment, significant reductions in hours worked, and increases in inactivity (figure I.4). According to the World Labour Organization (ILO, 2020), relative to the last quarter of 2019, in the second quarter of this year, hours worked declined 14% at the global level—equivalent to 400 million full-time jobs. The reduction has been led by South America (–20.6%), where inactivity has grown substantially. For the remainder of 2020, the ILO projects that hours worked will remain below the pre-pandemic level worldwide. In this context, most consumer confidence indexes remain in pessimistic territory.

Fiscal policy has played an active role in controlling the damage in terms of employment and income in a large group of economies, with uneven effects in accordance with the design of the respective social security systems and the focus of the applied measures. Some countries have oriented their programs toward preserving labor relationships through subsidies that complement income in the face of the temporary suspension of contracts or the reduction in hours worked. This has been the case in several European countries, where the impact on employment levels has been relatively limited (figure I.4). Other countries have focused on shoring up household income, for example, through the direct provision of resources. This has been the approach taken in the United States, which exhibits a more marked deterioration in unemployment data. Other tools being used by governments around the world include subsidies and tax cuts for households and firms, as well as commercial loan guarantees.

Figure I.6

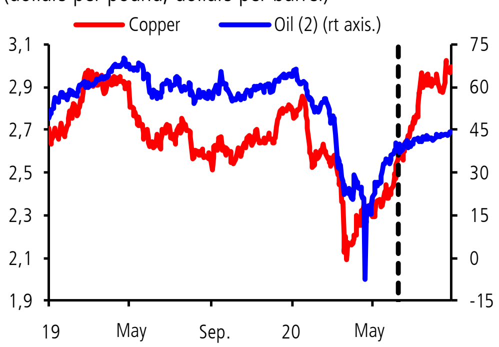
Emerging market spreads
(basis points)



Source: Bloomberg.

Figure I.7

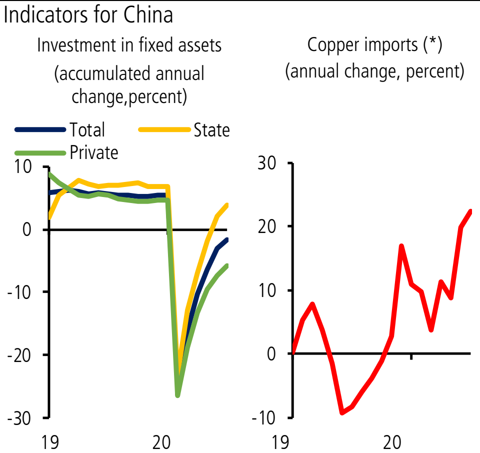
Commodity prices (1)
(dollars per pound; dollars per barrel)



(1) Vertical dotted line marks the cutoff date of the June Report.
(2) Simple average of Brent and WTI oil prices.
Source: Bloomberg.

Figure I.8

Indicators for China



(*) Volumes. Three-month rolling average of the annual change.
Source: Bloomberg.

As a result of the sudden expansion of fiscal spending, together with the sharp drop in income, the debt and the deficit have increased significantly in several countries. According to estimates by the International Monetary Fund, global public debt will reach a historical peak of just over 100% of GDP in the 2020–21 period, 19 percentage points higher than in 2019 (IMF, 2020) (figure I.5).

Central bank actions remain focused on maintaining financial stability and the functioning of credit systems, in a context in which global inflation remains low despite recent increases in some economies. Since June, global monetary accommodation has continued to increase, with additional rate cuts in several countries and the implementation of new unconventional measures that have translated into balance sheet expansion (figure II.1). At the margin, the Fed expanded access to some facilities and extended its liquidity programs through the end of the year, while the Bank of England reinforced its bond purchase plan.

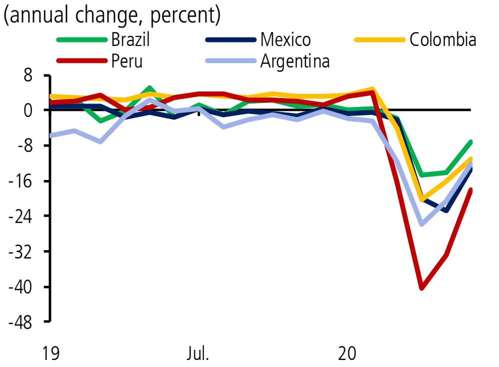
The policies adopted by central banks, governments, and regulators have been effective in maintaining and increasing the flow of credit. Thus, a large number of economies recorded an acceleration of credit in the first and second quarters, with growth rates in the double digits (box I.1).

The international financial markets have maintained a more positive tone in recent months, reflecting better real output data, greater control of the pandemic, and ample global liquidity. Comparing the cutoff dates of this and the last Reports, the majority of sovereign and corporate spreads have narrowed, and the dollar has tended to weaken against other currencies, albeit with exceptions (figure I.6).

The stock markets have generally trended upward, with some U.S. indexes hitting historical peaks. Long-term interest rates remain low in perspective, with mixed movements among countries. Capital outflows have continued to slow for the emerging economies. These developments have not been without fluctuations, associated, in part, with the political, trade, and technology disputes between China and the United States. However, these events have not been as severe as the start of the pandemic.

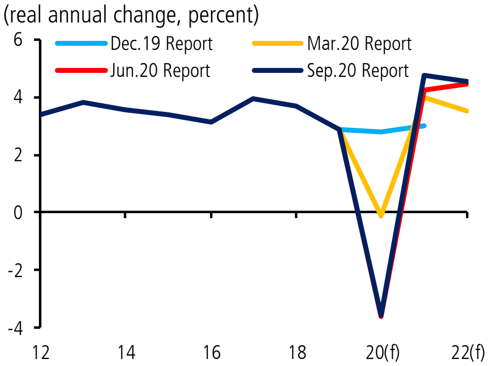
Most commodity prices have risen in the past three months, in the framework of a gradual recovery of global demand and output and a multilateral depreciation of the dollar (figure I.7). Copper and metals in general led the increases, largely reflecting the improvement of investment in China, which in turn was mainly due to the state stimulus (figure I.8). This has favored the performance of the industry and imports. Supply factors also played a role, such us the interruption of mining works in response to the pandemic, especially

Figure I.9
Latin America: Monthly activity
(annual change, percent)



Source: Bloomberg.

Figure I.10
Growth of trading partners
(real annual change, percent)



f) Forecast.
Source: Central Bank of Chile.

Table I.1
World growth (*)
(annual change, percent)

	Ave. 00-07	Ave. 10-18	2019 (e)	2020 (f)	2021 (f)	2022 (f)
World at PPP	4.5	3.9	2.8	-4.6	4.9	4.6
World at market FX	3.3	3.1	2.5	-5.2	4.6	4.4
Trading partners	3.7	3.9	2.9	-3.5	4.7	4.5
United States	2.7	2.3	2,2	-6.0	2.4	4.1
Eurozone	2.2	1.4	1.3	-8.9	6.7	5.2
Japan	1.5	1.4	0.7	-6.5	2.2	2.1
China	10.6	7.9	6.1	1.9	7.3	6.1
India	7.1	7.4	4.2	-5.6	5.8	5.6
Rest of Asia	5.3	4.6	3.4	-1.7	4.9	4.4
Latin America (excl. Chile)	3.4	2.0	-0.7	-9.2	2.0	2.9
Commodity exp.	3.1	2.4	1.7	-6.0	4.0	3.5

(*) See glossary for definitions.
(e) Estimte. (f) Forecast.
Sources: Central Bank of Chile, based on a sample of investment banks, IMF, and statistical offices of each country.

in Peru. Thus, betweenthe cutoff dates of this and the last Reports, the copper price rose 18%, fluctuating around US$3.00 a pound. In the same period, the oil price (Brent-WTI average) increased 15%, to around US$45 a barrel. The crude oil supply has continued to shrink, in accordance with the OPEC-Plus agreement, although the organization decided to ease the magnitude of the production cuts starting in August.

Forecasts and risks in the external scenario

The forecast for the external scenario has been revised slightly upward for the 2020–21 two-year period, mainly due to the expected performance in the Eurozone and China. This largely reflects the stimulus measures implemented by their economic authorities over the past few months, as well as the European bloc's relative success in controlling the pandemic—even taking into account the acceleration of new cases in recent weeks—and China's better-than-expected performance in the second quarter. The adjustments for the remaining economies vary in sign and magnitude. In particular, a bigger drop is forecast for several Latin American countries, which are still projected to record the most negative performance in the period (figure I.9). The region could close this year with per capita GDP levels similar to 2010 (ECLAC, 2020).

Chile's trading partners are expected to see a GDP contraction of 3.5% in 2020 and growth of 4.7% in 2021 (versus –3.6 and 4.2% in June, respectively). The 2022 growth forecast remains at 4.5% (figure I.10 and table I.1). With regard to commodities, copper and oil (Brent-WTI) will average US$2.80 per pound and US$46 per barrel in the 2020–22 period, respectively (around US$2.65 and US $43 in June).

The international risk scenario is closely tied to the scars that the pandemic will leave on the world economy. The forecasts take into account the continuing effects of mandatory and voluntary social distancing on global demand, especially in areas where personal interaction is central.

The public health risks are somewhat more balanced than a few months ago. Although new outbreaks are expected in the coming months, the experience garnered during the emergency, the prevention measures, and the strengthening of health systems all reduce the probability of repeating the worst moments of the pandemic. Moreover, the multiple studies aimed at developing a possible vaccine could yield earlier results.

The threat to the liquidity and solvency of households and firms remains active, particularly in the hardest-hit sectors, which will take longer to return to operations and whose labor effects will be longer lasting. This could contribute to a sudden adjustment in the financial markets, in an environment in which the response capacity of the economic authorities is more limited, given the broad efforts already implemented and the high government debt.

Doubts surrounding the continuity of the stimulus plans represent another risk to be taken into account, either due to the economic effects of ending the plans or the impact on the fiscal sustainability of their extension.

Box I.1: **Economic activity and credit cycles: International evidence**

Credit and economic activity usually tend to move in the same direction. In expansionary phases, the better economic outlook of households and firms has a positive influence on the banking sector's risk assessment, creating incentives for credit growth to finance investment and consumption. The opposite occurs in weak phases. Inflation-targeting monetary policy tries to mitigate this feedback between output and credit, by being more restrictive in boom periods—thereby avoiding unwanted spikes in inflation—and more accommodative in recessions, so as to ensure that credit does not fuel imbalances. In a large-scale crisis, especially one originating from systemic problems in the financial sector —as occurred in Chile in the early 1980s or in the developed world in 2008–09—the credit contraction begins when the capital losses of the banking system and other financial intermediaries limit their willingness and ability to lend, amplifying the recession. In these situations, not even a highly accommodative monetary policy would be sufficient for stimulating the economy (De Gregorio, 2009). This box reviews how, in the current recession, the policies adopted by central banks and governments have managed to avoid this outcome, allowing credit to increase despite the strong output contractions. It also identifies some elements that should be monitored to avoid negative risk scenarios originating in the financial markets.

The role of monetary and fiscal policy in the credit expansion during the COVID-19 pandemic

The current recession has very different characteristics from past episodes, since the drop in output was caused not by economic problems in specific sectors, but by the temporary need to suspend the normal functioning of the economy in order to reduce the spread of COVID-19. Thus, the shock to households and firms income has been very substantial, and in the absence of the equally exceptional public policy interventions, it probably would have implied a very significant credit contraction in response to the increased default risk. This would have led to massive bankruptcies, leaving permanent scars that would imply several years of poor economic performance and high unemployment.

However, in contrast to the 2008–09 global financial crisis, banks around the world are well-capitalized, thanks to the regulatory strengthening as a result of the lessons of that crisis, which has facilitated the efficiency of expansionary measures.

Given this background, Chile and many other countries have adopted a series of measures to ensure that credit flows to firms, allowing them to offset the sharp drop in cash flows and mitigating the more persistent effects of the pandemic. First, in addition to bringing their reference rates to the effective lower bound, central banks have established special programs to fund the banking system at low rates, conditional on an increase in lending. Examples include the credit programs implemented by the Bank of England (TFSME), the European Central Bank (TLTRO), and the Central Bank of Chile (FCIC-LCL). Nevertheless, given that credit risk remains high and that low funding rates may therefore be insufficient, these policies have been complemented by state guarantees on these loans, which in the case of Chile correspond to FOGAPE guarantees (table I.2).

The data show that a considerable number of countries, including Chile, recorded an acceleration of credit in the first and second quarters, with double-digit annual growth rates (figures I.11 and II.8). In Chile, an individual-level analysis shows that a large number of the loans granted under the umbrella of these programs have reached businesses whose sales were strongly affected by the pandemic. Moreover, the evidence further shows that these loans have supported operational continuity at these businesses and have helped mitigate the contraction in investment (box II.2). The availability of credit can also allow firms to build up inventories with which to satisfy the recovery of demand as the containment measures are gradually removed. Finally, relieving financial tightness may have supported a less intense employment adjustment, which should also ease the cost of the output reduction. For example, in the United States, the Paycheck Protection Program (PPP), aimed at preventing layoffs at small businesses, had contributed to maintaining around 2.3 million jobs as of the first week of June 2020.[1/]

Outlook and risks

The recovery projected in the forecast scenario in this Report assumes that lending conditions will remain favorable. Nevertheless, some risks associated with the credit market could have a substantial impact on this process.

First, it is important to maintain a substantial flow of credit to businesses in sectors where the recovery will take longer. After increasing significantly between March and April, credit to businesses has slowed in several developed and emerging economies. In the short term, it is important to determine whether this reflects lower financing needs—given the advances made in controlling the pandemic and the gradual normalization of economic activity—or if it is an early sign of supply restrictions. In this sense, maintaining fiscal and monetary policies that support lending will be fundamental to ensure an adequate credit flow.

Second, it is important to maintain regulatory conditions that facilitate credit growth. Chile and other countries have adjusted their regulations—including capital adequacy requirements—so that they do not become an impediment to the flow of credit. It is therefore important to ensure that the financial system's capitalization and liquidity levels do not deteriorate, due to regulatory changes and/or a more marked decline in the repayment capacity of households and businesses. If that were to happen, the financial sector would not be able to sustain the growth of credit, and it would begin to amplify the recession, as has been the case in the past.

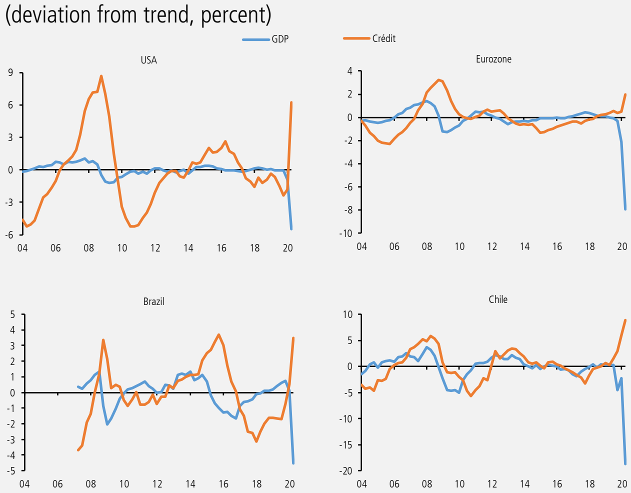
Finally, it will be immensely important to monitor the future impacts of the increased leverage taken on during the crisis. In many developed and some emerging economies, the corporate sector's debt levels were already fairly high in historical terms before the pandemic. In a risk scenario in which demand remains weak for a long time, the greater leverage could imply a risk to financial stability for some economies.

Conclusion

The fiscal and monetary policy responses implemented during this crisis have contributed to partially ameliorating the economic impacts. In both developed and emerging economies, bank lending to businesses increased significantly at the start of the crisis, providing financing for working capital in a context of plunging sales. The forecast scenario in this Report assumes that liquidity will continue to be available so that firms have access to loans, although negative risk scenarios cannot be ruled out and thus should be closely monitored.

Figure I.11

Economic activity and credit cycles (*)
(deviation from trend, percent)



(*) Calculated as the difference between the log of the GDP level and credit, relative to a trend calculated using an HP filter. Source: Central Bank of Chile.

[1/] See Autor et al. (2020).

Table I.2

Main measures announced by governments and central banks to directly support business credit

Country	Fiscal	% GDP	Monetary	% GDP
United States	Forgivable loans to small and medium-sized businesses (PPP)	3.4	Bank credit (TALF, MSLP) and corporate bond purchases (PMCCF – SMCCF)	7.3
Germany	Loans with federal and state guarantees	25.3	TLTRO loans from the ECB. Long-term refinancing for the banking sector (up to 3 years) conditional on loans to nonfinancial firms	--
France	Guaranteed loans, including reinsurance value	15.2		
Italy	Guaranteed loans, estimated amount from the IMF	33.8		
Spain	Guaranteed loans, excluding facilities for low-income households	9.6		
United Kingdom	Guaranteed loans	16.8	TFSME loans. Refinancing of up to 6 years in line with the government guarantee credit programs in effect	5.5
China	Support for guarantees, increased credit to SMEs, payment forbearance, and relaxation of restrictions	--	New instruments, rate cuts, and reserve ratio; expansion of credit lines	--
Brazil	Credit guarantees and financing to pay wages	1.0	More regulatory flexibility on agribusiness loans, loans guaranteed by financial letters, 1-year repos backed by the government, new time deposits with special guarantees, loans backed by debentures, reserve and capital deduction conditional on supplying credit to MSMEs, creation of special line for SMEs, use of real estate as collateral	18.3
Chile	Capital increase of US$3 billion in the Small Business Guarantee Fund (FOGAPE)	1.1 (1)	Conditional Financing Facility for Increased Loans (FCIC1 and FCIC2) and Liquidity Credit Line (LCL)	14.1 (2)
Colombia	National Guarantee Fund	7.6	--	--
México	Credit for SMEs (not guaranteed)	0.2	Provision of resources to the banking sector to channel credit to MSMEs and households; financing facility for the banking sector, backed by corporate loans, to finance MSMEs	1.4
Peru	Government guarantee program (Reactiva Perú), as well as the creation and expansion of other funds	9.4	--	--

(1) The value of the guarantee announced to increase firms' liquidity. (2) Only the FCIC1 and FCIC2 are in percent. The LCL is capped at a given bank's reserves. These measures were complemented with a bank bond purchase program.

Sources: Central Bank of Chile, based ondata from the IMF, central banks, and budget offices.

II. FINANCIAL CONDITIONS

Table II.1

U.S. dollar exchange rates (1)
(percent)

	Change until Sep.20 Report			
	06.20	03.20	12.19	09.19
Latin America (2) (3)	**4.8**	**1.5**	**20.4**	**21.6**
Brazil	8.0	10.1	30.9	35.4
Chile	0.6	-7.1	-0.8	11.0
Colombia	4,4	-6.2	9.8	11.0
Mexico	0.8	-6.6	13.3	11.2
Peru	4.4	0.9	5.6	5.6
Commodity exp.(2)	**-2.4**	**-9.3**	**0.7**	**-0.2**
Australia	-4.3	-17.2	-5.6	-5.9
Canada	-2.4	-7.4	-0.7	-0.7
New Zealand	-2.3	-10.6	-2.0	-2.4
South Africa	1.1	0.6	16.9	12.4
Developed (2)	**-4.3**	**-6.8**	**-5.2**	**-5.0**
Eurozone	-5.1	-7.8	-6.8	-6.3
Japan	-2.0	-2.6	-2.7	-0.1
United Kingdom	-4.3	-9.4	-1.7	-7.2
Other emerging	-2.5	-1.9	-1.6	-2.4
China	-2.6	-4.6	0.7	-2.1
Rep. Korea	-1.1	-0.3	4.2	4.4
India				
Indonesia	3.8	-5.5	4.7	3.5
Polonad	-5.8	-10.1	-4.7	-5.6

(1) The values reflect the percent change between the cutoff date of the corresponding Report and the cutoff of this Report. The NER of each series is calculated as the average of the last ten business days. A positive (negative) sign indicates depreciation
(2) Includes the currencies of the economies included in this table, using the weights in the April 2020 WEO.
(3) Excluding Chile.
Sources: Central Bank of Chile, Bloomberg, and Internarional Monetary Fund.

This chapter reviews the evolution of local and international financial conditions..

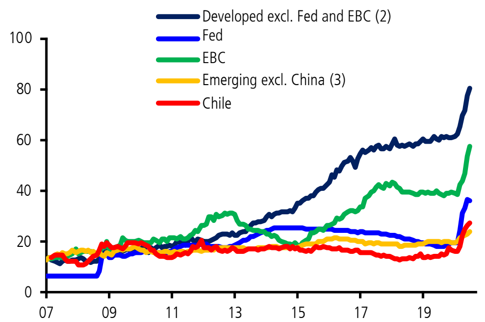
The financial conditions faced by the Chilean economy remain favorable, in a context of a strong local and global monetary stimulus, output indicators that have stabilized in recent weeks after falling sharply in the beginning of the second quarter, and a fairly controlled evolution of the pandemic in Chile. Under these circumstances, financial risk indicators have improved, as have asset prices. The liquidity provided by the Central Bank, the state guarantees, the various regulatory adjustments, and the adequate solvency of the banking system have contributed to the countercyclical behavior of commercial credit in the local market, providing financing to a large number of small and medium-sized enterprises. Going forward, the materialization of investments, productive adjustments in sectors that have been forced to make deep changes in their operations, and the increase in activity levels will require the continuation of this financing flow.

Financial markets

The gradual reopening of various economies has consolidated a more positive tone in the global financial markets since the middle of the second quarter. In particular, the somewhat more auspicious output data for China and most developed countries, in a context of renewed outbreaks that have had much more limited effects on the functioning of the economies than at the start of the year. Thus, sovereign and corporate risk indicators—EMBI and CEMBI—have declined in the majority of the emerging economies, including Latin America (figure I.6). The stock markets have continued to evolve positively in general, with sharp rises in China and the United States, where they are higher than in February. The dollar has weakened multilaterally, except against Latin American currencies (table II.1). This has occurred in a context of high exchange rate volatility, especially for emerging currencies. Moreover, the markets have not been exempt from fluctuations, associated with the political, trade, and technology disputes between China and the United States, among other factors. At any rate, the tension has not been as severe as before the pandemic.

Figure II.1

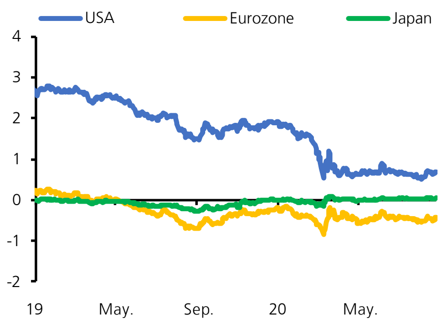
Central banks' balance sheets (1)
(percent of GDP)



(1) GDP is calculated using a four-quarter rolling window. (2) Includes England, Japan, Canada, and Switzerland. (3) Includes Brazil, India, Mexico, and South Africa.
Sources: Bloomberg and central banks.

Figure II.2

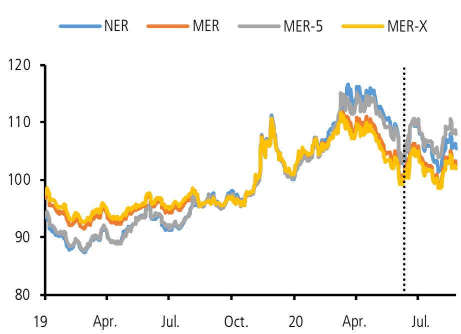
Ten-year bond interest rates
(percent)



Source: Bloomberg.

Figure II.3

Nominal exchange rate and multilateral measures (*)
(index: 2019–2020 = 100)



(*) The vertical dotted line marks the cutoff date of the June 2020 Report.
Source: Central Bank of Chile.

Most central banks have maintained or intensified their monetary stimulus, keeping reference rates low and/or increasing unconventional stimulus measures, especially in the developed countries. Since February, the U.S. Federal Reserve and the European Central Bank have increased their assets by the equivalent of 18 and 19% of GDP, respectively (figure II.1). In this context, long-term rates have stayed low in the developed countries (figure II.2), and many emerging economies saw a reversal of the hikes recorded in March.

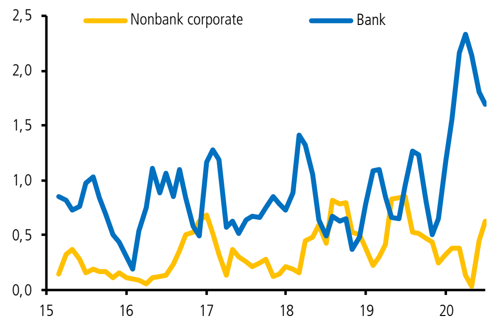
In Chile, the financial markets paralleled the trends of external peers, in general reflecting the more controlled evolution of the pandemic and the multiple measures adopted to reduce the negative effects on the economy. Sovereign and corporate risk have fallen since the June Monetary Policy Report, on the order of 30 and 60 basis point (bp) for the EMBI and CEMBI, respectively. The IPSA stock index has fluctuated around 4,000 points, on a lower trajectory than comparable foreign indexes. Taking the cutoff dates of this and the last Reports, the peso depreciated 0.6% against the dollar and 1.4, 3.0, 1.6% in multilateral terms (MER, MER-5, and MER-X respectively) (figure II.3). The real exchange rate was around 100 (fixed-base index: 1986=100). All this occurred in a context of higher intraday volatility and fluctuations related to the withdrawal of a share of pension savings (box II.1), recommendations by pension consultants, and marked shifts in the dollar and the copper price.

The strong monetary accommodation has contributed to keeping domestic financial conditions favorable. In June, the Board announced a set of unconventional measures, including a bond purchase program encompassing bank bonds and Central Bank BCP and BCU bonds for up to US$8 billion. In this context, local bank bond issues have remained highly dynamic since January, settling at around US$2 billion in July (figure II.4). Spreads, in turn, have narrowed, partially correcting the divergence between risk categories observed in June (figure II.5). This program also had somewhat of an impact on long-term interest rates in UFs and pesos—BCU and BCP bonds—which on average have fallen around 10 and 30 bp, respectively, since the June Report. This trend was also influenced by the constitutional discussion on the purchase of sovereign bonds by the Central Bank and by statements from the Central Bank Governor regarding the proactive role this would have in the reactivation of the economy (figure II.6). Nonbank corporate financing conditions via local bond issues have improved. Thus, total placements were around US$1.9 billion between June and August (US $1.3 billion between January and May) (figure II.4). Rate spreads on this type of bond, although still high, have declined since the June Report.

Some idiosyncratic factors have triggered fluctuations in local markets, in particular the discussion on the withdrawal of a share of pension savings. In July, the month in which the issue was debated in Congress, local markets wavered, with an appreciation of the peso, a hike in long

Figure II.4

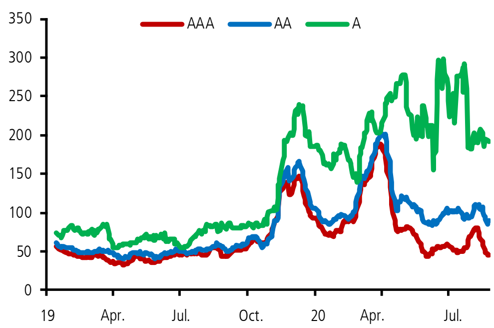
Bank and nonbank corporate bond issues
(quarterly rolling average, billions of dollars)



Sources: Financial Market Commission and Santiago Stock Exchange.

Figure II.5

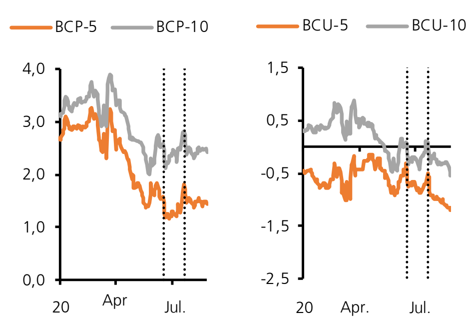
Bank bond spreads (*)
(two-week rolling average, basis points)



(*) Spreads over UF-denominated sovereign bonds. Source: Santiago Stock Exchange.

Figure II.6

Central Bank of Chile bond rates (1) (2)
(percent)



(1) Left vertical dotted line marks the announcement of the bank bond purchase program. (2) Right vertical dotted line marks the statements by the CBC Governor regarding the proactive role of taking measures to support economic reactivation. Source: Central Bank of Chile.

rates, and substantial uncertainty on the effects of the asset liquidation by the pension fund managers (PFMs) (box II.1).

In this context, once the initiative was approved, the Board implemented a series of measures to accommodate the asset liquidation by the PFMs and ensure an orderly process, so as to preserve financial stability and the efficiency of the price formation process. The measures centered, first, on the provision of temporary liquidity through repos, offering longer terms for asset sales, and second, on the purchase of assets (bank bonds and time deposits) with a spread so as to curb volatility in the event of an excessive rise[1/]. As a result of these measures, in conjunction with regulatory changes and the portfolio management strategies of the PFMs, the pension fund adjustments were implemented without generating any major market disruptions, and the managers obtained greater liquidity in the domestic market through the purchase of PDBCs and the sale of bank bonds. This has lessened the appreciative pressure on the peso—by reducing the need to repatriate overseas funds—and lowered the volatility and level of sovereign and bank long rates.

Bank credit

The liquidity provided by the Central Bank, the state guarantees, the various regulatory adjustments, and the adequate solvency of the banking system have contributed to breaking the usual relationship between commercial loans and the economic cycle. This phenomenon has been seen in many economies that have implemented this type of measure (box I.1). In July, the real annual growth rate of commercial loans was close to 12%, versus 6.5% through February (figure II.7). Average interest rates in this segment have stayed around 4.8% in nominal annual terms. The activation of the Conditional Financing Facility for Increased Loans (FCIC) and the use of fiscal guarantees have been key determinants in this credit growth. The use of the two phases of the FCIC has provided the banks with nearly CLP 21 trillion[2/]. Additionally, under the FOGAPE loan guarantee program, the banks have placed around CLP 8 trillion and granted nearly 220,000 loans to micro, small, and medium-sized businesses. The evidence shows that the credit flow has supported the operational continuity of businesses that have been hard hit by the pandemic and has helped mitigate the drop in investment (box II.2).

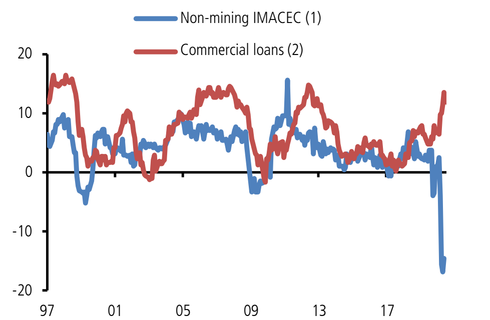
In contrast to the commercial segment, personal loans do reflect the evolution of the economic cycle. The consumer portfolio contraction deepened to almost 10% in July in real terms (figure II.8).

1/ For details on these measures, see https://www.bcentral.cl/contenido/-detalle/comunicado-del-banco-central-de-chile-1

2/ To date, the second phase of the FCIC is still open to the financial system, and almost 30% of the scheduled resources have been used.

Figure II.7

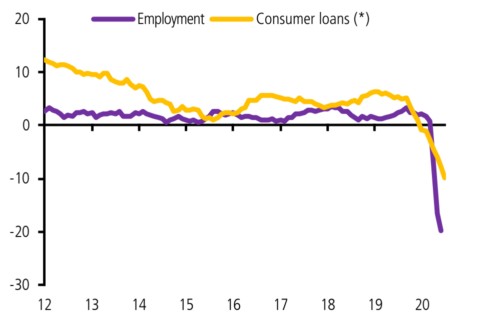
Real commercial loans and the non-mining IMACEC
(annual change, percent)



(1) Spliced series (index: 2013=100). (2) Real data constructed using the spliced CPI, with base year 2018.
Source: Central Bank of Chile.

Figure II.8

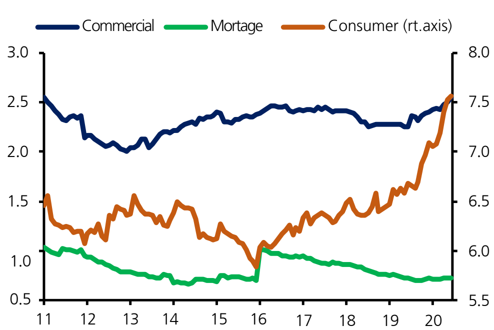
Consumer loans and employment
(annual change, percent)



(*) Real data constructed using the spliced CPI, with base year 2018
Sources: Central Bank of Chile and National Statistics Institute (INE).

Figure II.9

Provisions
(percent)



Source: Financial Market Commission.

Mortgage loans continued to grow in annual terms, but the growth rate has slowed in recent months. The main factor behind the performance of personal loans is the impact of the pandemic on household income and of the containment measures on consumption. Thus, the credit supply has deteriorated due to the worsening of the labor market and expectations on its recovery. Interest rates have declined somewhat, on average, to 20.1% annually in pesos in the consumer segment and to 2.6% annually in UFs for mortgages.

The sharp deterioration in the macroeconomic scenario has affected bank credit risk indicators. With data through June, there is a continuous upward trend in provisions expense in the commercial portfolio and, more acutely, the consumer portfolio (figure II.9). Moreover, in the latter portfolio, write-offs reached 7% of loans in June (versus around 5.5% in the last five years). In contrast, default in the commercial portfolio, which climbed in late 2019, stabilized and even declined in June. This is probably related to the high level of debt rescheduling[3]/—which already totals around 1.5 million—which could be postponing the manifestation of portfolio deterioration in the data.

The Central Bank has adopted a series of measures aimed at supplying liquidity to the markets and stimulating the flow of credit to the productive sector, so as to avoid a more severe deflationary cycle and prevent risks to financial stability, which would raise the economic and social costs of the current shock. As a result of these measures, about US$50 billion of resources have been made available to the economy (17.7% of GDP), through the FCIC1/2–LCL and the bank bond purchase programs. All this has translated into a significant expansion of the Central Bank's balance sheet, which increased 10% of GDP in the first half of 2020 (figure II.1). This has contributed to mitigating the impacts on the financial markets of the various shocks that have hit the economy in the last few quarters. It has also favored the maintenance of a credit flow in line with working capital and investment needs, thereby breaking the procyclical relation between commercial credit and the economic cycle. Going forward, the recovery of economic activity, as well as the adaptation of operations in some sectors, will require continued financing. In this context, the Board is committed to maintaining a strong monetary stimulus for a long time and increasing it as needed to achieve the objective of controlling inflation, as well taking the necessary measures to preserve financial stability.

[3]/ The banks had rescheduled about 37% of commercial loans and 38% of mortgages as of 21August and 19% of consumer loans as of 31 July.

Box II.1: **Description and short-term effects of the pension savings withdrawal**

On 23 July, a constitutional reform was passed to allow affiliates of the private pension fund system to withdraw a fraction of their pension savings, with a minimum of one million pesos and a cap of 4.3 million pesos. The withdrawal process, which will take place over one year, began on 30 July. As of Wednesday, 26 August, just over 10.3 million people (93% of total system affiliates) had applied for their withdrawal[1]/. As of that date, the amount accepted for processing had reached US$15.3 billion[2]/ (76% of potential withdrawals; equivalent to 6% of 2019 GDP).

The discussion, approval, and implementation of this reform generated major effects on the local financial markets, which have been dissipating over time. This box describes these effects and presents preliminary evidence on their short-term impact on consumption.

Financial market effects

In Chile, pension savings are invested in financial instruments in the local market and overseas. Therefore, it was to be expected that the liquidation of a significant fraction of those savings would reduce local asset prices, raise interest rates in the fixed-income market, and, to the extent that overseas funds had to be repatriated, appreciate the exchange rate. In its initial phase, the congressional discussion had effects in the expected direction. Ten-year sovereign bond rates increased 40 basis points (bp) between 7 and 17 July; the IPSA stock index fell 4% between 9 and 21 July; and the peso appreciated around 7% in the same period (figure II.10).

In addition to the level effects, the uncertainty surrounding the possible approval and the amount that would be withdrawn implied an increase in asset price volatility. This was seen in interest rates, the stock market, and, especially, the exchange rate (figure II.11).

To prevent the increased volatility from compromising financial stability and normal price formation, the Bank announced on 23 July that it was evaluating measures to provide liquidity and facilitate the portfolio adjustment. The details on the measures were published on 30 July. First, the Bank established a special repo program involving simultaneous spot purchases and forward sales of bank bonds, in order to establish a mechanism for providing liquidity and thus to prevent the short-term adjustments in the investment portfolio from causing an overreaction in the levels and volatility of fixed-income prices. The Superintendence of Pensions also made a number of adjustments to facilitate the process, as did the FMC.

Second, considering that a large share of the pension fund portfolio in the local market is concentrated in bank bonds and time deposits, the Bank decided to continue its bank bond purchase program and to establish a time deposit purchase program for up to US$8 billion, in order to forestall the possibility that a massive liquidation of these assets could produce distortions in these markets. In the case of time deposits, given their importance for the functioning of the money market, avoiding distortions in this area is an important factor for the correct transmission of monetary policy. Although these facilities have not been completely accessed, the temporal correlation between the announcement, the reduction of volatility, and the partial reversal of the asset price effects suggests that the signal effect was successful in mitigating the short-term impacts.

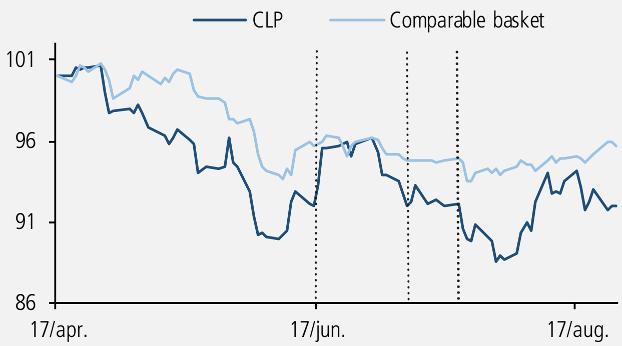
[1] / Of the total, 933,000 were rejected for not meeting the formal requirements.

[2]/Data as of 25 August. Based on the limits established in the reform and individual account balances, total potential withdrawals are around US $20 billion.

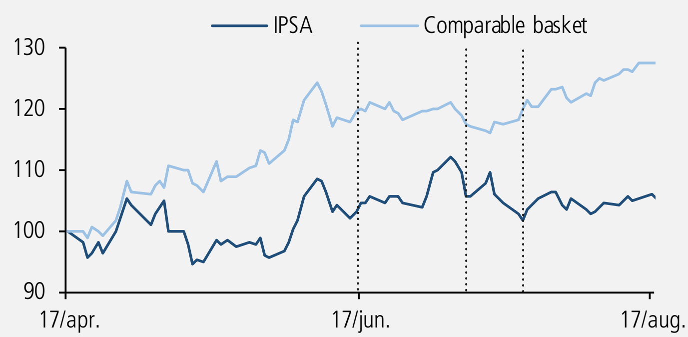
Figure II.10

Evolution of local assets versus a basket of comparable countries (1) (2)

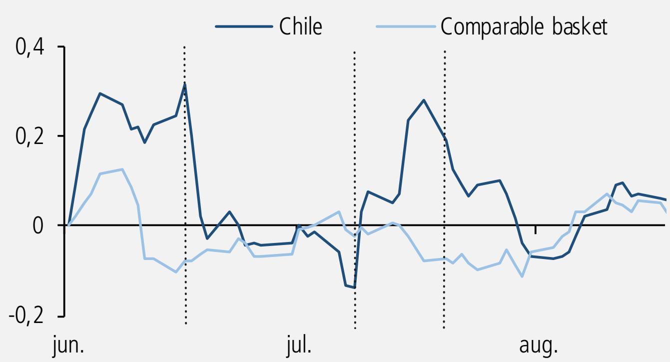
(a) Exchange rate
(index 17/04/2020=100)



b) IPSA
(index: 17-Apr-2020=100)



(c) Ten-year sovereign bond rates
(differential from 01-Jun-20)

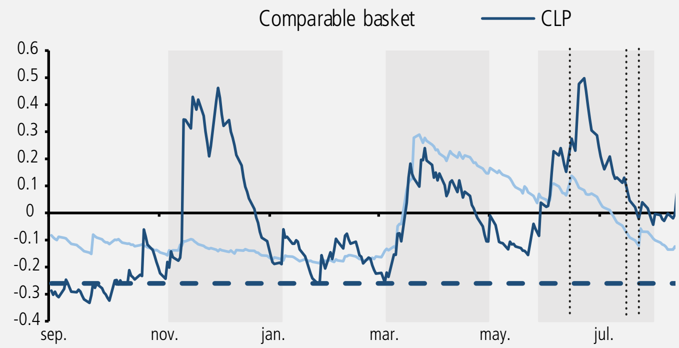


(1) From left to right, vertical lines mark the the June Monetary Policy Meeting (16 June), approval in the House of Representatives of the idea to legislate a bill allowing the withdrawal of 10% of private pension savings (8 July), and the first announcements by the Central Bank of Chile (20 July). (2) The basket of comparable economies includes assets from Latin America and commodity exporters (Australia, Brazil, Colombia, Mexico, New Zealand, and Peru). Source: Bloomberg.

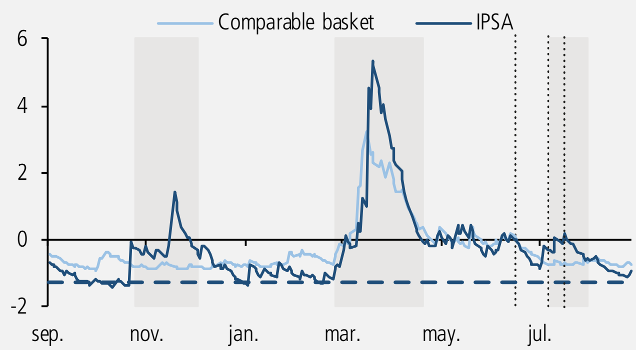
Figure II.11

Volatility of local assets versus a basket of comparable countries (1) (2) (3) (4)

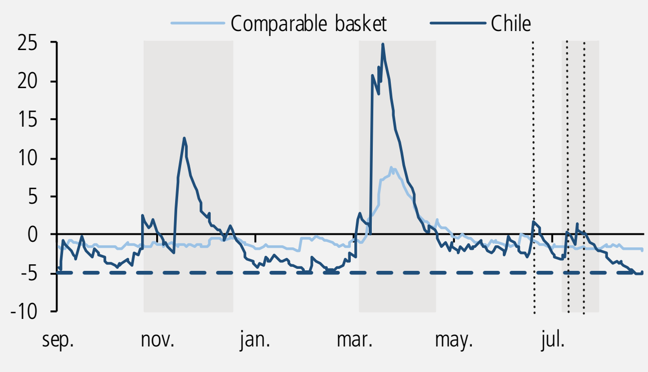
(a) Exchange rate
(difference from 2020 average, estimated standard deviations)



(b) IPSA
(difference from 2020 average, estimated standard deviations)



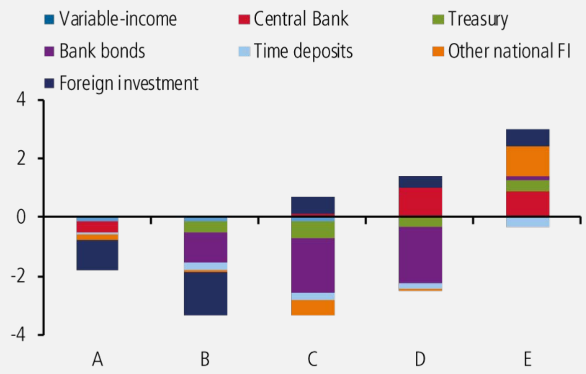
(c) Ten-year sovereign bond rates
(difference from 2020 average, estimated standard deviations)



(1) From left to right, vertical lines mark the the June Monetary Policy Meeting (16 June), approval in the House of Representatives of the idea to legislate a bill allowing the withdrawal of 10% of private pension savings (8 July), and the first announcements by the Central Bank of Chile (20 July). (2) The basket of comparable economies includes assets from Latin America and commodity exporters (Australia, Brazil, Colombia, Mexico, New Zealand, and Peru). (3) Horizontal dashed line shows the average for Chile from January 2016 to September 2019. (4) From left to right, gray areas mark the high-volatility periods associated with the social crisis, the emergence of the COVID-19 pandemic, and the debate on the withdrawal of 10%of pension savings.
Source: Bloomberg.

Figure II.12

Changes in pension fund portfolio, by type of fund (*)
(billions of dollars)



(*) Portfolio change between 17 July and 25 August 2020.
Source: Central Bank of Chile and Superintendence of Pensions.

The portfolio management strategy pursued by the pension fund managers (PFMs) also worked as an important factor in containing financial volatility. In particular, given that the regulation penalizes a drop in fund value, the liquidation strategy focused on assets that would have the least impact on local markets (figure II.12). Additionally, several PFMs began to adjust their portfolios in advance, so as to reduce the temporal concentration of the operations. Something similar occurred with the payouts to affiliates, which in some cases was processed ahead of the initially established date.

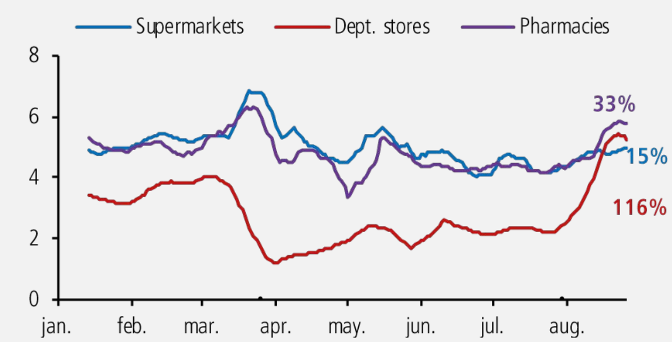
Possible effects on consumption

The evidence on how affiliates are using their withdrawn savings is as yet limited. Although solely qualitative, surveys show that the funds will boost both durable and nondurable goods consumption, as well as being allocated to the payment of financial commitments, saving, and investment. According to surveys by CADEM and the Santiago Chamber of Commerce—both published in the third week of July—nondurable goods consumption represents the primary use of the withdrawn savings: 50 to 60% of the people surveyed will use all or some of their withdrawn savings to purchase food and basic goods. At the same time, 30 to 40% of the people will allocate some of the resources to pay utilities. Debt repayment ranks third in both surveys, cited by 20 to 25% of respondents. Importantly, while the use of withdrawn savings on these latter two items does not have a direct impact on demand, it does reduce the financial stability risks that could be generated by an increase in default due to the economic crisis.

Retail sales data collected from electronic receipts are also consistent with an upswing in consumption. In this case, there would appear to be a skew toward durable and semi-durable goods over nondurable goods. According to these data, comparing the two weeks before the statistical cutoff date and the last two weeks of July, retail sales increased significantly, concentrated in the large department store segment, which had been the hardest hit since the start of lockdowns (figure II.13). with regard to the potential implications for employment, the consumption effects appear to be skewed more toward the purchase of imported goods—whose production and commercialization are relatively less labor intensive—than services—where employment typically responds more strongly to an improvement in sales. Finally two additional factors play a role in the retail recovery: the materialization of government transfers or state subsidies and the lifting of quarantine in some communities of the country.

Figure II.13

Electronic sales receipts (1) (2)
(two-week rolling average, billions of pesos)



(1) Left vertical line marks the start of quarantines in the eastern sector of Santiago (26 March); right vertical line marks the publication in the Official Gazette of the law on the withdrawal of 10% of pension savings (30 July). (2) Percentages: change between 30 July and 26 August.
Source: Central Bank of Chile.

The forecast scenario in this Report estimates that half of the approved withdrawal (which is around 6% of 2019 GDP) will be allocated to goods consumption, while the remaining half will go to account and loan payments, financial investments, or savings. Given the ongoing restrictions on service activities, the higher consumption will be more concentrated on goods than usual, which will increase the imported component. Around two-thirds of the spending will take place in 2020, contributing significantly, but temporarily, to offsetting the drop in domestic demand and output this year. The balance will be spent in the first few months of 2021, with a naturally lower impact. Longer term, it is important to consider not only the short-term effects on consumption, butalso the more permanent impact on savings, investment, and the fiscal accounts, which will depend, in part, on how the reduction in pension savings is compensated.

Conclusion

The first few days of the debate on the reform to allow the withdrawal of pension savings generated a price adjustment in the assets that the market expected to be liquidated, as well as an increase in volatility. The measures implemented by the Central Bank and the regulators, together with the portfolio management strategies used by the PFMs, played an important role in facilitating the adjustment and thereby mitigating the volatility. On the consumption side, the volume of withdrawn savings, supported by preliminary information from surveys and retail sales, is consistent with a significant—but temporary—stimulus for consumption. This has been incorporated into the macroeconomic framework of the forecasts in this Report.

Box II.2: **The pandemic shock and the economic response: Evidence from Chilean firms**

A distinctive characteristic of the recession caused by the COVID-19 pandemic has been the significant expansion of commercial credit in various countries. This has been supported, to a large extent, by the combination of a highly accommodative monetary policy—including unconventional measures—and state loan guarantees (box I.1). Chile has also followed this trend, as seen in the Central Bank measures, the FOGAPE guarantees, and the regulatory adjustments by the FMC. While this has allowed many firms to get through the worst moments of the pandemic, the aggregate credit expansion may not be sufficient to avoid deeper scars. In this sense, it is especially important for credit to reach firms that, while solvent, are facing serious liquidity restrictions due to the total or partial suspension of business activities.

The evidence presented in this box shows that the shock facing Chilean businesses has been very large and heterogenous across sectors, with plummeting sales and a significant increase in firms reporting zero sales[1]. Importantly, the hardest-hit businesses have been able to access credit, especially through the FOGAPE-COVID programs. The data show that this access to financing has supported operational continuity and reduced the contraction of investment.

It is important to note that the conclusions presented in this box are based on the analysis of individual-firm-level data [2]. This combines the analysis of data on firms' economic performance, access to bank credit, and different adjustment margins. This data set is not commonly available in all countries, and it shows the value of having granular data to support a correct evaluation of the role played by macroeconomic policies.

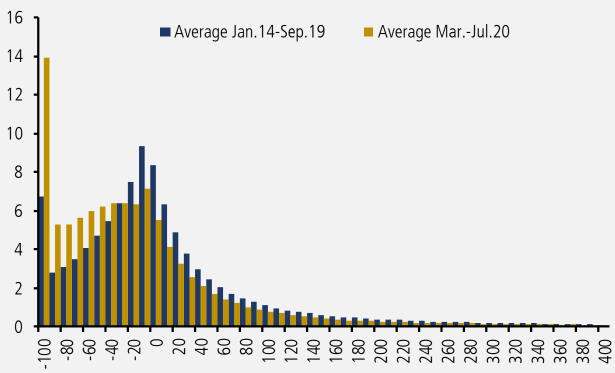
Moreover, in times of stress like the current period, the short lag of this data offers the capacity to adjust the policy course, to the extent that the diagnosis suggests areas for improvement—a very important limitation of traditional aggregate data, given the lags in their publication

Sales shock and credit expansion

Electronic invoice data show that over the past few months, there has been a sharp reduction in sales. On average, sales fell by 13.6% in real annual terms between March and July of this year. This compares with an increase of 10.5% between January 2014—when electronic invoice data become available—and September 2019 —the month before the start of the social crisis [3] (figure II.14).

Figure II.14

Distribution of real annual sales growth (*)
(percent of firms)



(*) Based on electronic invoice data. Annual sales growth calculated monthly for each firm.
Source: Central Bank of Chile.

The firms with the steepest drop in sales pertain to the restaurant, hotel, personal services, housing, and construction sectors. This group includes firms that report

[1] This phenomenon has occurred in many economies. Albagli et al (2020) review the most recent international on the effects of the pandemic on firms.

[2] The main data used are from the Chilean IRS and FMC, together with job termination records from the Labor Bureau. The Central Bank always works with anonymous records to guarantee the privacy of people and firms.

[3] The data and exercises reported in this box exclude, a priori, sectors that were less affected by the pandemic, such as mining, EGW, agriculture, fishing, and public administration. For details on the construction of the adjustment margins and the sample of firms used, see Albagli et al (2020).

zero sales—that is, a drop of 100%—and firms that report a reduction of 70% or more (table II.2).

Table II.2

Sectoral evolution of sales: March to July 2020 (1)
(percent)

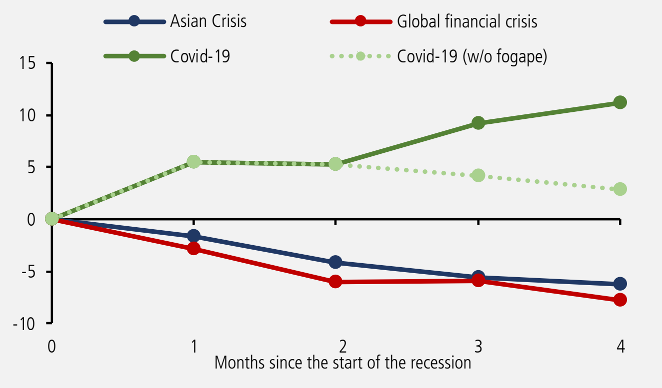
Sector	Average sales growth (2)	Share of firms (3)	Share of firms reporting no sales in each sector (4)	Share of firms *reporting sharp drop* in sales in each sector (5)
Manufacturing	-14.2	15.8	15.2	31.1
Construction	-11.8	13.7	24.1	30.2
Trade	-12.8	31.8	16.1	29.0
Transport	-6.2	11.2	11.8	20.7
Financial services	-6.0	2.0	15.3	22.7
Housing	-18.0	1.7	20.3	22.5
Business services	-12.5	11.8	18.1	27.6
Personal services	-18.1	5.0	26.0	26.6
Restaurants and hotels	-39.9	6.9	41.9	23.6

(1) Based on electronic invoice data. (2) Simple average of the annual change in sales. (3) Calculated for the period from Feb.19 to Mar.20. (4) Share of firms that ceased to report the issue of electronic invoices. (5) Firms with a reduction in annual sales of 70% or more. Source: Central Bank of Chile.

As a result of the liquidity provided by the Bank, the state guarantees, the diverse regulatory adjustments, and the adequate solvency of the banking sector, the usual procyclical behavior of commercial loans has been broken in this recession. In particular, the COVID-19 credit lines and the use of FOGAPE guarantees explain two-thirds of the increase in the annual growth rate of the stock of commercial loans between February and June 2020 (figure II.15).

Figure II.15

Stock of commercial loans
(change in annual growth rate relative to the first month with a negative IMACEC, percent)



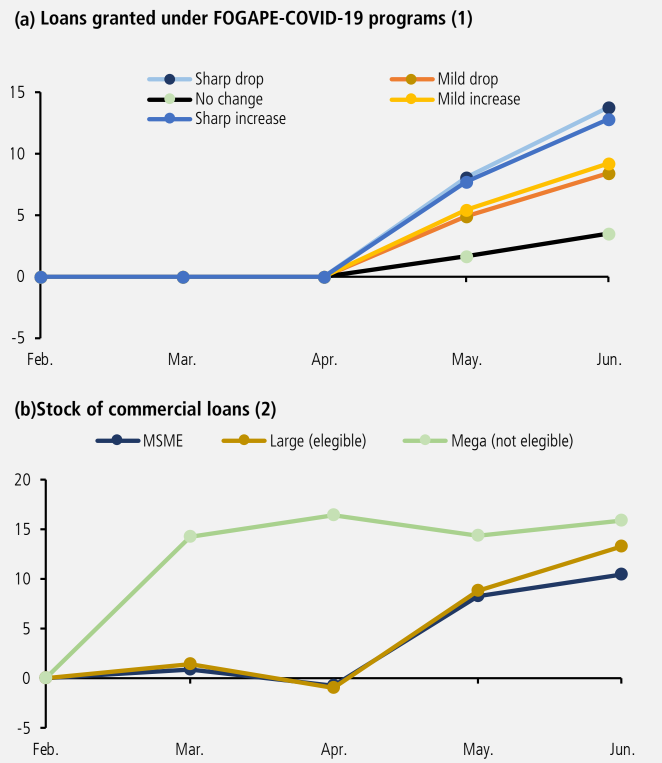
Source: Huneeus et al. (2020).

With regard to credit recipients, crossing tax and financial data shows that the loans granted under the FOGAPE-COVID-19 programs have mostly gone to businesses that recorded a major reduction in sales (figure II.16, panel a).

Among companies that are not eligible for these programs because of their sales level, there was a significant increase in credit to mega-firms. In terms of timing, credit to micro, small, and medium-sized enterprises (MSMEs) and large firms only began to increase in May, when the FOGAPE-COVID-19 programs were implemented (figure II.16, panel b).

Figure II.16

Stock of commercial loans by size and sales behavior
(change in annual growth rate relative to February 2020, percent)



(1) Sharp drop: growth of less than –20% (46% of total firms); Mild drop: growth between –20% and –1% (17% of total); No change: growth between –1% and 1% (3% of total); Mild increase: growth between 1% and 20% (13% of total); Sharp increase: growth over 20% (21% of total).
(2) Firm size defined based on total sales reported to the Chilean IRS on Form 29 between September 2018 and September 2019. MSMEs: annual sales of up to UF 100,000; Large: annual sales between UF 100, 000 and 1 million; Mega: annual sales of over UF 1 million.

Credit as a mitigator of adjustment margins for Chilean firms

Crossing tax and financial data shows that access to credit has been an important factor in allowing businesses that have seen their sales plummet to continue operating[4]/. The results reported in Albagli et al. (2020) show that firms that managed to get a loan in recent months had a lower probability of reporting zero sales in June and July of this year[5]/.

The results also indicate that in the past few months, access to credit has mitigated the contraction in investment. This result varies depending on the size of the firm, to the extent that access to credit does not appear to have affected investment by the largest companies during the pandemic. One possible interpretation is that this type of firm has fewer liquidity restrictions, such that access to credit at the margin has little influence on their investment decisions. A similar pattern is found for the smallest firms, although probably for different reasons. In this case, they may be using loans to ensure operational continuity, while reducing their investment regardless of the credit. For medium-sized firms, the evidence suggests that access to bank loans has helped mitigate the drop in investment.

Final reflections

Chilean firms have faced a major shock during the pandemic, as reflected in plummeting sales and an increase in firms reporting zero sales (because their sales have completely stopped). In line with the objective of the public policies that have been adopted, the evidence shows that bank credit has not only grown significantly, but has also reached the segment of businesses that has been hit the hardest by the pandemic. In these firms, the credit flow has contributed to mitigating the most negative effects, helping to maintain operational continuity and reducing the contraction of investment.

However, the evidence also shows that not all firms have had access to credit and that in many cases, operational continuity has been disrupted. While it is premature to determine whether this reflects a permanent decision, it is evident that the current situation will imply the closure of a large number of businesses. The size of this phenomenon will become clear over the coming months.

Going forward, the materialization of investments, productive adjustments in sectors that have been forced to make deep changes in their operations, and the increase in activity levels will require the continuation of this financing flow. It is therefore essential to ensure that the financial system's capitalization and liquidity levels do not deteriorate, due to regulatory changes and/or a more marked decline in the repayment capacity of households and businesses. If that were to happen, the financial sector would not be able to sustain the growth of credit, and it would begin to amplify the recession, as it has in the past.

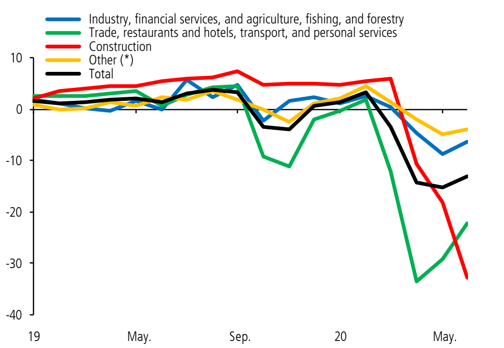
[4]/ Albagli et al. (2020) describe the methodology and results of the regressions underlying this analysis.

[5]/ These results are robust to various specifications and sample selections, including the exclusion of the restaurant and hotel sector, which has the largest share of businesses closed by public health order.

III. OUTPUT AND DEMAND

Figure III.1

Sectoral output
(annual change, percent)



(*) Includes fishing; electricity, gas, water, and waste management; mining; communications and information services; business services; housing and real estate services; and public administration. Source: Central Bank of Chile.

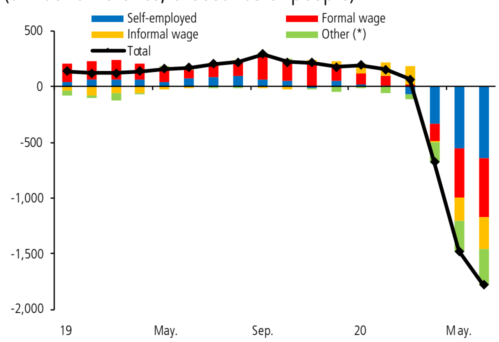
This chapter reviews the recent evolution of output and demand and their short-term outlook, in order to examine possible inflationary pressures.

After recording a sharp decline at the beginning of the second quarter, the Chilean economy has shown signs of stabilizing, with a mix of incipient recovery in some sectors and deterioration in others. However, the pandemic has had a very substantial negative impact on household and business income, which poses important risks for the economic recovery process. The evolution of the labor market will be particularly important, as its slack has increased significantly due to the loss of jobs and the reduction of labor income and hours worked, in addition to the high degree of inactivity. In the short term, consumption is expected to be bolstered by the various income-support measures, including the temporary effect of the withdrawal of a fraction of pension savings.

The economy contracted 14.1% in annual terms in the second quarter—the worst contraction in decades. The IMACEC index showed that the biggest (seasonally adjusted) contraction occurred in April (over 8% relative to the previous month). Recent data reveal that activity has stabilized somewhat, but performance varies by sector, in a context in which the pandemic forced the imposition of tighter containment measures in the second and part of the third quarter. On the one hand, sectors such as trade and some services have adapted fairly rapidly to the new operating conditions. One example is the shift from in-person to online sales. According to data from the National Chamber of Commerce, the latter grew over 40% annually in the second quarter. In this context, retail sales of durable and nondurable goods have shown signs of a recovery starting in May (INE). On the other hand, in sectors like financial services, personal services, some industrial lines, and agriculture, livestock, and forestry, the impact of the pandemic has been smaller than anticipated. This reflects the implementation of remote work, the increased coverage of online classes, and the fact that the production

Figure III.2

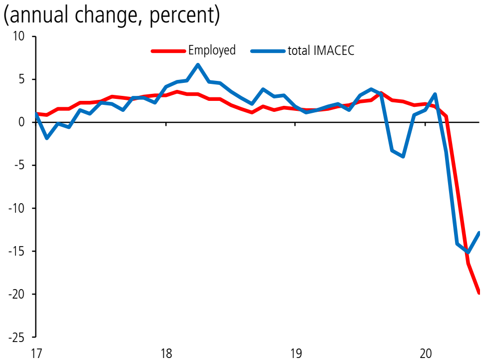
Employment by job category
(annual difference, thousands of people)



(*) Includes employers, domestic workers, and unpaid family workers.
Source: National Statistics Institute (INE).

Figure III.3

Output and employment
(annual change, percent)



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

of essential goods was not strongly affected. Mining production has sustained positive growth, especially copper and iron. In contrast, some sectors have been hit harder than projected, including construction. In this case, the imposition of quarantines has delayed a large number of projects, which should be reversed to the extent that the improvement in the public health situation allows lockdowns to be lifted and the measures announced to reactivate the sector are implemented (figure III.1). At the regional level, the people interviewed for the August Business Perceptions Report (BPR) revealed a more negative outlook in the north and center of the country, while expectations are more varied in the south.

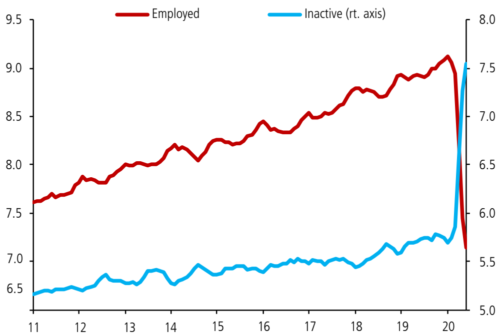
High-frequency indicators have also improved recently. Goods exports have maintained a stable performance throughout the year, in particular iron and copper shipments. In addition, some industrial lines saw a recovery in the second quarter, in particular food shipments to Asia. Imports have also been recovering at the margin, after bottoming out in May, including consumer goods—both durable and nondurable— and capital goods.

Beyond the behavior of output at the margin, second-quarter data indicate a strong contraction in demand, in particular private consumption. In particular, services consumption has collapsed, as social distancing measures have had a major impact on spending on restaurants, hotels, transport, health, and leisure activities. Both components of investment—construction other works; and machinery and equipment—fell sharply in the period, although there was a positive surprise in the latter component, mainly tied to the execution of projects in the energy sector. At the same time, inventories have been drawn down slightly, related to mining and industrial products.

Household spending has been strongly affected by the reduction of employment and labor income. In the rolling quarter ending in June, the annualized contraction of employment affected approximately 1.8 million jobs (INE). Of these, around 45% are wage jobs, —mainly formal—while about 36% correspond to self-employment. The latter has not been able to fulfill its traditional role as a shock-absorber during this recession, due to the restrictions on movement (figure III.2). By sector, the contraction has been generalized, though steeper in trade, construction, lodging and food service. The reduction in labor income continues to be reflected in the annual growth of nominal wages and in total hours worked (INE), both of which are around their all-time lows. At the same time, almost 70% of the people interviewed for the August BPR indicated that they had made wage cuts, through reductions in commissions and bonuses, overtime hours, and/or base wages.

Figure III.4

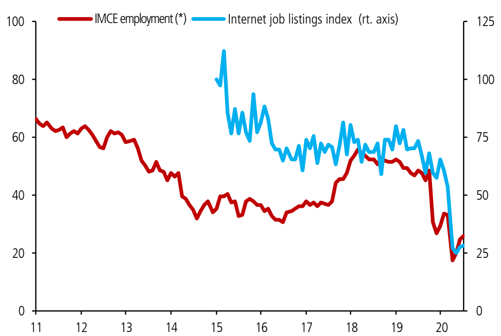
Employment and inactivity
(thousands of people)



Source: National Statistics institute (INE).

Figure III.5

Labor market outlook
(indexes)



(*) Simple avarerage of responses on employment expectations in three months (IMCE) in construction, trade, and industry. A value under (over) 50 indicate pessimism (optimism).
Sources: Central Bank of Chile and Icare.

In the third quarter, several measures have been approved that will significantly boost consumption in the short term, which has translated into a reduction in consumer pessimism. Business expectations have also improved, in particular in terms of future sales in the trade sector (IMCE). To the significant number of programs implemented by the government —direct support, subsidies, payment forbearance, and tax cuts—was added the recently approved withdrawal of a share of pension savings. With regard to the latter, as of the cutoff date of this Report, over 10.3 million people (93% of total system affiliates) had already applied for their withdrawal, and the amount accepted for processing had reached US$15.3 billion (76% of potential withdrawals; equivalent to 6% of 2019 GDP). The forecast scenario in this Report estimates that around half of the total withdrawals will destined for to consumption—skewed toward goods, especially imported—and that the effect will be temporary and mainly concentrated in the second half of 2020 (box II.1).

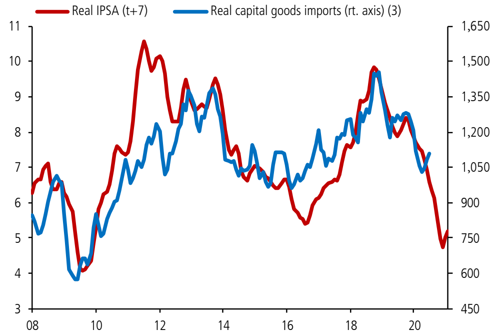
In the longer term, the evolution of consumption will be determined by the labor market's capacity to absorb the significant number of people who are currently without work (figure III.3). In the rolling quarter ending in June, the unemployment rate rose to 12.2% (versus 7.4% in the rolling quarter ending in January 2020). In the same period, inactivity grew from 5.7 million to 7.5 million people, and employment shrank by 1.8 million people (figure III.4). Broader unemployment indicators, which, for example, classify potentially active people as inactive workers [12]/, reveal even greater labor market slack.

The forecast scenario in this Report assumes that as the public health restrictions are relaxed, there should be a significant recovery in self-employment and in some sectors that can restart their activities more quickly. Nevertheless, there are important risks that could result in a slower jobs recovery. On the one hand, a survey of 760 firms across the country—included in the August BPR—revealed that the majority estimate that the jobs recovery will be slower or a lot slower than the output recovery. On the other, the same survey, as well as the opinions of the people interviewed for the BPR, signaled that businesses still need to make additional personnel adjustments and/or that social distancing will impede a return to operations with the same staff. There was even wide consensus that some fraction of the job losses would be permanent, especially in the services sectors. The forecast scenario also assumes that, in the short term, consumption would be more skewed toward goods—whose production and commercialization are relatively less labor intensive—than services. Another factor to take into account

[1]/ People outside the work force who were not actively looking for a job, but who were available to work; or who have found a job but have not yet started i, so they were not available to work

Figure III.6

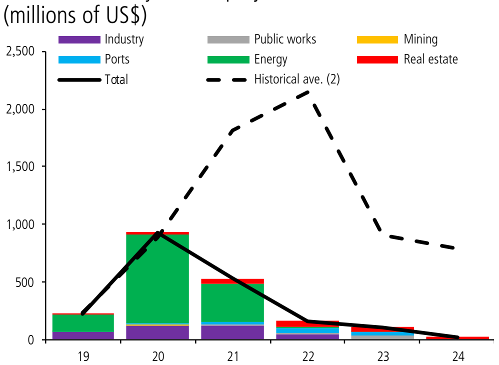
Capital goods imports and the IPSA (1) (2)
(thousands of 2013 US$; millions of 2013 US$)



(1) Quarterly rolling averages.
(2) Series deflated by the capital goods export price index, with base year 2013=100. Spliced with the base year 2008=100 series using annual changes. For July 2020, the value for the second quarter of 2020 is used.
(3) Excludes other transport vehicules.
Sources: Central Bank of Chile and Bloomberg.

Figure III.7

Investment: entry of new projects (1)
(millions of US$)



(1) New projects (amount) relative to the last survey.
(2) 2009–2020 average.
Source: CDTBC investment survey for second quarter of 2020.

is how they will reincorporate workers who were under the Job Protection Law, which affected nearly 723,000 people as of the cutoff of this Report. Finally, the Internet job listings index (CBC) and business expectations on hiring (IMCE) remain low from a historical perspective, despite a recent uptick (figure III.5). Although consumer expectations improved somewhat at the margin, they remain at markedly pessimistic levels (IPEC).

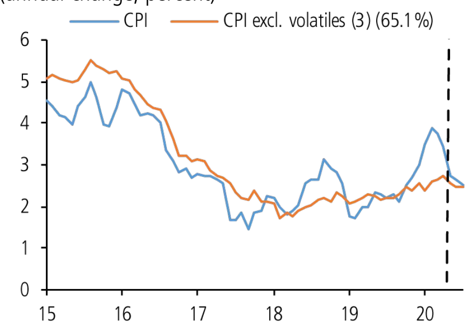
The investment outlook has improved at the margin since the last Report, due to the incorporation of some projects tied to the energy sector and the announcements of public investment and reactivation measures for 2020–22. In the machinery and equipment component, the increase in capital goods imports in recent months is associated with the aforementioned initiatives in the energy sector. The evolution of other fundamentals, such as the real exchange rate and the local stock market, as yet do not suggest a relevant recovery of the tradable component of investment in the coming months (figure III.6). In the case of construction and works, the public investment plan announced a few weeks ago will imply a bigger stimulus than previously projected. This will involve approximately US$34 billion in the 2020–22 period and will be centered on public road works, infrastructure, transport, housing, and hydro projects. It will also expedite private investment, concessions, and tenders. The survey by the Capital Goods Technology Development Corporation (CGTDC) for the second quarter of 2020 reported rescheduling over the coming years, together with a very low entry of new projects—well under the historical average (figure III.7). The real estate sector remains weak, according to new home sales in Greater Santiago and the July report by the Chilean Chamber of Construction (CChC). Business expectations for construction remain in pessimistic territory (IMCE and CChC).

IV. PRICES AND COSTS

This chapter analyzes the recent evolution of the main components of inflation and costs, identifying the current sources of inflationary pressure and their likely evolution in the future.

Figure IV.1

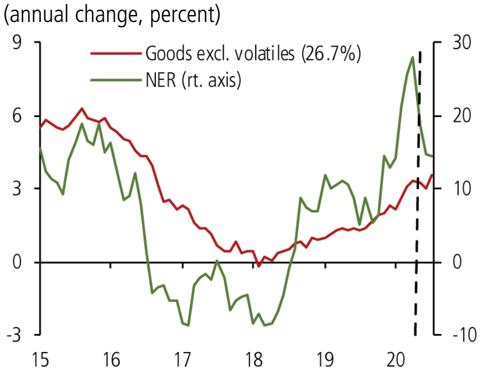
Inflation indicators (1) (2)
(annual change, percent)



(1) Vertical dotted line marks the cutoff date of the June 2020 Report. (2) In parentheses: the share in the total CPI basket. (3) For more details, see the December 2019 Report (box IV.1) and Carlomagno and Sansone (2019).
Sources: Central Bank of Chile and National Statistics Institute (INE).

Figure IV.2

Core goods inflation and nominal exchange rate (1) (2) (3)
(annual change, percent)



(1) Vertical dotted line marks the cutoff date of the June 2020 Report. (2) In parentheses: the share in the total CPI basket. (3) For more details, see the December 2019 Report (box IV.1) and Carlomagno and Sansone (2019).
Sources: Central Bank of Chile and National Statistics Institute (INE).

Over the past few months, monthly inflation has remained low, as have medium-term inflationary pressures. At the margin, the risks to the downside have declined. The data indicate a somewhat larger-than-expected increase in goods inflation, in a context in which output has shown signs of stabilizing in recent months, after falling sharply at the start of the second quarter. Additionally, the effects of the government support programs and the pension savings withdrawal will provide a boost to consumption in the short term. In the opposite direction, the labor market has undergone a deep deterioration, and while the forecast scenario assumes a substantial economic recovery in the second half of the year, the output gap will take longer to close. Given these trends, annual inflation will converge to 3% in 2022, and, in the short term, will not drop below 2%.

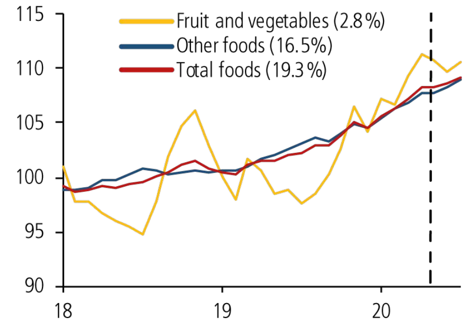
Inflation[1]/

Relative to the last Monetary Policy Report, headline inflation has continued to fall, albeit more slowly than a than at the start of the year. Core inflation—measured as the CPI excluding volatile items[2]/ —did not change significantly. Between May and July, headline inflation was null, falling in annual terms from 2.8% in May to 2.5% in July and thus continuing the downward trend observed since March. Annual core inflation fell slightly at the margin, from 2.6 to 2.5% in the same period (figure IV.1). As seen at the time of the June Report, the inflation trend was determined by lower fuel and services prices, which were partially offset by goods and food. In this period, inflation was slightly above the forecast in the June Report.

[1]/ Unless otherwise indicated, the inflation series and components use the new indexes with base year 2018=100, so they may not be strictly comparable with earlier data.
[2]/ The methodology used to build this indicator is described in the December 2019 Monetary Policy Report (box IV.1) and Carlomagno and Sansone (2019).

Figure IV.3

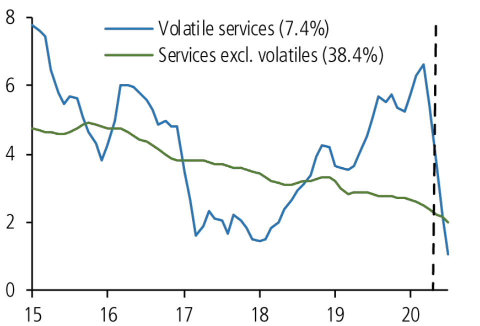
Food CPI (1) (2)
(fixed-base index: 2018=100)



(1) Vertical dotted line marks the cutoff date of the June Report. (2) In parentheses: the share in the total CPI basket.
Sources: Central Bank of Chile and National Statistics Institute (INE).

Figure IV.4

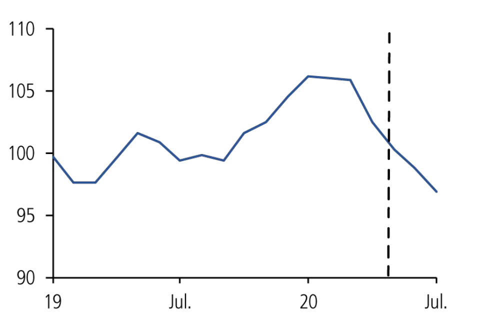
Services inflation (1) (2) (3) (4)
(annual change, percent)



(1) Three-month rolling average. (2) Vertical dotted line marks the cutoff date of the June 2020 Report. (2) In parentheses: the share in the total CPI basket. (3) For more details, see the December 2019 Report (box IV.1) and Carlomagno and Sansone (2019).
Sources: Central Bank of Chile and National Statistics Institute.

Figure IV.5

Fuel CPI (*)
(fixed-base index: 2018=100)



(*) Vertical dotted line marks the cutoff date of the June 2020 Report.
Source: National Statistics Institute.

Goods inflation rose between May and July, mainly due to the increase in the core component. Thus, annual inflation in this part of the goods CPI rose to 3.6% in July (3.2% in May) (figure IV.2). In this period, products related to household furnishings and supplies, in particular, recorded higher prices. According to information collected in the August Business Perceptions Report (BPR), a percentage of these increases appears to be tied to exchange rate pass-through by import firms.

Food prices have continued to rise, although the trend is less generalized than in the June Report. Between May and July, fruit and vegetable prices recorded slightly negative monthly inflation, after the increases cited in the last Report. On aggregate, annual food inflation rose to 6.8% in July (6.6% in May) (figure IV.3). This occurred in a context in which global prices remained low relative to the start of the year. The FAO Food Price Index has risen somewhat from the trough recorded in May, such that the index's negative annual rates went from –6.5% in May to –1.9% in July.

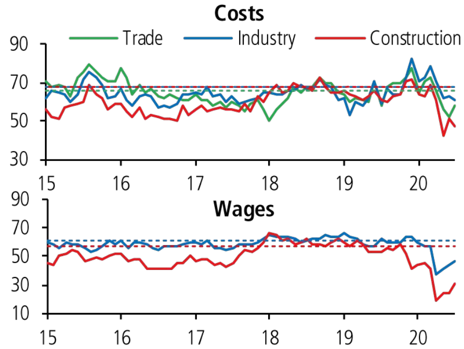
Services inflation continued to decline, in the midst of extensive capacity gap. Core services recorded null inflation between May and July, falling in annual terms to 1.7% in July (2.1% in May) (figure IV.4). According to a supplement published by the INE in conjunction with the July CPI[3]/, the percentage of imputed data—due to the difficulty of collecting data in connection with the pandemic-related restrictions on mobility—decreased in June and July relative to April and May, although it is still higher than usual. As in previous months, in July the categories with the largest share of imputations were Recreation and culture and Restaurants and hotels. Also as in previous months, the last-observation-carried-forward method continues to be applied to some services, such as air transport and recreation

Fuel inflation remained negative, mainly explained by the drop in gasoline prices. The lows recorded in the international market in April have gradually passed through to local prices over the last three months, in accordance with the application of the Fuel Price Stabilization Mechanism (MEPCO). Thus, annual CPI fuel inflation was –2.5% in July (–1.3% in May) (figure IV.5).

[3]/ For more details, see INE, "Índice de precios al consumidor: Contingencia COVID-19," July 2020.

Figure IV.6

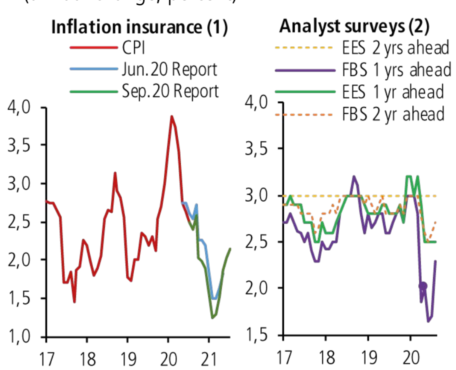
IMCE: Cost and wage expectations (1) (2) (3)
(diffusion index)



(1) A value over (under) 50 indicates expectations of growth (contraction). (2) Horizontal dotted lines mark the historical average from January 2004 to July 2020 for each series. (3) Cost expectations are three months ahead; wage expectations, six months ahead. Source: Icare/Universidad Adolfo Ibañez.

Figure IV.7

Inflation expectations
(annual change, percent)



(1) The June and September 2020 Reports use the average of the last ten business days through 10-Jun-2020 and 26-Aug-2020, respectively.
(2) The FBS is for the first half of each month through January 2018. From February 2018 on, the data are from the last survey published in the month, including the survey published on 27-Aug-2020. In months when the survey is not published, the last available survey is used.
Sources: Central Bank of Chile and National Statistics Institute.

Cost pressures have not changed substantially since the June Report. The exchange rate has fluctuated over the past few months and is currently a little higher than in June (+0.6% relative to the cutoff of the last Report), easing the pressures deriving from this source. In July, business expectations (IMCE) for the evolution of costs over the next three months had not changed significantly relative to previous months and remain below the historical average (figure IV.6).

Labor costs continued to fall, in the context of the labor market deterioration. In the August BPR, the majority of the firms surveyed reported having to cut wages, via lower commissions and bonuses, and/or reduce overtime hours and base wages. Wage indicators published by the INE—the wage index (WI) and the labor cost index (LCO)—reveal slight growth in June, after contracting in April and May. This has implied that, in nominal terms, annual wage growth rates remain around the historical low. The INE published a technical note indicating that the data continue to be affected by the pandemic, although June saw an improvement in the survey response rate in comparison with April and May[4]/. IMCE expectations on the evolution of wages in the next six months have risen somewhat, but they remain in contractionary territory, at historically low levels.

Inflation outlook

Market inflation expectations continue to incorporate the low outlook. Two years ahead, expectations are similar to the cutoff of the June Report. Expectations contained in inflation insurance put inflation at 2.2% in one year (1.8% in June). For December 2020, the median of the Economic Expectations Survey (EES) declined to 2.1% in August (2.4% in June). One year ahead, the EES held at 2.5%, while the median of the Financial Brokers Survey (FBS) for the first half of August rose to 2.3% (1.9% in June). Two years ahead, median expectations in the EES and FBS have not changed substantially, at 3.0 and 2.7%, respectively (figure IV.7).

In the forecast scenario, annual inflation will converge to 3% in 2022 and, in the short term, will not drop below 2%. The trajectory for the coming months is somewhat higher than the June forecast, largely due to greater private consumption than projected.

[4]/ For more details, see INE, "Encuesta mensual de remuneraciones y costo de la mano de obra: Contingencia COVID-19," Technical Note N°2, August 2020.

The inflation forecast for this year has been revised upward, to 2.4% in December of this year (2.0% in the June Report). However, in the medium term, the slow closing of the output gap continues to dominate the inflation outlook over the policy horizon, such that inflation will not converge to the target before 2022. Core inflation will stay above 2.5% in the short term before gradually converging to 3%, also in 2022.

V. FUTURE EVOLUTION OF MONETARY POLICY

This chapter presents the most likely trajectory of monetary policy over the next two years, based on the Board's assessment of the dynamics projected for inflation in the policy horizon, with the information at hand at the close of this Report. It also describes sensitivity scenarios and explains how the policy response could change in such cases.

In the most likely macroeconomic scenario, meeting the inflation target requires that monetary policy remains highly expansionary. This assumes that the capacity gaps will close and inflation will converge to 3% only by 2022. It is assumed that the economy will begin to recover in the second half of this year, consistent with the gradual withdrawal of sanitary control measures, the boost coming from the initiatives that have been adopted to mitigate the impact on business and household income, and credit continues to flow to meet the financing needs for working capital and investment. Still, the levels of uncertainty remain high. While the Board is on the lookout for changes in the macroeconomic scenario that may require some adjustment to its policies.

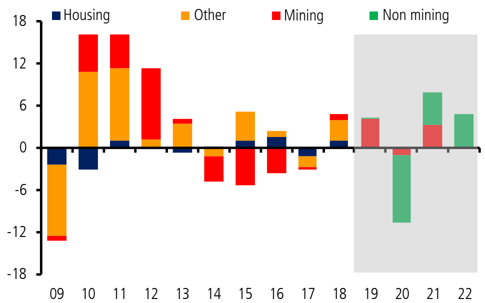
PROJECTIONS FOR DOMESTIC DEMAND AND ACTIVITY

The projections in this Report foresee that in the third quarter the economy is beginning a gradual process of recovery, with positive quarterly expansion rates starting from this period. However, this year activity will contract between 4.5% and 5.5% annually. This assumes that deconfinement will continue to advance gradually nationwide and that the various income support measures will have a significant effect on consumption in the second half of the year. In any case, the uncertainty surrounding the short-term impact of the pandemic, its containment measures and the effect of household income support programs, implies that the GDP growth range for this year is wider than its usual width[1].

The evolution of activity will be determined by progress in the control of the pandemic and the ability of businesses and households to overcome its adverse effects. This projection assumes that the sectors where social interaction is most relevant will continue to be affected as long as there is no vaccine, so it will take several quarters for their activity to return to pre-pandemic levels. At the same time, it is considered that both companies and individuals will be able to recover their income levels, as long as activity recovers, a process in which the support of monetary policy will be key. Greater control of the pandemic elsewhere in the world will also allow the external impulse to improve next year with respect to 2020. For 2021 and 2022 GDP is forecast to grow in the 4.0%–5.0% and 3.0–4.0% ranges, respectively.

Figure V.1

Real annual contribution to GFCF (*)
(percentage points)



(*) Housing investment uses household investment data from National Accounts by Institutional Sector. The Other GFCF component is treated as a residue. Forecasts for the years 2019, 2020, 2021 and 2022 are made using forecasting models of the Central Bank of Chile and sectoral sources, such as investment plans and the CBC survey.
Source: Central Bank of Chile.

Compared with the June forecasts, the milder contraction estimated for 2020 is explained by the economy being not so weak as expected in the second quarter and which, furthermore, is expected to have a more favorable behavior of spending in the second half. This reflects build-up of stimulus measures that have been added in the last few months, including the withdrawal of part of pension savings, a strong increase in the fiscal deficit, and unconventional monetary policy actions. These effects are being partly offset by the extension of quarantines, relative to the forecast in June, in some zones of the country, particularly the Metropolitan Region.

On the expenditure side, after contracting by 4.2% this year, total consumption will return to positive rates of expansion in 2021 and 2022, in line with the recovery of employment and household income. Our short-term forecast is improved due to the withdrawal of part of the pension savings and increased fiscal transfers. The recovery of economic growth is projected to be coupled with an increase in employment levels. In the immediate future, as the tighter sanitary measures are lifted, employment in sectors such as construction and retail is expected to show a significant upturn, and so is self-employment. However, employment in general will take longer than activity to match its pre-pandemic levels, because of the already mentioned effect of social distancing on the operation of some of the more labor-intensive sectors. Moreover, in the short term, the expected recovery in consumption would be more inclined toward imported goods—whose production and marketing are less labor-intensive—than toward services.

[1]/ Normally, in every September's Monetary Policy Report the forecast range for the current year has a width of 0.5 percentage points.

The projection scenario assumes that after increasing 6.8% in 2021, in 2022 total consumption will reduce its expansion to 1.7%, considering that the transitory stimulus to household spending provided by the various income support measures will have dissipated and that 2021 will leave a higher basis for comparison.

Anyway, the consumption trajectory considers two effects operating in opposite directions. On one hand, the group of individuals whose income has been eroded by the pandemic—and who have needed to borrow and/or deplete their savings to cope during these months— will probably take longer to go back to their usual consumption patterns. On the other hand, those whose income has been spared, but have put aside their consumption decisions due to the sanitary measures, could return to their usual spending patterns sooner as measures are relaxed.

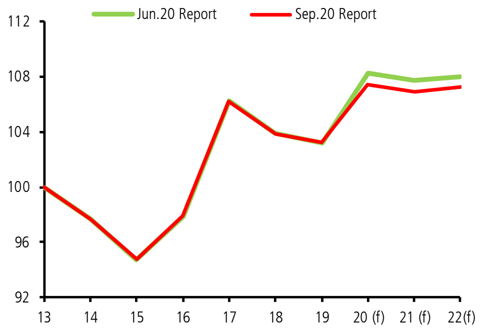
Gross fixed capital formation (GFCF), particularly its construction and other works component, will start recovering as quarantines are lifted and investment projects shelved this year are resumed, according to the CBC Survey of the second quarter of this year. The highly expansionary monetary policy stance, the increase in public investment and the reactivation measures announced by the Government will also sustain its recovery. Non-mining investment will increase next year, but it will be less dynamic than was expected before the pandemic, given the corporate indebtedness that has been necessary to cover the cash deficits of recent quarters (figure V.1). Considering all of the above, this Report assumes that GFCF will contract 10.6% annually in 2020, to then grow 8% annually in 2021 and 4.9% in 2022.

Forecasts in this Report assume that this year and next the Treasury will provide a significant boost to the economy, consistent with the various measures adopted. Overall, it is assumed that this boost will decline as the economy converges to its trend growth rates and the fiscal consolidation process announced by the Government is launched.

Contrary to our June Report's forecasts for this year and next, the current account is expected to post a deficit. This considers that the various measures to sustain household income will alleviate the liquidity problems identified in June. Added to it is a somewhat lower than foreseen deterioration in investment and somewhat better prospects for recovery. All this significantly reduces domestic savings compared to June estimates. Thus, for this year the current account is expected to post a deficit of 1.4% of GDP (a 0.8% surplus in June), increasing to 2.5% in 2021 (-0.7% in June). For its part, and consistent with an adjustment of the current account that responds more to quantities than to prices, the estimated current

Figure V.2

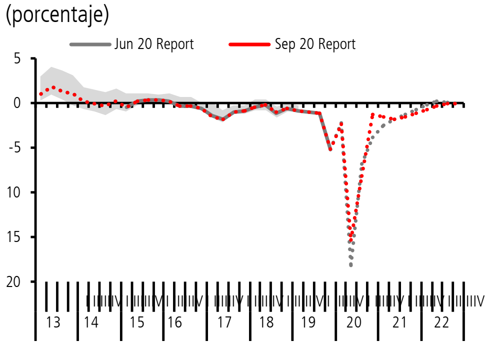
Terms of trade
(index, 2013=100)



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

Figure V.3

Activity gap (1) (2) (3)
(porcentaje)



(1) Gray area shows minimum and maximum ranges for gap estimates, using different potential GDP estimation methods (trivariate, multivariate, HP, SVAR, MEP and SSA methods). See Fornero and Zúñiga (2017). (2) Dotted lines show forecast. (3) The calculation of the gap in June Report, derived from the MSEP model, considered an annual growth for potential non-mining GDP of -1.7%, -0.2% and 1.9% for 2020, 2021 and 2022, respectively. For this Report, the productivity inference of the XMAS model is used, so it contemplates a projection for potential GDP of -1.2%, 0.2% and 2.1%, respectively. For more details see Central Bank of Chile (2020), Use of Macroeconomic Models.
Source: Banco Central de Chile.

account deficit at trend prices[2]/ also sees an important revision, rising to 3.5% and 4.6% of GDP in 2020 and 2021, respectively (-1 and -2.4% of GDP in June).

PROJECTIONS OF THE INTERNATIONAL SCENARIO

Global growth prospects continue to suggest that, after the sharp contraction in activity this year, expansion rates above the averages of the past ten years will resume in 2021 and 2022. This outlook is slightly more favorable than was estimated a few months ago, mainly due to the better expected performance of the Eurozone and China. This is mainly due to the greater stimulus provided by the authorities, in addition to the relative success in the pandemic control in the European bloc—even considering the acceleration of contagion of recent weeks—and the better than expected performance of China in the second quarter. This contrasts with Latin America, where the sanitary situation remains particularly complex, even though many of these countries have maintained strict restrictions on mobility for a long time. Chile's trading partners are projected to have a GDP contraction of 3.5% this year and an expansion of 4.7% in 2021 (-3.6% and 4.2% in June, respectively). For 2022, projections remain at 4.5% growth. External financial conditions will remain favorable, in line with a still expansionary global monetary policy according to announcements by the different authorities, and with the recovery of the world economy.

The terms of trade will be better than in previous years (figure V.2), assuming that in the period 2020-2022, the prices of copper and oil will average US$2.8 per pound and US$46 per barrel (Brent-WTI average), respectively. Both prices are projected to be higher than estimated in June (US$2.65 and US$43), in line with the effective increases of recent months and the prospects of a somewhat faster recovery of the world economy.

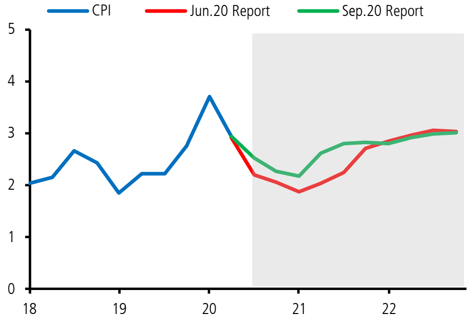
CAPACITY GAPS AND CONVERGENCE OF INFLATION TO THE TARGET

Normally once a year we recalculate the structural parameters that are used to evaluate the state of the economy. On this occasion, given the magnitude of the pandemic's shock and the high uncertainty

[2]/ This measure adjusts the value of mining exports and fuel imports considering deviations in the prices of copper and oil from their long-term values. The same applies to income and transfers associated with copper exports. Other exports and imports are valued using current prices. In addition, it does not correct possible changes in the quantities exported or imported due to movements in copper and oil prices. The calculation uses long-term prices of US$2.7 per pound of copper and US $70 per barrel of oil (see box V.2 in the September 2012 Report, and box V.1 in the December 2015 Report.

Figure V.4

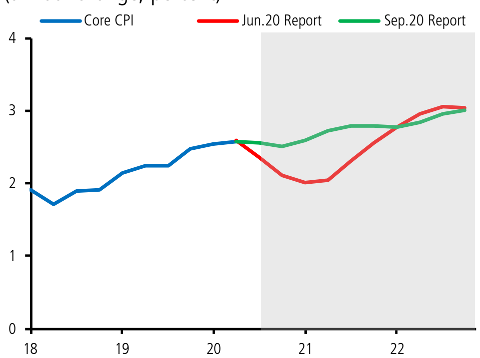
CPI inflation forecast (1) (2)
(annual change, percent)



(1) (1) For 2018, the annual variation of CPI is obtained by splicing the 2013=100 series with the monthly variations of the 2018=100 basket starting in February 2018. See box IV.1, March 2019 Report.
Sources: Central Bank of Chile and National Statistics Institute (INE).

Figure V.5

Core CPI inflation forecast (1) (2)
(annual change, percent)



(1) For 2018, the annual variation of CPI is obtained by splicing the 2013=100 series with the monthly variations of the 2018=100 basket starting in February 2018. See box IV.1, March 2019 Report. Central de Chile e Instituto Nacional de Estadísticas.
Sources: Central Bank of Chile and National Statistics Institute (INE).

surrounding its impacts make it necessary to postpone such updating, pending the accumulation of more information that would allow for a comprehensive assessment of them, including medium- to long-term trend growth and the neutral level for the monetary policy interest rate (MPR). As for the MPR's technical minimum, considering the information available, it is still estimated at 0.5%.

As for short-term potential growth, notwithstanding the aforementioned uncertainty, it can be anticipated that it has declined, a result that factors in the set of shocks that have affected the economy since the fourth quarter of 2019. Although the supply-side disruptions generated by the social crisis were transitory, the greater uncertainty surrounding its evolution plus the constitutional discussion caused a significant drop in investment forecasts for 2020 and 2021. This led to a reduction in the potential GDP growth estimation for both years to 1.4% and 1.9% respectively in the December 2019 Report (around 3.4% for both years in the September 2019 Report).

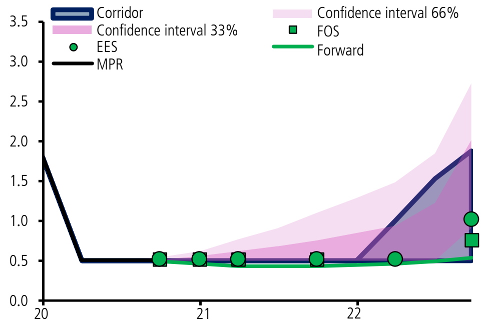
This year, productivity has again been affected by supply constraints associated with the pandemic control measures. Thus, already by June, the estimated potential growth for this year was in the negative. This, considering the most persistent effects of the economic crisis, such as some companies going bankrupt and employment and investment being gradually reallocated among sectors. This, in addition to the necessary adjustments to comply with the sanitary protocols in face-to-face work and the fact that distancing measures will remain in place for as long as there is no vaccine, affecting more intensely the activity of those businesses that rely the most on social interaction. In this Report, the annual variation of potential GDP is estimated to be around -1.2% in 2020 and 0.2% in 2021.

The revision to potential GDP results in a somewhat narrower activity gap than that considered up until June, although quite wide compared to any recent episode, because of the sharp drop in activity in the second quarter. Going forward, it is expected that the gap will close significantly in the second half of 2020, as confinements are relaxed and driven by the temporary boost in consumption resulting from the withdrawal of pension savings, as well as increased fiscal transfers. However, the activity gap is expected to remain open until the turn of 2022 (figure V.3).

Labor market gaps have widened significantly. Indicators reveal 1.8 million lost jobs comparing both salaried and self-employment in June 2020 and June 2019. All this has translated into increased inactivity (i.e. persons that were not looking for a job but were available for work) from 5.7 to 7.5 million between January and June (a little more

Figure V.6

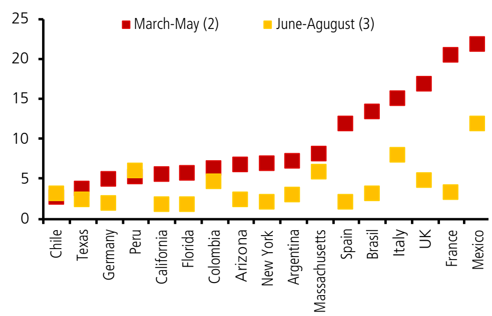
MPR corridor (*)
(percent)



(*) The corridor is built following the methodology of Box V.1 of the March 2020 Report. It includes the FOS of August 27th, the EES of August and the Forward curve derived from 10-day average of financial assets at statistical closing.
Source: Central Bank of Chile.

Figure v.7

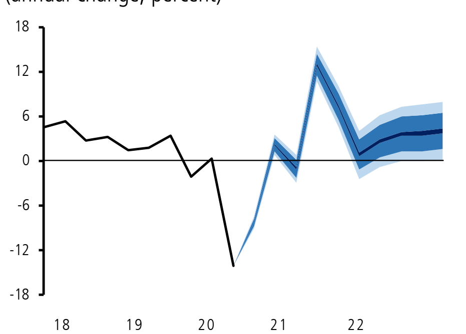
Mortality rate (1)
(percentage)



(1) The lethality is calculated on cases and deaths detected by examinations. (2) Division between the accumulated deaths from the first registered death to May 31st and from the first registered case to May 16th. (3) Division between the deaths accumulated between May 31st and August 25th and the cases between May 16th (3) Division between the deaths accumulated between May 31st and August 25th and the cases between May 16th and August 10th.
Source: Central Bank based on information from Our World in Data, The Covid Tracking Project and the Ministry of Science, Technology, Knowledge and Innovation.

Figure v.7

Quarterly GDP growth scenarios (*)
(annual change, percent)



(*) The figure shows confidence interval of baseline projection over the respective horizon (colored area). Confidence intervals of 10%, 70% and 90% around the baseline scenario are included. Confidence intervals are built based on the RMSE of averaged XMAS-MEP models from 2009 to 2017. Also, the intervals contain the risk evaluation on growth performed by the Board.
Source: Central Bank of Chile.

than 30% annually). Add to this the fall in labor income due to shorter working days or adjustments in different components of remunerations

The evolution of inflation has been heavily influenced by the downward pressures resulting from the slowdown in domestic demand. These have been partly buffered by upward pressures from declining potential growth. In the short term, a somewhat faster convergence towards the target is expected due to the aforementioned boost in consumption (Figures V.4 and V.5). After that, falling household and business incomes, coupled with prospects for a recovery of the economy and the closing of gaps that will take a long time to be completed, continue to dominate the inflation outlook over the policy horizon.

MONETARY POLICY STRATEGY

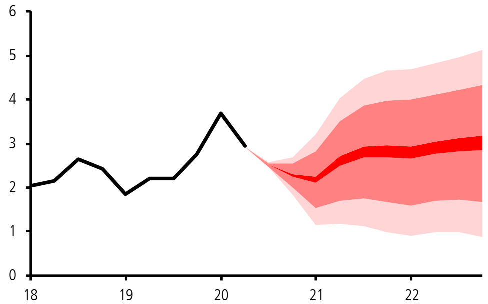
The Board has held the MPR at 0.5% since March and has continued to implement several unconventional measures to lend support to credit and liquidity, within a context where the process of closing the capacity gaps and the convergence of inflation to the target will materialize no sooner than 2022. Moreover, the Board has stated that it will continue to maintain a highly expansionary monetary policy stance and will remain vigilant to avert risks to financial stability.

As always, there are sensitivity scenarios, where the evolution of the macroeconomic situation could call for adjustments to the monetary impulse, as is derived from the MPR corridor[3]/ (Figure 6). On the one hand, the scars that the pandemic will leave will condition the recovery of the activity going forward. The projections recognize that social distancing will alter —for a longer period— the operation of businesses where human interaction is key. However, stronger than expected effects of the pandemic on these sectors cannot be ruled out. Moreover, the impacts of the pandemic on the operation of the various economic sectors could trigger an intra- and inter-sectoral reallocation of resources. In the labor market, this process could take some time, given the greater uncertainty, a different configuration of work modalities and organization, and mismatches between demand for and supply of competencies. Another factor is the cost in human capital of high inactivity and company closures. A slower recovery of the labor market could lead to a more prolonged weakness in demand, negatively affecting growth and inflation's convergence, requiring a greater than anticipated monetary impulse.

[3]/For details, see Box V.1 in Monetary Policy Report, March 2020.

Figure V.9

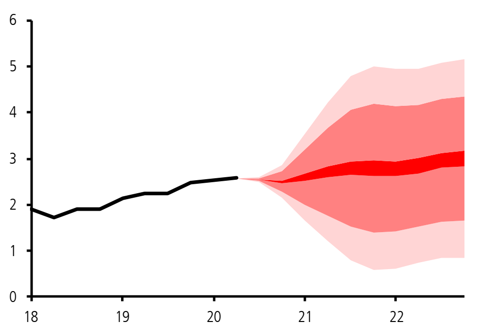
CPI inflation forecast (*)
(annual change, percent)



(*) The figure shows confidence interval of baseline projection over the respective horizon (colored area). Confidence intervals of 10%, 70% and 90% around the baseline scenario are included. Confidence intervals are built based on the RMSE of averaged XMAS-MEP models from 2009 to 2017. Also, the intervals contain the risk evaluation on inflation performed by the Board. For 2018, the annual variation of CPI is obtained by splicing the 2013=100 series with the monthly variations of the 2018=100 basket starting in February 2018. See box IV.1, March 2019 Report.
Sources: Central Bank of Chile and National Statistics Institute (INE).

Figure V.10

Core CPI inflation forecast (*)
(annual change, percent)



(*) The figure shows confidence interval of baseline projection over the respective horizon (colored area). Confidence intervals of 10%, 70% and 90% around the baseline scenario are included. Confidence intervals are built based on the RMSE of averaged XMAS-MEP models from 2009 to 2017. Also, the intervals contain the risk evaluation on inflation performed by the Board. For 2018, the annual variation of CPI is obtained by splicing the 2013=100 series with the monthly variations of the 2018=100 basket starting in February 2018. See box IV.1, March 2019 Report. This Core CPI Report refers to CPI without Volatiles.
Sources: Central Bank of Chile and National Statistics Institute (INE).

On the other hand, the accumulated experience, the prevention measures and the reinforcement of the healthcare systems reduce the probability of repeating the most critical episodes of the pandemic in case of virus outbreaks. Indeed, the mortality of the virus has declined in most countries (Figure V.7). This could lead the ongoing deconfinement to proceed at a somewhat greater speed, allowing activity and employment to recover more quickly, and limiting the need for product adaptation and reconversion. This could be boosted by the prompt discovery of a vaccine, in view of the series of investigations underway. In this context, a somewhat lesser monetary impulse would be required to ensure the convergence of inflation. Considering these scenarios, the Board estimates that the risk balance for both activity and inflation is unbiased (figures V.8, V.9 and V.10).

More negative risk scenarios, especially associated with the economic scars the pandemic is leaving, are still possible. These would push GDP growth away from the projection ranges, inducing policy decisions that are materially different from those outlined above, to ensure inflation's convergence to the target and sustain financial stability. The measures implemented by the monetary and fiscal authorities have allowed for maintaining a flow of credit in line with working and investment capital needs, breaking down the pro-cyclical relationship of credit. However, the growth in bank lending has lost some strength in recent weeks. It is not evident whether this responds to demand or supply factors; for example, because the reopening of some businesses has allowed them to regain their income flows or because of a greater perception of risk, respectively. In the near future, the materialization of investments, the productive adjustments in some sectors where the sanitary emergency has demanded deep changes in their operation, and increases in the levels of activity, will require financing. For this reason, it is essential to ensure a sustained flow of credit, ensuring that the financial system does not see its capitalization and liquidity levels deteriorate, whether due to regulatory changes and/or a sharper deterioration in the repayment capacity of households and businesses. If such a situation were to occur, the financial sector might be unable to sustain aggregate credit growth, becoming an amplifier of the recession as it has been on previous occasions.

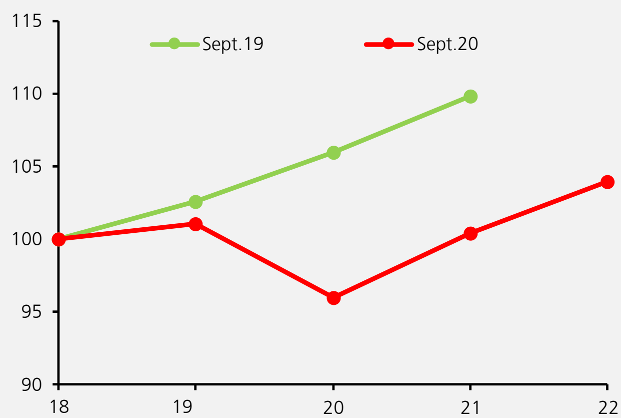
The Board is committed to maintain the strong monetary impulse for an extended period of time and to increase it if it deems it is necessary for the achievement of its objectives of controlling inflation, as well as taking the measures to safeguard financial stability.

Box V.1: **Changes in the baseline forecast scenario in the last year**

In the past year, the macroeconomic scenario changed drastically. In September 2019, the Chilean economy was projected to grow on the order of 6.4 percentage points (pp) between 2020 and 2022; currently, the forecast is for the economy to recover the level of the third quarter of 2019 around 2022 (figure V.11). This box describes the factors behind this drastic change, the effects on inflation convergence, and the monetary policy reaction.

Figure V.11

GDP forecasts in each Monetary Policy Report
(base year 2018=100)



Source: Central Bank of Chile.

The first significant impact on the economy's performance occurred after the events of 18 October 2019. The social crisis brought with it countless acts of violence that affected the normal functioning of the country and implied an important reduction in economic activity in October and November. As a result, the year closed with annual GDP growth of 1.1%, far lower than expected in September 2019 (between 2.25 and 2.75%). More importantly, the increase in uncertainty triggered a significant drop in planned investment. Thus, the GFCF forecast went from annual growth of 4% in 2020 in the September Monetary Policy Report to a contraction of the same magnitude in the December Report. GDP growth was cut to a range of 0.5 to 1.5% (table V.1).

Table V.1

Economic growth and current account for 2020

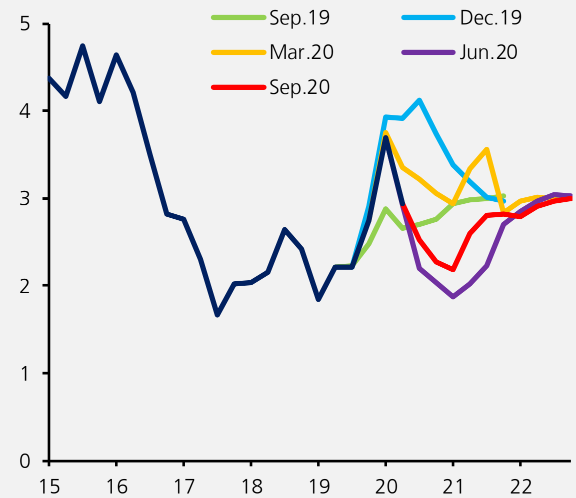
	Sep. 19	Dec. 19	Mar. 20	Jun. 20	Sep. 20
	(annual change. percent)				
GDP	2.75 - 3.75	0.5 - 1.5	-2.5 / -1.5	-7.5 / -5.5	-5.5 / -4.5
Domestic demand	3.5	-1.6	-5.8	-10.4	-7.1
Domestic demand (excl. inventory change)	3.3	0.0	-3.3	-6.8	-5.6
Total consumption	3.1	1.1	-1.9	-4.2	-4.2
Gross fixed capital formation	4.0	-4.0	-8 .2	-15.9	-10.6
	(percent of GDP)				
Current account	-3.1	-0.2	0.3	0.8	-1.4

Source: Central Bank of Chie.

While the economy clearly weakened in late 2019, the implications for inflation were not obvious. On the one hand, there was a widening of the output gap; on the other, the significant peso depreciation after 18 October had an important effect on inflation. Taking both factors into account, it was projected that annual CPI inflation would approach 4% in mid-2020, to then gradually descend to the target (figure V.12). This was consistent with the fact that the idiosyncratic nature of the peso depreciation pointed to a higher degree of pass-through to prices. Moreover, the possibility of more persistent effects could not be ruled out, since uncertainty remained high and the financial markets had been stressed by sharp price movements. The peso had risen more than could be explained by country risk alone. In response, the Board adopted various measures to improve liquidity in pesos and dollars and decided to intervene in the foreign exchange market to reduce the high volatility of the exchange rate and support the adequate adjustment of the economy. Thus, considering the opposing forces on inflation and the need to maintain consistency between the exchange intervention and the degree of monetary accommodation, the Board held the MPR at 1.75% after the October events.

Figure V.12

Inflation forecast in each Monetary Policy Report
(annual change, percent)



Source: Central Bank of Chile

Between December 2019 and February 2020, output recovered faster than projected, in a context in which the wave of violence subsided considerably. However, in the final days of 2019 and the first weeks of 2020, word began to spread on the appearance of COVID-19 in China. Initially, concerns focused on the impact on world trade. Fears grew as the virus expanded to other continents and hospitals were overwhelmed in some European countries. The financial markets reacted sharply, with volatility spiking to historical levels. Many countries began to order the suspension of activity and the lockdown of cities to slow the contagion of COVID-19. Authorities around the world began to increase their fiscal and monetary stimulus measures, while also adopting a series of unprecedented measures aimed at protecting solvent firms from a crisis without parallel in recent world history. Although this set of measures managed to calm the markets after a few weeks, economic forecasts began to anticipate the largest recession in decades.

In Chile, the first case of COVID-19 occurred in March. By the middle of that month, the country entered phase four of the pandemic and decreed a series of public health measures that limited the normal course of economic, including the closure of borders, the suspension of classes, and the restriction of all activities involving a high degree of personal interaction. Toward the end of March, a number of neighborhoods were put into quarantine. The March Report captured these developments, reducing the GDP growth range for 2020 by around 3 pp. As the weeks passed, contagion spread geographically, as did the stricter containment measures. The peak of the pandemic was recorded in the first half of June, when the test positivity rate exceeded 33%. In June and July, more than 50% of the population was subject to quarantine. Given the long duration of these lockdowns and the preliminary evidence on their economic effects, the June Report again downgraded the output and demand forecast for 2020 significantly. The forecast scenario in this Report foresees a GDP contraction of 4.5 to 5.5% in Chile. Furthermore, the bulk of the world economies will have a recession this year, with an estimated global contraction on the order of 4.6% (tables V.1 and V.2).

On the spending side, the forecasts in the March Report incorporated a contraction in consumption for 2020, and the estimate was increased in June. In this Report, the projection holds at –4.2%. This takes into account offsetting effects. On the one hand, the lockdowns were more extensive and longer lasting than considered in June, but on the other, the income-support measures, including the withdrawal of a share of pension savings, would partially offset the impact.

Table V.2

2020 international scenario

	Sep. 19	Dec. 19	Mar. 20	Jun. 20	Sep. 20
			(annual change. percent)		
GDP trading partners (*)	2.9	2.8	-0.1	-3.6	-3.5
World GDP at PPP (*)	2.9	2.8	-0.2	-4.5	-4.6
			(level)		
LME copper price (US$/lb)	260	270	215	250	270
WTI oil price (US$/barrel)	53	56	32	38	40
Brent oil price (US$/barrel)	57	60	35	41	43

(*) For details. see the definition in the glossary.
Source: Central Bank of Chile.

This drastic change in the output and demand scenario has reduced inflationary pressures significantly. At a special meeting held on 16 March, the Board voted to reduce the MPR to 1% and to adopt additional measures oriented the financial market. At the end of that month, the Board lowered the MPR again, bringing it to 0.5%—the effective lower bound—and announced that monetary policy would remain expansionary throughout most of the monetary policy horizon. The unconventional monetary policy measures that have been implemented include the two phases of a Conditional Financing Facility for Increased Loans (FCIC 1 and 2), the Liquidity Credit Line (LCL), and a bank bond purchase program. These measures together could inject resources of nearly US$50 billion, or 17.7% of GDP[1]/.

The liquidity provided by the Central Bank, the state guarantees, the various regulatory adjustments, and the adequate solvency of the banking system have contributed to breaking the usual relationship between commercial loans and the economic cycle. Between February and July 2020, credit growth went from a real annual rate of 6.5% to almost 12%. The available data show that these resources have been channeled to a large number of businesses whose sales have been strongly affected by the pandemic, thereby supporting operational continuity and helping mitigate the drop in investment (box II.2). The set of measures has also allowed an important reduction in long-term rates and better financing conditions in the corporate and bank bond market.

The forecast scenario in this Report considers that the economy will need several more quarters to recover from the negative impacts of the pandemic and the wave of violence in late 2019. In fact, output is only expected to regain its September 2019 levels over the course of 2022. The shocks that have affected the economy have also resulted in a reduction of the potential GDP growth forecast to –1.2 in 2020 and 0.2% in 2021 (around 3.4% for both years in September 2019). This takes into account both the reduction in the investment outlook following the events of late 2019 and the drop in productivity and underutilization of resources due to the supply restrictions deriving from the containment measures. However, the output gap remains large and is expected to remain open until 2022. The Board is committed to maintaining a strong monetary stimulus for a long time and increasing it if necessary to achieve the inflation objective, as well as taking the necessary measures to preserve financial stability.

[1]/ More information on the measures adopted can be found in Appendix C of this Report and online at https://www.bcentral.cl/web/banco-central/-medidasexcepcionales

APPENDIX A: **THE CENTRAL BANK OF CHILE'S BALANCE SHEET**

This appendix presents and analyzes the position and projections of the main items on the Central Bank of Chile's financial statements. First, it analyzes the evolution of the balance sheet in the first half of 2020. Second, it analyzes the special measures, the new balance sheet composition, and the financial effects of these measures. Finally, it presents asset and liability forecasts for year-end 2020 and 2021, as well as the long-term forecast.

EVOLUTION IN THE FIRST HALF OF 2020

As a consequence of the measures implemented in late 2019, the size and composition of the balance sheet has changed significantly. Specifically, the balance sheet grew 60% in the first half of the year in pesos. In terms of composition, at the close of the first half, 43% of liabilities were promissory notes and policy instruments (debt), versus 41% at year-end 2019; while 57% of assets were international reserves, versus 93% in December 2019. The latter is explained by the increase in local currency investments, which represent 43% of assets. For 35% of assets, yields are equal to the MPR, while 40% of liabilities have costs very close to the MPR, which reduces the balance sheet mismatches. However, international reserves continue to represent a significant share of assets, which has an important effect on earnings, largely depending on the fluctuation of the peso against the foreign currencies in which reserves are invested. Currently, the international reserve benchmark is made up of U.S. dollars (52%), euros (11%), Australian dollars (9%), Canadian dollars (9%), pounds sterling (8%), Chinese renminbi (8%), and South Korean won (3%).

In comparison with year-end 2019, in the first half of the year there was an increase in of assets and liabilities and an equity surplus as a percentage of GDP (table A.1).

Thus, between 31 December 2019 and 30 June 2020, assets increased CLP 19.439 trillion, from 16.4 to 26.2% of GDP. Liabilities, in turn, grew by CLP 17.328 trillion, from 17.2 to 25.9% of GDP. Consequently, in six months, the Central Bank went from having an equity deficit of CLP 1.563 trillion (equivalent to –0.8% of GDP) to an equity surplus of CLP 548 billion (equivalent to 0.3% of GDP). This is mainly explained by the higher value in pesos of assets denominated in foreign currency, due to the depreciation of the local currency in the period.

Table A.1

Central Bank of Chile's balance sheet: Summary of balances and earnings (percent of GDP)

	2017	2018	2019	Jun.20	2020 (f)	2021 (f)
ASSETS	**13.9**	**14.9**	**16.4**	**26.2**	**37.8**	**35.0**
International reserves	13.3	14.5	15.3	15.0	15.5	14.3
Fiscal promissory notes and other gov. credit	0.2	0.2	0.2	0.2	0.2	0.2
Monetary policy instruments	0.2	0.1	0.8	9.3	17.6	16.3
Bank bonds				16	4.3	4.0
Other assets	0.2	0.2	0.2	0.2	0.2	0.2
LIABILITIES	**17.1**	**16.9**	**17.2**	**25.9**	**37.7**	**35.0**
Promissory notes with secondary market	8.3	7.3	7.0	11,1	18.8	17.4
Bank policy instruments	1.8	1.8	16	6.3	5.9	5.5
Other bank liabilities	0.2	0.9	2.0	0.9	2.1	2.0
Other liabilities excl. monetary base	0.6	0.9	0.4	0.0	0.4	0.4
Monetary base	6.2	5.9	6.2	7.6	10.5	9.7
EQUITY (A+B+C)	**-3.2**	**-2.0**	**-0.8**	**0.3**	**0.0**	**0.0**
A. Initial equity	-2.3	-3.0	-1.9	-0.8	-0.8	0.0
B. Net income	-0.9	1.1	1.1	1.1	0.9	0.0
Nonfinancial	0.0	0.0	0.0	0.0	0.0	0.0
Net interest (1)	-0.3	-0.2	0.3	0.0	0.0	0.0
Effect of exchnage rates and UF	-0.5	1.2	0.8	1.0	0.8	0.0
C. Capital contributions	0.0	0.0	0.0	0.0	0.0	0.0
Position payable in foreign currency (2)	12.9	13.6	13.2	13.9	13.4	12.4

(1) The difference between interest earned on international reserve investments and monetary policy instruments debt securities and monetary policy instruments on the liability side.
(2) Foreign currency assets minus foreign currency liablities.
(3) Forecast.
Source: Central Bank of Chile.

BALANCE SHEET COMPOSITION AND SPECIAL MEASURES

In the face of the increasing financial tension generated by the spread of COVID-19, in the first half of 2020, the Central Bank announced a series of measures to provide liquidity to the the economy, support the flow of credit, contain financial market volatility, and ensure the correct transmission of monetary policy. Taken together, the announced measures would inject nearly US $50.0 billion into the economy, including US$40.0 billion through the Conditional Financing Facility for Increased Loans (FCIC 1 and 2) and the Liquidity Credit Line (LCL) and around US$10.0 billion through the bank bond purchase programs.

The increase in the size of the balance sheet, close to 10% of GDP in the first half of 2020 (table A.1), is explained by the implementation of the special measures, which increased monetary policy assets in local currency by CLP 18.376 trillion, from 0.8% to 9.3% of GDP, where the FCIC1 and LCL programs represent 9.0% of GDP. In addition, investment in local currency bank bonds totaled CLP 3.190 trillion, equivalent to 1.6% of GDP. In sum, local currency assets went from 1% of GDP (or 7% of the balance sheet) in December 2019 to 11% of GDP (or 43% of the balance sheet) in June 2020.

In parallel, liabilities grew 8.7% of GDP, where promissory notes traded in secondary markets expanded CLP 8.189 trillion (PDBCs increased CLP 11.352 trillion and long-term debt decreased CLP 3.163 trillion), growing from 7.0 to 11.1% of GDP. In addition, bank policy instruments (essentially the standing deposit facility) increased CLP 9.366 trillion, from 1.6 to 6.3% of GDP.

The special measures partly explain the equity result for the first half of 2020. Forward foreign currency sales generated losses of CLP 328 billion, due to exchange rate fluctuations (higher value of the dollar at contract maturity), while debt buybacks generated losses of CLP 165 billion[1]/, due to the difference between the issue rate and the (lower) buyback rate. With regard to local currency assets, the bank bond portfolio generated total income of CLP 124 billion, while the FCIC1 and LCL programs generated interest of CLP 14 billion. The rest of the measures did not have a significant impact on the balance sheet in the period. Other important items affecting earnings include the payment of interest on promissory notes (debt), which totaled CLP 174 billion, and administrative expenses and the costs of issuing and distributing banknotes and coins, which added an additional CLP 43 billion.

Thus, the equity result was a positive CLP 2.110 trillion (equivalent to 1.06% of GDP), mainly explained by gains associated with the international reserves. In particular, the depreciation of the peso against the basket of currencies in which the reserves are invested generated returns of CLP 2.096 trillion, and interest rate returns contributed an additional CLP 578 billion. The latter includes accrued earnings and gains from the drop in interest rates in the economies where the reserves are invested.

In terms of flows and consistent with the above, changes in the balance sheet explained an increase in the monetary base of CLP 2.732 trillion in the first half (table A.2).

Table A.2

Balance sheet flows of the Central Bank of Chile (1)
(billions of pesos)

	2017	2018	2019	Jun.20	2020 (f)	2021 (f)
1. Net international reserves	-2.155	1000	-140	-1917	-1917	0
2. Policy instruments in domestic currency	330	-770	1862	1976	6.700	-169
3. Other domestic currency operations, excl. monetary base (2)	433	960	-823	795	888	214
4. Other foreign currency operations (3)	2.155	-1000	-1684	1878	1878	0
Monetary base (change=1+2+3+4)	763	190	-785	2.732	7.550	45
Position payable in foreign currency (forex operations=1+4) (4)	0	0	-1824	-39	-39	0

(1) Exchange flows. The corresponding balances are also affected by interest, indexation, and price adjustments, where applicable.
(2) Service on Treasury notes in UF, subordinated debt service, and other operations in domestic currency.
(3) Treasury and bank deposits and other operations in foreign currency.
(4) Includes forex market operations deriving from policy decisions and forex operations for operational purposes of the Central Bank.
(f) Forecast.
Source: Central Bank of Chile.

FINANCIAL EFFECTS OF THE SPECIAL MEASURES

In addition to the special measures to address the financial effects of COVID-19 described above, the Central Bank implemented measures in November 2019 in response to financial tension deriving from the social crisis, combined with greater liquidity requirements than usual at year-end. The objective of these measures was to facilitate liquidity management in dollars and pesos in the financial market.

To manage peso liquidity, the Bank announced a repo window, at a floating MPR rate and maturities of 7, 30, 90, and 180 days.

[1]/ This differs from the amount shown in table A3 because it only considers the January-June 2020 period, whereas the table includes returns since the implementation date of the measures (November 2019).

As a complementary measure, a buyback program for Central Bank debt securities was also implemented to increase the effectiveness of the financial system's liquidity management.

Dollar liquidity was managed with a currency swap program, offering US$4.0 billion at 30, 90, and 180 days, and a foreign exchange market intervention, via spot operations (December 2019) and forwards, with the goal of mitigating exchange rate volatility and supporting adequate price formation. The measure was expected to be implemented from 2 December 2019 to 2 May 2020 for a total of up to US$20.0 billion, with an equal share of spots and forwards.

The spot dollar sales had a direct impact on the balance sheet, by reducing the amount of international reserves by US$ 2.55 billion. The sum of the other measures and their impact on the Central Bank's equity is presented in table A.3.

Table A.3

Equity effects of the special measures implemented by the Central Bank of Chile (1)
(billions of pesos)

	Amount used/Current stock (4)	Gains/Losses
1. Buyback of CBC securities (2)	4.835	-663
2. Dollar forwards (NDF) (2)	2.816	-328
3. Dollar spots (2)	1.969	
4. Swap (2)	1.915	-0,3
5. REPOs (2)	510	11
6. Bank bonds (3)	3.155	124
7. FCIC1-LCL loans (3)	17.866	14
Total		**-843**

(1) Gains or losses with an impact on equity deriving from the special measures implemented by the CBC between 13 November 2019 and 30 June 2020.
(2) Measures announced in November 2019, due to the social crisis and financial stress at the end of the year.
(3) Measrues announced in March 2020, due to the financial tension related to COVID-19
(4) Repos and NDFs correspond to the current stocks on 30 June 2020.
Source: Central Bank of Chile.

BALANCE SHEET PROJECTIONS FOR 2020 AND 2021

The main working assumptions underlying the medium-term forecast are as follows: (i) there will be no foreign exchange operations during the forecast period; (ii) the totality of the special asset programs announced through June 2020 will be implemented (FCIC1-LCL, bank bond purchases, financial asset purchases, and FCIC2); (iii) all long-term debt will be bought back; and (iv) the growth of assets in domestic currency will be absorbed in liabilities via PDBCs, the monetary base, and the standing deposit facility. With regard to the macroeconomic assumptions, the central scenario projects that for the rest of 2020, the gap between local and external interest rate returns will be similar to the close of the first half of this year and will increase in 2021. Further assumptions are that exchange rates will move in accordance with their forward values at the end of June 2020 and that the GDP forecast for 2020 and 2021 will be in line with average nominal GDP growth in the June 2020 Monetary Policy Report.

Based on these assumptions, equity gains of approximately 0.05% of GDP are expected from net interest in 2020, with equity losses of 0.02% of GDP in 2021. Valuation effects are projected to generate equity gains of 0.85% of GDP in 2020 and 0.02% of GDP in 2021.

Finally, for year-end 2020, the size of the balance sheet is projected at 37.8% of GDP, which will decline to 35.0% of GDP in 2021. An equity surplus of 0.03% is forecast for 2020, with a deficit of 0.02% of GDP in 2021.

LONG-TERM BALANCE SHEET PROJECTION

In the central scenario, the return on reserves and the lower cost of debt allows a gradual reduction of the Bank's equity deficit over time. Thus, equity becomes positive in March 2025. This forecast is based on several assumptions, including the following: (i) GDP growth in line with the Central Bank's trend GDP forecasts; ; (ii) local inflation of 3%; (iii) convergence of the real exchange rate to the average of the last ten years in late 2023, where it will remain through the end of the policy horizon; (iv) maintenance of the liquidity injection, through the implementation of 100% of the special asset programs announced through June 2020 (FCIC1-LCL, bank bond purchases, financial asset purchases, and FCIC2);

of the growth of assets in domestic currency through PDBCs, the monetary base, and the standing deposit facility; and (vi) conversion of the partial withdrawal of pension funds into the monetary base (cash, bank reserves, and technical reserves).

The programs adopted in 2019 have long-term effects on the recovery of equity. In particular, it is estimated that the partial withdrawal of pension funds will move up the recovery by three quarters. At the same time, the implementation of the bank bond and financial asset purchase programs will bring forward the recovery by two years, while the FCIC1, LCL, and FCIC2 programs will push it back by two quarters.

APPENDIX B: **INTERNATIONAL RESERVE MANAGEMENT**

International reserves are liquid assets in foreign currency that are held by the Central Bank of Chile. They constitute a policy tool for executing the Bank's primary objectives: to safeguard the stability of the currency and the normal functioning of internal and external payments. Reserves are managed so as to provide efficient and secure access to international liquidity in accordance with the legal framework defined in Article 38, Title III, of the Basic Constitutional Act of the Central Bank.

In order for the international reserves to be an effective tool for meeting the Central Bank's objectives, they must be of adequate size and liquidity. When this is achieved, the international reserves can vary due to price and exchange rate fluctuations, but these changes will not affect the Central Bank's ability to meet its commitments. In this context, the objectives of liquidity and capital preservation constitute the central focal points of reserve management, as they ensure that at any given time the Central Bank will, with some degree of confidence, have access to the necessary resources for policy execution in a short time and at a reasonable cost.

To carry out its international reserve management, the Central Bank maintains a clear separation of responsibilities at the hierarchical level, in line with international recommendations in this area. The Bank also undergoes periodic internal and external audits, including a review of the different investment processes. This ensures that the decision-making process and management assessment within the Bank remain clearly defined and that the risks are mitigated.

The Financial Market Analysis Area participates in the definition of the investment policy, which is approved by the Board, and is responsible for analyzing investment performanceand risk. The Payment Systems and Operations Area is responsible for optimizing investment operations, including the registry, accounting, and generation of all payment instructions and/or fund movements to ensure compliance with all contractual liabilities. These three areas report to the Financial Markets Division.

The Corporate Risk Area is responsible for evaluating and managing the corporate, financial, and strategic risks of the Central Bank of Chile. It thus performs the functions related to financial compliance, risk measurement applicable to international reserve management, and validation of the methodologies used by the Financial Markets Division for asset and liability valuation and risk measurement. The Corporate Risk Area also acts as the technical counterpart to the Financial Markets Division in the risk management processes for the Bank's financial operations, reporting directly to the General Manager and the Board.

Table B.1

Benchmark structure of the international reserve investment portfolio (1) (2)

Structure	Credit risk	Share	Benchmark
Liquidity portfolio	Sovereign	45%	Bloomberg Barclays Index:Global Aggregate Treasuries. (100%) (USD)
Diversification portfolio	Sovereign	55%	Bloomberg Barclays Index:Global Inflation-Linked.(12.73% USD), (7.27% EUR) Bloomberg Barclays Index: Global Aggregate Treasuries. (16.36% AUD), (16.36% CAD), (14.55% CNY), (12.73% EUR), (5.45% KRW), (14.55% GBP)
Total portfolio	Sovereign	100%	

(1) Global Treasury Index EUR, excluding countries with shallow markets and/or an average rating of less than A–

(2) Global Treasury Index KRW, including only securities issued by the South Korean Treasury.

Source: Central Bank of Chile.

The Office of the General Auditor, which reports directly to the Board, periodically evaluates the efficiency and efficacy of internal controls, operational risk management, and the integrated reserve management process.

The strategic asset allocation, which serves as a guideline for reserve management, is periodically reviewed to ensure that the risk-return profile is consistent with the policy framework and strategic objectives established by the Board. The investment policy is designed taking into account the Bank's potential liquidity needs and the financial effects on the balance sheet.

The investment policy establishes that the investment portfolio (table B.1) is made up of two portfolios: the liquidity portfolio (45%) and the diversification portfolio (55%). The objective of the former is to guarantee the necessary liquidity for fulfilling policy objectives, so this portfolio is invested exclusively in U.S. Treasury bonds, one of the most liquid fixed-income markets in the world. The objective of the diversification portfolio, in turn, is to diversify risk and to contribute to obtaining medium- and long-term returns that are consistent with the expected evolution of the Bank's balance sheet, although it is also highly liquid.

In addition to the investment portfolio, the international reserves comprise the cash portfolio (namely, current account balances held by the Treasury, public companies, and commercial banks) and the other assets portfolio (IMF special drawing rights, certified gold, and other assets).

The benchmark allocation of the investment portfolio includes a total of seven currencies: U.S. dollars (52.00%), euros (11.00%), Canadian dollars (9.00%), Australian dollars (9.00%), pounds sterling (8.00%), Chinese renminbi (8.00%), and South Korean won (3.00%). The liquidity portfolio is invested entirely in nominal U.S. Treasury bonds; while the diversification portfolio includes nominal sovereign bonds (80.0%) denominated in Australian dollars (16.36%), Canadian dollars (16.36%), Chinese renminbi (14.55%), euros (12.73%), South Korean won (5.45%), and pounds sterling (14.55%); and inflation-indexed bonds (20.0%) denominated in U.S. dollars (12.73%) and euros (7.27%).

With regard to credit risk, the benchmark contemplates 100% sovereign risk exposure. The total interest rate risk of the investment portfolio, measured by duration, is approximately 21.8 months. By sub-portfolio, the liquidity portfolio has a duration of 22.4 months; the diversification portfolio, 21.4 months (table B.2).

Table B.2

Benchmark currency, maturity, and duration structure of the investment portfolio (1) (2) (3) (4)

		Liquidity portfolio (LP)		Diversification portfolio (DP)		Total portfolio
		Investment portfolio	Subtotal LP	Investment portfolio	Subtotal DP	Investment portfolio
USD	Share	**45.0%**	**100.0%**	7.0%	12.7%	52.0%
	Duration (months)	**22.40**		18.20		21.80
EUR	Share			11.0%	20.0%	11.0%
	Duration (months)			21.50		21.50
CAD	Share			9.0%	16.4%	9.0%
	Duration (months)			20.90		20.90
AUD	Share			9.0%	16.4%	9.0%
	Duration (months)			25.90		25.90
GBP	Share			8.0%	14.5%	8.0%
	Duration (months)			19.80		19.80
CNY	Share			8.0%	14.5%	8.0%
	Duration (months)			21.00		21.00
KRW	Share			3.0%	5.5%	3.0%
	Duration (months)			21.70		21.70
Total	**Share**			**55,0%**	**100,0%**	**100,0%**
	Duration (months)			**21,40**		**21,80**

(1) Liquidity portfolio in U.S. dollars is composed exclusively of nominal bonds (100%). Diversification portfolio in U.S. dollars is composed of indexed bonds (12.7%).

(2) Diversification portfolio in euros (20.0%) is composed of nominal (12.7%) and indexed (7.3%) bonds.

(3) Diversification portfolio in pounds sterling is composed of nominal bonds (16.36%).

(4) The duration of indexed bonds is adjusted by a factor of 0.5.

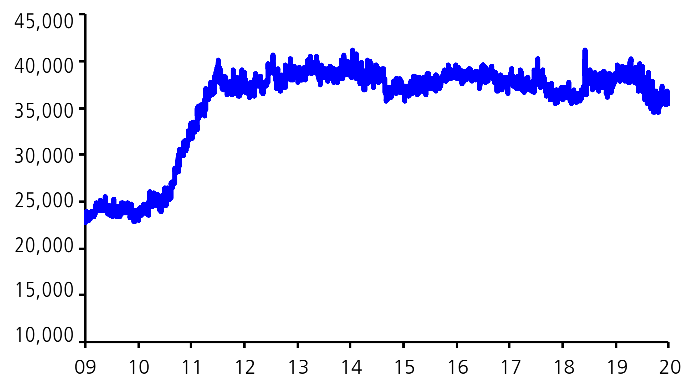
Source: Central Bank of Chile (30 June 2020).

The credit risk associated with the investment of international reserves is managed through the definition of eligibility criteria and maximum exposure to countries, supranational entities, commercial banks, and agencies. The variables used to monitor this risk include credit rating, institutional equity, market size, debt ratios, and explicit guarantees. Market risk is managed primarily through a risk budget (ex ante tracking error).

On 30 June 2020, the international reserves totaled US $36.3902 billion (figure B.1). Of the total, US$34.3946 billion was allocated to the investment portfolio, US$770.0 million to the cash portfolio, and US$1.2256 billion to other assets. With regard to the currency allocation, 51.3% of total reserves was invested in U.S. dollars, 10.3% in euros, and 38.4% in other currencies.

Figure B.1

International reserves (1)
(stock, millions of US$)



(1) Includes investment portfolio and cash portfolio; excludes other assets.
Source: Central Bank of Chile.

On 30 June 2020, the total value of the international reserves was US$ 4.2668 billion less than at year-end 2019. This reflects a decrease in the cash portfolio (US$4.4408 billion), due to changes in the stock of deposits and account balances held at the Central Bank by the financial system[2]/. This was partially offset by an increase in the investment portfolio (US $126.5 million) relative to year-end 2019, mainly explained by capital gains associated with the increase in the value of fixed-income assets, which was, in turn, partially offset by the effect of the depreciation of the currencies that make up the portfolio against the U.S. dollar. Additionally, in the period there was an increase of US$47.5 million in other assets, due in part to operations with the International Monetary Fund (IMF) (table B.3).

Table B.3

Composition of international reserves
(millions of US$)

Type of portfolio	Currency	2019 Dec.	2019 %	2020 Jun	2020 %
Investment portfolio		**34,268.1**	**84.3**	**34,394.6**	**94.5**
Currencies and deposits	U.S. dollar	14.2	0.0	18.9	0.1
	Euro	3.2	0,0	0.3	0.0
	Canadian dollar	0.3	0.0	2.7	0.0
	Australian dollar	0.5	0.0	0.2	0.0
	Other currencies	205.2	0.5	11.9	0.0
Securities	U.S. dollar	17,551.1	43.2	17,895.5	49.2
	Euro	3,802.9	9.4	3,730.5	10,3
	Canadian dollar	3,094.0	7.6	3,050.5	8.4
	Australian dollar	3,055.0	7.5	3,042.8	8.4
	Other currencies	6,541.6	16.1	6,641.2	18.2
Total	U.S. dollar	17,565.3	43.2	17,914.4	49.2
	Euro	3,806.1	9.4	3,730.9	10.3
	Canadian dollar	3,094.3	7.6	3,053.2	8.4
	Australian dollar	3,055.5	7.5	3,043.0	8.4
	Other currencies	6,746.9	16.6	6,653.1	18.3
Cash portfolio		**5,210.8**	**12.8**	**770.0**	**2.1**
Currencies and deposits	U.S. dollar	5,210.8	12.8	770.0	2.1
Other assets		**1,178.1**	**2.9**	**1,225.6**	**3.4**
Monetary gold	Other currencies	12.0	0.0	14.0	0.0
IMF SDRs	Other currencies	745.7	1.8	644.6	1.8
IMF reserve position	Other currencies	419.0	1.0	565.6	1.6
Currencies and deposits	U.S. dollar	1.4	0.0	1.3	0.0
Total International Reserves		**40,656.9**	**100.0**	**36,390.2**	**100.0**
	U.S. dollar	22,777.5	56.0	18,685.7	51.3
	Euro	3,806.1	9.4	3,730.9	10.3
	Canadian dollar	3,094.3	7.6	3,053.2	8.4
	Australian dollar	3,055.5	7.5	3,043.0	8.4
	Other currencies	7,923.5	19.5	7,877.4	21.6

Source: Central Bank of Chile.

In the first half of 2020, the return from international reserve management was 1.96% measured in local currency, which does not take into account the appreciation or depreciation of the currencies in the portfolio. Expressed in U.S. dollars, the return was 0.84% (table B.4), which represents the sum of the yield on assets in local currency and the exchange rate effect on those assets vis-à-vis the dollar. In general terms, the positive performance of the international reserves in dollars is explained by the widespread decline in interest rates (figure B.2),

2/ The decrease in the cash portfolio is due to the lower incentive for local commercial banks to comply with their foreign currency technical reserve requirements.

which implied an increase in the market value of the fixed-income assets. The interest rate effect was partially offset by the depreciation of the portfolio currencies against the dollar. Measured in pesos, the first-half return was 9.21%, which is mainly explained by the strengthening of the basket of investment currencies against the peso. The differential return attributable to reserve management in the first half was 2 basis points under the benchmark.

Table B.4

Absolute and differential returns on international reserve management (1) (2) (3) (4)
(percent)

Period	In local currency		In dollars		Differencial
	Int.Res.	BMK	Int.Res.	BMK	
2020	1.96	1.95	0.84	0.86	-0.02
2019	5.67	6.25	5.39	6.09	-0.71
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
2011	2.43	2.41	1.22	1.20	0.02
2010	2.10	2.19	-0.15	-0.06	-0.09

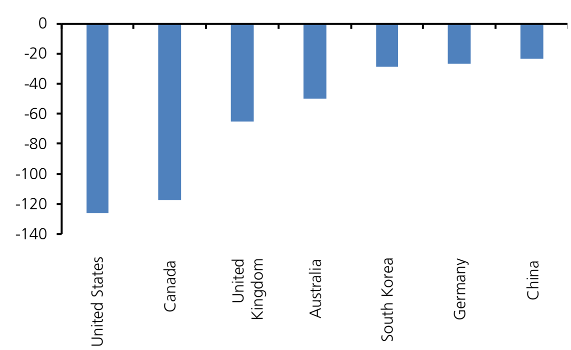
(1) 2020 data correspond to the first half of the year.
(2) Excluding monetary gold, special drawing rights, IMF reserve position, reciprocal credit agreements, and other reserve assets.
(3) Starting in 2014, the Bank reports the return measured in local currency, which does not incorporate the appreciation or depreciation of the currencies in the portfolio. From 2009 to 2013, an approximation of the return in local currency was used (called the foreign currency return), where the return was expressed in the benchmark currency basket and thus was equivalent to the return in local currency to the extent that the investments tracked the benchmark allocation.
(4) The 2019 differential return considers the period of convergence to a new benchmark. The 2012 differential return considers the period of convergence to a new benchmark.

Source: Central Bank of Chile.

With regard to the exposure of the investment portfolio by type of risk and country, on the cutoff date of this Report, there was an appropriate degree of diversification of the different types of risk in which the international reserves are invested. On 30 June 2020, investment in sovereign risk represented 98.6% of the investment portfolio, and it was concentrated in the United States (51.0%), Canada (8.7%), China (8.4%), and Australia (8.1%). At the end of the period, investment in supranational risk represented 1.4% of the total investment portfolio; agency risk, 0.02%; and bank risk, 0.01% (tables B.5 and B.6)[3]/. This includes exposure to a BIS Investment Pool (BISIP) denominated in renminbi (equivalent to US$109.7 million), which is managed directly by the Bank for International Settlements (BIS). This instrument provides exposure to the Chinese onshore fixed-income market.

Figure B.2

Change in 10-year government bond reference rate (1) (2)
(basis points)



(1) Rate change in the first half of 2020.
(2)A negative change in interest rates implies an increase in the value of fixed-income instruments.
Source: Bloomberg.

On 30 June 2020, the currency allocation of the investment portfolio was as follows: 52.1% in U.S. dollars, 10.9% in euros, 8.9% in Canadian dollars, and 8.9% in Australian dollars. The remaining 19.3% was invested in Chinese renminbi, pounds sterling, and South Korean won (table B.7).

To complement internal international reserve management, the Bank has had an external management program for a share of the reserves since 1995. The objectives of this program are to

3/ Tables B.5 and B.6 provide details on the investment portfolio, disaggregated by internal and external management.

provide an active benchmark for evaluating internal management, to add economic value, and to facilitate the transfer of knowledge and technology.

At the end of the first half of 2020, a share of the investment portfolio (3.0%) was under the independent management of two external companies: BlackRock Institutional Trust Company N.A. (BlackRock) and Amundi Asset Management (Amundi). These firms received their management mandate in February and October 2016, respectively. At the end of June, the two external portfolio managers, Amundi and BlackRock, managed a total of US$1.125 billion.

Table B.5

Internally managed portfolio: Investments by country and type of risk (1) (2) (3) (4)
(millions of US$)

Country	Sovereign	Bank	Agency	Supranational	TOTAL
United States	16,999	0	0	0	16,999
Canada	2,928	0	0	0	2,928
Australia	2,735	0	0	0	2,735
China	2,778	0	0	0	2,778
United Kingdom	2,545	0	0	0	2,545
France	1,608	0	0	0	1,608
South Korea	1,008	0	0	0	1,008
Spain	650	0	0	0	650
Germany	641	0	6	0	647
Supranational	0	0	0	470	470
Finland	174	0	0	0	174
Netherlands	156	0	0	0	156
Belgium	154	0	0	0	154
Austria	112	0	0	0	112
Ireland	87	0	0	0	87
Japan	84	0	0	0	84
Poland	83	0	0	0	83
Czech Republic	35	0	0	0	35
United Arab Emirates	12	0	0	0	12
Malaysia	0	0	0	0	0
Other	0	5	0	0	5
TOTAL	32,788	5	6	470	33,269

(1) Sovereign exposure includes the following institutions with an explicit sovereign guarantee: Kreditanstalt für Wiederaufbau (KFW / Germany, 249.0 million), Japan Bank for International Cooperation (JBIC / Japan, 84.4 million), Export Development Canada (EDC / Canada, 72.7 million), Oesterreichische Kontrollbank (OKB / Austria, 18.8 million), and Instituto de Crédito Oficial (ICO/Spain, USD 12.3 million). Sovereign risk also includes China (USD 109.7 million in the BISIP-CNY), which is directly managed by the BIS.
(2) Exposure to German agency risk corresponds to Landwirtschaftliche Rentenbank (USD 6.2 million).
(3) Exposure to supranational risk includes the following eligible issuers: European Investment Bank (EIB, USD 161.7 million), Inter-American Development Bank (IDB, USD 128.2 million), International Bank for Reconstruction and Development (IBRD, USD 78.6 million), International Finance Corporation (IFC,USD 54.3 million), Asian Development Bank (ADB, USD 19.7 million), Council of Europe Devolpment Bank (CEB, USD 10.8 million), Eurofima (USD 8.,5 million), and African Development Bank (USD 8.5 million).
(4) The category Other corresponds to current account balances and accounts payable/ receivable flows.

Source: Central Bank of Chile.

Table B.6

Externally managed portfolio: Investments by country and type of risk (1) (2) (3)
(millions of US$)

Country	Sovereign	Bank	Agency	Supranational	TOTAL
United States	538	0	0	0	538
Canada	68	0	0	0	68
Australia	51	0	0	0	51
China	96	0	0	0	96
United Kingdom	87	0	0	0	87
France	56	0	0	0	56
South Korea	18	0	0	0	18
Spain	20	0	0	0	20
Germany	52	0	0	0	52
Ireland	4	0	0	0	4
Belgium	3	0	0	0	3
Finland	1	0	0	0	1
Austria	42	0	0	0	42
Supranational	0	0	0	15	15
Japan	52	0	0	0	52
Other	22	0	0	0	22
TOTAL	1,110	0	0	15	1,125

(1) Sovereign exposure includes the following institutions with an explicit sovereign guarantee: Japan Bank for International Cooperation (JBIC / Japan, 52.2 million), Kreditanstalt für Wiederaufbau (KFW / Germany, USD 46.5 million), and Oesterreichische Kontrollbank (OKB / Austria, 41.8 million)
(2) Exposure to supranational risk includes the following eligible issuers: Nordic Investment Bank (NIB, USD 9.6 million) and International Finance Corp (IFC, USD 5.6 million) .
(3) The category Other corresponds to current account balances and accounts payable/ receivable flows.
Source: Central Bank of Chile

In the first half of 2020, three initiatives were carried out to strengthen the country's international position, as a complement to the stock of reserves held by the Bank. On 29 May, the IMF granted access to a Flexible Credit Line for US$ 23.930 billion, a temporary (two years) and precautionary mechanism. This line is granted to countries with solid economic fundamentals to help prevent balance-of-payment pressures during episodes of severe stress. In July, an agreement was reached with the People's Bank of China (PBoC) to increase the amount of the yuan/peso (RMB/CLP) bilateral currency swap agreement, in effect since 2015, to the equivalent of US$7.1 billion (approximately double the original cap), as well as to expand the eligible uses of the resources. Now, in addition to promoting international trade between the two countries, the funds can also be used to maintain stability in the financial markets if necessary. Finally, to complement the above two measures, the Central Bank of Chile enrolled in the Federal Reserve Bank of New York's Temporary Foreign and

International Monetary Authorities (FIMA) Repo Facility. This overnight transaction service will allow the Bank to utilize temporary repurchase agreements, exchanging its U.S. Treasury securities (held as part of the reserves) for U.S. dollars, in order to access dollar liquidity without having to sell the securities. This will provide greater flexibility for foreign currency liquidity management in the event necessary. None of the above facilities have been used to date.

Table B.7

Investment portfolio by currency (1) (2)
(percent)

Currency	Share
U.S. dollar	52.1
Euro	10.9
Canadian dollar	8.9
Australian dollar	8.9
Chinese renminbi	8.4
Pound sterling	8.0
South Korean won	3.0
Other	0.0
TOTAL	**100.0**

(1) Includes currency forward positions.
(2) Includes China BISIP position.
Source: Central Bank of Chile.

APPENDIX C: MAIN MEASURES TAKEN BY THE CENTRAL BANK OF CHILE IN 2020

JANUARY

3. Given the reduction in the volatility recorded over the previous months, the Board announced the suspension of spot operations, which reached a total of US$2.55 billion, together with the renewal of forward operations, which had a current stock of US$4.49 billion.

On 13 November 2019, to address the market tension deriving from the social events and the greater liquidity requirements than usual at year-end, the Central Bank implemented measures to facilitate liquidity management in dollars and pesos in the financial market. At that time, it was decided that the operations would be in effect from 14 November 2019 to 9 January 2020. For liquidity injection in pesos, a repo window was established at a floating interest rate equivalent to the monetary policy rate, initially for a term of 30 days and subsequently also for 7, 90, and 180 days. The instruments received as collateral would be Central Bank and Chilean Treasury bonds; subsequently bank bonds and time deposits were also accepted as valid collateral. Between the announcement and the cutoff of the Monetary Policy Report, US $6.304 billion had been injected, and the outstanding balance was US$661 million. Dollar liquidity, in turn, was managed through swap purchases, offering a program of US$4.0 billion at 30 and 90 days, with the later addition of 180 days. The minimum bid-ask spread for the operations was set at the LIBOR plus 200 basis points.

Additionally, on 14 November 2019, the Bank announced, as a complementary measure, a buyback program for Central Bank securities, to increase the effectiveness of the operations aimed at facilitating liquidity management in the financial system. The program would be in effect from 15 November 2019 to 9 January 2020. On the date of the announcement, the outstanding balance of Central Bank securities was US$8.514 billion. From the announcement through the cutoff date of the Report, a total of US$6.455 billion had been bought back, including US$968 million of BCPs, US$5.412 billion of BCUs, and US$75 million of other securities.

On 28 November 2019, given the high level of uncertainty—due to the impact of the social conflict on the normal functioning of the economy—and taking into account the current inflation-targeting and floating-exchange-rate policy framework, the Central Bank announced, via Board Resolution N° 2265E-01-191128, that it would intervene in the foreign exchange market to mitigate exchange rate volatility and ensure adequate price formation. The measure would be implemented from 2 December 2019 to 2 May 2020 and would consist in currency sales of up to US$20.0 billion. The intervention mechanism would involve sales of up to US$10.0 billion in the spot market via auctions on the Datatec transactional platform and currency hedging instruments of up to US$10.0 billion, consisting in forward sales auctioned on the local Open Market Operations System (SOMA). In both cases, the operations schedule for the coming week would be announced every Friday.

29. At its Monetary Policy Meeting, the Board of the Central Bank of Chile voted unanimously to hold the monetary policy interest rate at 1.75% in annual terms.

MARCH

16. At a Special Monetary Policy Meeting, the Board of the Central Bank of Chile voted to reduce the monetary policy interest rate by 75 basis points, to 1%, and to implement a set of additional measures for strengthening the provision of liquidity to the economy and supporting the flow of credit and the transmission of monetary policy: namely, to open a Conditional Financing Facility for Increased Loans (FCIC) for banks; to include corporate bonds as eligible collateral for all peso liquidity operations in effect, including the FCIC; to initiate a bank bond purchase program for SOMA participants, for an amount in UFs equivalent to up to US$4.0 billion; and to extend the period of the currency sales program through 9 January 2021.

20. Through Resolution N° 2294E-01-200318, the Board temporarily modified the regulations contained in Chapter 3.1 of the Compendium of Monetary and Financial Regulations,

with regard to reserve requirements for banks and savings and loan associations, by expanding the options for constituting reserves for foreign currency liabilities to include not only U.S. dollars, but also euros, Japanese yen, and national currency. The change, in effect from 18 March 2020 to 8 September 2020, was first applied to the reserve period beginning on 9 March 2020.

19. Through Resolution N° 2295E-01-200319, the Board approved the regulations applicable to the implementation of the bank bond purchase program, announced at the Special Monetary Policy Meeting held on Monday, 16 March 2020, in accordance with the respective Central Bank of Chile press release. The program, initially for up to US$4.0 billion and later expanded to US$8.0 billion, has the objective of containing the effects of high volatility in the fixed-income market. This measure entered into force on 20 March and considers debt securities issued by banks in the country, corresponding to bonds with no special guarantee covered under paragraph number 2 of Article 69 of the General Banking Law, with the exclusion of own issues and bonds eligible for a debt-equity swap, as well as subordinated bonds and perpetual bonds. In accordance with the applicable financial conditions, the operations will be processed through a window, and the eligible debt instruments can be denominated in pesos or UFs, with a residual maturity of up to five years. The maximum amount to be purchased from a given issuer is 20% of the stock of bank bonds under five years. The rate for these operations is based on the average interbank swap rate for the corresponding term, plus a variable spread depending on the issue rating.

26. Through Resolution N° 2297E-01-200326, the Board approved the regulations applicable to the FCIC and temporarily modified Chapters 2.1 and 2.3 of the Compendium of Monetary and Financial Regulations and the respective Operating Rules, in order to equalize the eligible instruments in accordance with these regulations in terms of the admissible securities for accessing the FCIC, as long as it is in place.

The measure was adopted in exercise of the authority conferred on the Central Bank of Chile to regulate the quantity of money and credit in circulation, so as to safeguard compliance with the Bank's objective and thereby contribute to financial stability and the maintenance of the bank credit channel, as a monetary policy transmission mechanism, with an emphasis on creating incentives for financing and refinancing household and business loans.

At the same time, through Resolution 2297E-02-200326, the Board approved the use of the Liquidity Credit Line (LCL) in domestic currency, where access and use are subject to the same conditions established for the FCIC in terms of increasing loans.

The objective of the FCIC and LCL, in place since 30 March 2020, is to create incentives for banks to use the resources obtained through these channels to continue financing and refinancing household and commercial credit, especially in the case of customers that do not have access to the capital markets. The measures consider a total of US$24.0 billion and are granted as a function of the initial consumer and commercial loan portfolio reported to the FMC at the end of February.

In the FCIC, the loans are granted at the monetary policy rate currently in effect, for a duration of four years, against collateral pledged to the Central Bank (namely, Central Bank bonds, Chilean Treasury bonds, bank bonds, corporate bonds, or time deposits). The LCL, in turn, sets a given bank's limit as the average reserve requirement enforced in the prior monthly reserve period in pesos. Between the announcement and the cutoff date of the Monetary Policy Report, total use of the measure was US$23.171 billion.

Finally, through Resolution N° 2297E-03-200326, Chapter III.B.2.1 of the Compendium of Financial Regulations was modified to temporarily suspend compliance with the term mismatch requirements applicable to banks' liquidity management, contained in paragraph number 8.2 of the aforementioned Chapter, for both 30 days at one times core capital and 90 days at two times capital.

31. At its Monetary Policy Meeting, the Board of the Central Bank of Chile voted unanimously to reduce the monetary policy interest rate by 50 basis points, to 0.50%.

In that Meeting, the Board decided to expand the current bank bond purchase program by US$4.0 billion, to a total of US$8.0 billion, and to eliminate the term restriction on eligible instruments. This brought the available balance of the program to US$5.5 billion, considering that US$3.5 billion had been purchased on that date.

APRIL

15. Through Resolution 2301E-01-200414, the Pension Fund investment limits on alternative assets, established in Chapter III.F.4 of the Compendium of Financial Regulations, were increased within the ranges established in Article 45 of Decree Law N° 3,500 of 1980, subject to the prior assessment of the Superintendence of Pensions. At the same time, the Bank issued its prior favorable assessment of the modifications contemplated for the Pension Fund and Unemployment Fund Investment Guidelines, with regard to currency hedging. In both cases, the objective is to promote pension fund portfolio diversification, to allow them to access better risk-return combinations, while observing the criterion of graduality applied by the Board in relation to setting the aforementioned limits.

30. Through Resolution N° 2304-01-200430, the Board modified the regulations applicable to the FCIC. The changes included increasing the instruments eligible to be used as collateral for operations processed with a charge to this Facility, to include other documents that represent credits and/or rights to the banks' loan portfolio, which meet the requirements established under the FCIC Operating Rules. It was specified that these instruments will not be eligible for operations covered in Chapter 2.1 and 2.3 of the Compendium of Monetary and Financial Regulations.

MAY

6. At its Monetary Policy Meeting, the Board of the Central Bank of Chile voted unanimously to hold the monetary policy interest rate at 0.50%.

20. Through Resolution N° 2309-01-200520, the Board modified the investment policy for the Central Bank's international reserves, approving the use of repo operations with other central banks, monetary authorities, and foreign custodian banks, in order to obtain funding in foreign currency through the sale of securities that make up the international reserves, subject to the mandatory repurchase of the securities under the terms established with the respective counterparty. The Board approved in advance each type of operation and the general conditions to be applied in each case.

28. The new modifications of the FCIC regulations were approved through Resolution N° 2310-03-200528. The objective is to establish that the maturity and automatic and successive renewal of the credit granted to the banks by the Central Bank with a charge to the FCIC will be for one-week periods, such that the accrual and payment of the corresponding interest will also take place on a weekly basis. The maximum duration of these operations remains four years, through 24 March 2024.

JUNE

4. Resolution N° 2313-02-200604 renewed the temporary and exceptional measures adopted under Resolution N° 2297E-03-200326, which revised Chapter III.B.2.1 of the Compendium of Financial Regulations, with regard to the measurement and management of banks' liquidity position.

16. At its Monetary Policy Meeting, the Board of the Central Bank of Chile voted unanimously to hold the monetary policy interest rate at 0.50% and to extend the unconventional liquidity and credit support measures.

18. Through Resolution N° 2317-01-200618, the Board of the Central Bank announced the special asset purchase program, thereby amplifying the use of unconventional instruments to intensify the monetary stimulus. The program, which will be in effect from 22 June 2020 to 17 December 2020, contemplates the purchase (through a window facility) of a total of US$8.0 billion of Central Bank debt securities and bank bonds, in accordance with the conditions established for the bank bond purchase program. Between the announcement and the cutoff date of the Monetary Policy Report, US$1.877 billion had been purchased.

19. Through Resolution N° 2318E-01-200619, Phase Two of the Conditional Financing Facility for Increased Loans (FCIC2) was approved, with the goal of deepening and extending commercial credit for responding to the prolongation of the public health emergency caused by the COVID-19 pandemic. The amount of the program is US$16.0 billion, with a cap of US $4.0 billion per bank. The measure entered into force on 1 July, for a period of eight months. The banks can access the facility once they have used the full FCIC1 or waived the remaining balance.

25. Through Resolution N° 2320E-01-200625, the Board approved a one-time exception granting an extension of the period in which the banks, as a condition for using the FCIC2, can opt for the total disbursement of the initial and additional credit lines, with a charge to the FCIC1 and/or the LCL, solely through the month of July 2020, or, alternatively, irrevocably waive the undisbursed balance of these lines on 31 July 2020.

26. On 24 June, The Federal Reserve Bank of New York (Fed) accepted the Central Bank of Chile's application to enroll in the Temporary Foreign and International Monetary Authorities (FIMA) Repo Facility. This overnight facility will give the Bank greater flexibility for conducting currency swaps, a mechanism through which it provides dollars to the local banking system on a weekly basis. To access this temporary funding facility, the Central Bank of Chile delivers collateral in the form of U.S. Treasury bonds, paying an interest rate that is indexed to the U.S. monetary policy rate, which is currently close to zero.

JULY

2. Through Resolution N° 2322-02-200702, the board approved opening a public consultation, through 4 September 2020, on a set of modifications to Appendix N°1 of Chapter I of the Compendium of Foreign Exchange Regulations, for the purpose of authorizing new cross-border foreign exchange operations that can be conducted in domestic currency (pesos), in which case they would cease to be considered foreign exchange operations, although they would still be subject to the corresponding reporting requirements. This measure is part of the second phase of the plan for modernizing the country's foreign exchange regulations, as part of the Central Bank's 2018–22 Strategic Plan. It is aimed at promoting the continued development and global integration of the local financial market, including the internationalization of the peso, while safeguarding the institutional objectives of price stability and the normal functioning of payments.

The proposed changes are related to the incorporation of Chile in the international CLS payment system, which will reduce counterparty risk in foreign exchange operations and increase the efficiency and competitiveness of the local foreign exchange market. At the same time, this expansion deepens the flexible exchange rate policy pursued since 1999, which is consistent with the general orientation of the government's economic policy in this area over the last two decades.

In accordance with the regulations open for consultation, starting in January 2021, the following operations will be added, which currently can only be carried out in foreign currency: (1) the purchase of derivatives whose settlement or payment involves the physical delivery of pesos; (2) the opening and maintaining of bank accounts in pesos by people who are not domiciled in or residents of Chile; and (3) the granting of loans denominated in pesos to people who are not domiciled in or residents of Chile, whether in the form of mortgages, credit lines, or other modalities.

In addition, the following conditions will be added starting in July 2021:

(1) Overseas loan, deposit, or investment operations carried out by people who are domiciled in or residents of Chile (Chapter XII of the Compendium of Foreign Exchange Regulations).

(2) Other operations carried out by people who are not domiciled in or residents of Chile (Chapter XIV of the Compendium of Foreign Exchange Regulations).

For peso operations that have been authorized in the past and the new operations that are included in this proposal, intermediaries must report to the Central Bank when they conduct this type of operation and the corresponding obligations are payable in pesos, the same as if they were payable in foreign currency, for which purpose the existing forms and reporting systems will be used. This reporting requirement constitutes a central element in the regular monitoring of the markets performed by the Bank for the purpose of complying with its legal objectives.

15. At its Monetary Policy Meeting, the Board of the Central Bank of Chile voted unanimously to hold the monetary policy interest rate at 0.50% and to extend the unconventional liquidity and credit support measures.

24.The Bank announced the successful conclusion of negotiations with the People's Bank of China (PBoC), to increase the amount of the yuan/peso (RMB/CLP) bilateral currency swap agreement, in effect through 2021. Specifically, the Central Bank of Chile and the PBoC agreed to increase the line from RMB 22.0 billion to RMB 50.0 billion, equivalent to approximately US$7.1 billion.

31. In anticipation of the entry into effect of the constitutional reform granting a one-time exception to allow pension fund affiliates to withdraw 10% of the resources in their individual capitalization accounts, corresponding to mandatory savings in the pension fund system regulated by Decree Law 3,500 of 1980, the Central Bank implemented measures to mitigate

possible volatility in the financial markets due to potentially significant changes in the composition of the pension fund portfolios. Through Resolution N° 2327E-01-200730, the Board approved a Special Program on Repo Operations (Programa CC-VP) involving simultaneous spot purchases and forward sales of bank bonds, directed at open market operators that are participants in the local Open Market

Operations System (SOMA) on the date of the publication of the agreement in the Official Gazette (Participants). Each repo operation considers two buy-sell transactions that are contracted jointly and simultaneously and that constitute a single negotiation or contract for all legal purposes. The initial total amount of the Special Program is up to US$10.0 billion, with forward maturity dates of one and three months, and it may be expanded, restricted, and/or divided up, as indicated in the Financial Conditions, where individual limits can be established for each Participant. As of the cutoff date of this Monetary Policy Report, repos contracted under this program totaled US$3.26 billion. Additionally, the decision was made to continue offering the bank bond purchase window for SOMA participants for the remaining US$4.1 billion of the March program, to contain the volatility scenarios.

31. Through Resolution N° 2329E-01-200731, as part of the measures announced to mitigate financial market volatility, the Board approved the purchase of up to US$8.0 billion in time deposits through a window facility open to SOMA participants. These operations and the special repo program entered into effect on 3 August 2020 and will last for six months. On the cutoff date of this Report, US$186 million had been purchased.

AUGUST

4. Through Resolution N° 2326-01-200730, the regulations governing the Check Clearing House in Domestic Currency were replaced with Chapter III.H.1 of the Compendium of Financial Regulations. This modification will allow the consolidation of payment, collection, and clearing in the new Clearing House for Checks and Other Bank Documents in Domestic Currency and Dollars in the Country, including the settlement of net debtor positions in dollars through the RTGS System in dollars, as well as incorporating a special protocol for operational contingency situations.

8. Through Resolution N° 2331E-01-200807, the Board issued an exceptional and temporary relaxation of the regulations governing the Clearing House for Checks and Other Bank Documents in Domestic Currency and Dollars in the Country, in accordance with Chapter III.H.1 of the Compendium of Financial Regulations. Specifically, the resolution suspends the application of the individual limit of fifty million pesos for the submission of checks and other bank documents, issued in domestic currency by a bank established in the country, for payment, collection, and clearing in this clearing house. Thus, for a period of three months, banks can submit the documents for clearing, without being subject to the individual limit.

GLOSSARY

Baseline scenario: Includes both the central forecast scenario and those sensitivity scenarios whose implications for the growth of output and demand are consistent with the range of forecasts in each Monetary Policy Report, but that could require different monetary policy paths to achieve the convergence of inflation within the policy horizon.

Central forecast scenario: The forecast scenario that the Board considers to have the highest probability of occurrence.

Commodity exporters: Australia, Canada, and New Zealand, weighted at PPP (using data from the October 2019 WEO).

CPI excluding volatile items: The CPI basket excluding volatile components and representing 65.1% of the total CPI basket. The index breaks down into non-volatile goods and services sub-indexes.

CPI, volatile items: Represents 34.9% of the total CPI basket. The index breaks down into volatile foods, volatile energy, and other volatile CPI sub-indexes.

CPIEFE: CPI excluding food and energy prices, leaving 73.2% of the total CPI basket. The index breaks down into the CPIEFE goods and the CPIEFE services sub-indexes.

Effective lower bound: A structural parameter—like the neutral MPR or the trend and potential growth rate of the Chilean economy—that is periodically evaluated by the CBC Board. It is the MPR level that the Board estimates to be the lowest MPR level that allows the adequate functioning of the money markets.

EPI: External price index for Chile, or external inflation, calculated using the wholesale price index (WPI)—or the CPI if the WPI is not available—expressed in dollars, of the main trading partners included in the MER.

Excess capacity: A broader set of indicators for measuring inflationary pressures, which includes not only the output gap, but also labor market conditions, electricity consumption, and installed capacity utilization in firms.

Forecast horizon: The period for which the macroeconomic forecast is formulated based on the models used by the CBC. It is normally a period of three years.

Growth of trading partners: The growth of Chile's main trading partners, weighted by their share in total exports over two rolling years. The countries included are the destination for about 94% of total exports, on average, for the 1990–2019 period.

Latin America: Includes Argentina, Bolivia, Brazil, Colombia, Mexico, and Peru, weighted at PPP using data from the World Economic Outlook (WEO, October 2019).

MER-5: MER against the following five currencies: Canada, the Eurozone, Japan, United Kingdom, and United States.

MER-X: MER excluding the U.S. dollar.

MER: Multilateral exchange rate. A measure of the nominal value of the peso against a broad basket of currencies, weighted as for the RER. For 2020, the following countries are included: Argentina, Bolivia, Brazil, Canada, China, Colombia, France, Germany, India, Italy, Japan, Mexico, Netherlands, Paraguay, Peru, Republic of Korea, Spain, United Kingdom, United States, and Vietnam.

NER: Nominal exchange rate.

Neutral MPR: The monetary policy interest rate that is consistent with the long-term equilibrium GDP growth rate (after the effects of transitory shocks in the economy have dissipated) and with inflation at the 3% target. The neutral interest rate is one of the structural parameters that the Board uses to assess the current state of the economy and its outlook and to calibrate monetary policy. Monetary policy is considered accommodative (restrictive) when the MPR is below (above) the neutral rate.

Output gap: A key indicator for measuring inflationary pressures, defined as the difference between the economy's actual output and its current production capacity in the non-mining sectors (non-mining GDP).

Policy horizon: According to the Central Bank of Chile's monetary policy framework, the policy horizon is a period of two years from the time the projections are made. Inflation should converge to the target in this period, and thus the projected MPR should be consistent with this objective.

Potential GDP: The economy's current production capacity. Also called short-term potential GDP.

RER: Real exchange rate. A measure of the real value of the peso against a basket of currencies, which includes the same countries used to calculate the MER.

Rest of Asia: Hong Kong, Indonesia, Rep. Korea, Malaysia, Philippines, Singapore, Taiwan, and Thailand, weighted at PPP (using data from the October 2019 WEO).

Risk scenarios: Forecast scenarios that the Board estimates to be less probable and that are more extreme than the baseline scenario; they are discussed in the corresponding chapters of each Monetary Policy Report.

Sensitivity scenarios: Alternative forecast scenarios that the Board considers to have a comparable probability of occurrence vis-à-vis the central forecast scenario.

Trend GDP: The medium-term growth potential of the Chilean economy, where the effect of shocks that usually alter production capacity in the short term have dissipated and the production factors are thus used normally. In this context, growth depends on the structural characteristics of the economy and the average growth of productivity, variables that, in turn, determine the growth of production factors.

World growth at market exchange rate: Each country is weighted according to its GDP in dollars, published by the IMF (WEO, October 2019). The sample of countries used in the calculation represent around 91% of world growth. For the remaining 9%, the average growth rate of advanced and emerging economies is used for the 2020–2022 period.

World growth: Regional growth weighted by share in world GDP at PPP, published by the IMF (WEO, October 2019). World growth forecasts for the 2020–2022 period are calculated from a sample of countries that represent about 86% of world GDP. For the remaining 14%, the average growth rate of advanced and emerging economies is used.

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