MONETARY POLICY REPORT

March 2020

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*/ This Monetary Policy Report uses data available as of Wednesday, 25 March 2020, except where indicated otherwise. It also takes into account the monetary policy decision announced on 31 March.

PREFACE

The main objective of the Central Bank of Chile's monetary policy is to keep inflation low, stable, and sustainable over time. Its explicit commitment is to keep annual CPI inflation at around 3% most of the time, within a range of plus or minus one percentage point. To meet this target, the Bank focuses its monetary policy on keeping projected inflation at 3% annually over a policy horizon of around two years. 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 31 March 2020 for publication on 1 April 2020.

The Board

SUMMARY*/

Chile's economic scenario has worsened dramatically since our last Report. The worldwide spread of Covid-19, the measures implemented to contain it and the uncertainty about its dimensions have reflected in plummeting stock markets and asset prices around the world, that will result in a global economic recession in 2020. The pandemic is also having significant effects on the Chilean economy, so projections for this year are a contraction of GDP and a further deterioration of the labor market. The Board has adopted a number of decisions aimed at mitigating the effects of this new scenario; these include a 125 basis point reduction in the MPR, taking it to its technical minimum of 0,5%, and a set of extraordinary measures intended to ensure adequate access to credit and the normal functioning of financial markets. These measures seek to safeguard the correct transmission of monetary policy and help credit to flow to businesses and persons in need of funds to overcome these complex times, thus mitigating the impact on employment, income and households' well-being.

The propagation of Covid-19 is having severe consequences on the world economy. At its onset, concerns were mainly concentrated in China and world trade, given its weight in global value chains. As the virus has expanded to other continents, fears have increased that the speed of contagion may overwhelm hospitals' capacity, taking its toll on lost human lives and population welfare. Bearing this in mind, most governments have increasingly adopted drastic sanitary policies to slow down the virus' propagation which, coupled with the population's natural fear, has significantly affected the functioning of the economy. In particular, the measures to limit contact between persons, such as suspended educational activities, border lockdown, domestic sanitary barriers and collective quarantines, have paralyzed complete sectors—especially services—, hurting logistic chains and cash flows of enterprises in many countries.

The unprecedented magnitude of these phenomena and their dissemination on a global scale has been reflected in deteriorated global financial conditions, which has been the most significant since the global financial crisis of 2008. Central banks and governments in a number of countries have announced substantial measures to cushion the impact on incomes and placate market fears. However, their ability to contain the economic deterioration will depend

*/ This is a translation of a document originally written in Spanish. In case of discrepancy or difference in interpretation, the Spanish original prevails. Both versions are available at www.bcentral.cl

on the depth and duration of the containment policies and the degree of disruption of production chains, given the dramatic reduction in companies' income.

Thus, during the last week of February and the first half of March, the growing fear in the financial markets was reflected in high demand for safe assets, which contributed to a compression of long-term interest rates, an appreciation of the dollar, the widespread fall in stock markets, and generalized falls in the prices of commodities. Towards the second half of March there was an increase in demand for safe short-term assets and dollar liquidity, to the detriment of practically every other asset classes. This reflects the strong preference for cash as households, businesses, banks and financial intermediaries anticipate significant cash needs to live through the coming months. Emerging economies have suffered from currency depreciation, capital outflows, sharp falls in stock markets and rising risk indicators. In any case, in recent days there has been a partial reversal of these phenomena, responding to the measures announced by various authorities.

INTERNATIONAL BASELINE SCENARIO ASSUMPTIONS

	Avg. 10 - 18	2019 (e)	2020 (f)	2021 (f)	2022 (f)
	(annual change. percent)				
Terms of trade	1.5	-0.6	-0.9	0.1	1.8
Trading partners GDP (*)	3.9	2.9	-0.1	4.0	3.5
World GDP at PPP (*)	3.8	2.9	-0.2	3.8	3.5
World GDP at market exchange rate (*)	3.1	2.4	-0.9	3.4	3.0
Developed economies' GDP at PPP (*)	1.9	1.7	-2.1	2.8	2.1
Emerging economies' GDP at PPP (*)	5.3	3.9	1.4	4.7	4.7
External prices (in US$)	1.0	-2.2	-7.5	6.3	3.4
	(levels)				
LME copper price (US¢/lb)	310	272	215	245	285
WTI oil price (US$/barrel)	74	57	32	43	46
Brent oil price (US$/barrel)	81	64	35	47	50
Gasoline parity price (US$/m3) (*)	623	491	259	427	401
Fed Fund Rate (%)	0.6	2.3	0.5	0.4	1.0

(*) For definition, see glossary.
(e) Estimation.
(f) Forecast.

Source: Central Bank of Chile.

This global crisis will affect Chile through various channels. First, in terms of the effects from abroad, it will cause a significant drop in trade flows. This year the world economy is projected to suffer a recession, combining falling activity in the developed world with weak expansion in China. In this setting, a contraction in the United States stands out, where early labor market figures augur major effects in the economy. In the Eurozone, the low dynamism of its main economies —Germany, France and Italy— and an already complex banking system situation, pose greater challenges for stimulus policies. This year China will grow 3%, with important repercussions in the rest of the world, both because of its integration in the value chains and because of its relevance in trade with some countries, including Chile. The effect on trade is compounded by the negative impact on income from the fall in commodity prices. Especially relevant is the drop in the price of copper, which approached US$2 per pound during March. For this year, its average price is projected to be around US$2.15. This negative effect will be partly offset by the fall in oil prices, which dropped to levels between US$20 and 30 per barrel during March. Although this last factor will cause some improvement in disposable income —via its effect on gasoline prices— it is not enough to compensate for the negative impact of the lower price of copper and other exports, so the terms of trade are forecast to fall by nearly 1% in 2020.

A second transmission channel is related to the deterioration of financial conditions. The global increase in risk perception and large adjustments in financial prices limit access to financing by governments and businesses. This has prompted several central banks to take steps to maintain the proper functioning of markets. In Chile, among other measures, the Board adapted the operation of the liquidity programs it has been applying since November 2019, included corporate bonds as eligible collateral for all the Bank's peso liquidity operations, and initiated the purchase of bank bonds from SOMA system participants for an amount equivalent in UF to up to US$4 billion, which later on was raised to US$8 billion, indicating that the remaining amount—up to US$5.5 billion—would bear no maturity constraint on the eligible instruments. In turn, the sharp decline in economic activity has resulted in a significant increase in businesses' funding needs, as they must continue to cover their costs in a context of great loss of income. In Chile, these needs are particularly important because, after the onset of the social crisis, many companies found themselves in a similar situation, which could have consumed a large part of their liquidity cushions without being able to replenish them. To facilitate access to credit by individuals and firms, especially smaller ones, the Board established the Conditional Facility for Loan Increase (FCIC) whereby 4-year loans are granted to banks, with an interest rate equivalent to the MPR and in a magnitude that increases according to the refinancing and credit operations in the most stressed segments.

A third transmission channel is the deterioration of business and consumer expectations and its effects on investment and consumption. Prior to the worsening of the sanitary emergency, both variables were already in pessimistic territory and in the present situation a reversal looks difficult. In fact, in the second half of March, the Bank conducted a survey on participants in the Business Perceptions Report (BPR), which showed a significant deterioration in the outlook for employment and activity over the next six months (Box III.1).

The local economy will also be affected by the social distancing measures —or non-pharmacological measures— needed to contain the spread of the disease in Chile and ensure its management by the health-care system. Both the measures decreed by the authorities and those adopted voluntarily by the population will result in the stoppage, in some cases total, of certain service activities. Furthermore, they can also lead to a reduction in the supply of some goods, with the consequent impact on their prices.

The employment and income of workers will also be affected. The need to avoid contagion has led to the cessation of activities highly intensive in personal interaction, such as retail, education, restaurants and hotels, among others. While some of these activities may be partially carried out remotely (e.g. education) in other cases this is not possible and uncertainty about the duration of the cessation of activities jeopardizes the jobs and income of an important number of people. The Government has announced a package of measures to ensure that, even without losing their employment, workers can ensure their income using unemployment insurance. Initiatives have also been announced to supplement people's income, including transfers, as well as the postponement of the payment of utility bills for lower-income households. The extent to which the employment and income of workers will be reduced, particularly for those without a formal contract or self-employed, will determine the magnitude of the impact on consumption and the performance of the economy.

Investment projects are also being affected by the sanitary emergency. Some of the large-scale projects that were being developed in the country have announced planned downtime for some weeks to prevent the spread of the virus among their workers. The duration of these stoppages will depend on the evolution of the health situation, but will also have a substantial effect on investment performance in the second quarter. The baseline scenario assumes that these projects will resume normally as from the third quarter of this year.

One must bear in mind that the economy's performance from last October to date provides a fragile starting point for dealing with Covid-19. Even though the latest Imacecs —December 2019 and January 2020— reported a recovery in activity levels, the sanitary measures have a greater impact on sectors that had already been hit by the social crisis. In turn, household consumption follows a significant contraction in the latter part of last year, while investment was sustained by the performance of the construction component and other works, mainly related to mining projects. In the labor market, although until the moving quarter ending in January the national unemployment rate reported by INE showed a limited increase, other indicators showed a significant deterioration in job quality. In particular, the rise in informal wage-earning employment, which lacks all the benefits of formal wage-earning employment, including the payment of medical leave, is cause for concern. Various financial variables, such as the exchange rate, stock prices and credit growth, were also at less favorable levels than before the onset of the social crisis.

The unfolding of the sanitary emergency leads to estimate that activity began contracting in the second half of March, which corrects down first-quarter growth and marks the starting point of the contraction it will see in the second quarter of the year. This projection reflects the greater restrictions already applied by the authority until the closing of this Report, which are expected to be intensified during the second quarter, in line with the signals it has communicated.

The baseline scenario assumes that from the third quarter of this year, the stringency of sanitary measures will begin to diminish and the process of economic recovery will begin. Although this will not prevent a contraction in annual terms for the period, it will be the starting point of a significant rebound in growth rates in the last quarter of 2020 and all of 2021. This view is consistent with expectations for the rest of the world next year, when the US would resume growth of above 3% and China of 7%, giving way to global and trading partner growth of nearly 4%. By 2022, both Chile and the rest of the world would again show rates of expansion consistent with their medium-term growth rates.

In addition to overcoming the sanitary emergency, the expected recovery relies the premise that most businesses and individuals will be able to resume their activities as the spread of the virus is controlled, which depends on whether the financing needs of these agents can be met. This explains the strong response from fiscal and monetary authorities around the world and in

ECONOMIC GROWTH AND CURRENT ACCOUNT

	2019	2020 (f)	2021 (f)	2022 (f)
	(annual change. percent)			
GDP	1.1	-2.5 / -1.5	3.75-4.75	3.0-4.0
National income	0.8	-1.5	4.0	3.9
Domestic demand	1.0	-5.8	5.3	4.2
Domestic demand (w/o inventory change)	1.5	-3.3	4.8	3.8
Gross fixed capital formation	4.2	-8.2	5.1	4.3
Total consumption	0.8	-1.9	4.7	3.7
Goods and services exports	-2.3	-1.4	4.3	2.7
Goods and services imports	-2.3	-14.7	8.4	5.4
Current account (% of GDP)	-3.9	0.3	-0.6	-1.0
Gross national saving (% of GDP)	18.8	19.4	19.1	19.2
Gross national investment (% of GDP)	22.8	19.0	19.7	20.2
GFCF (% of nominal GDP)	22.4	21.2	21.5	21.6
GFCF (% of real GDP)	21.8	20.5	20.6	20.8
	(US$ million)			
Current account	-11,100	800	-1,700	-3,100
Trade balance	4,000	11,900	11,400	11,300
Exports	69,900	59,700	68,600	74,700
Imports	65,900	47,800	57,200	63,400
Services	-5,100	-4,500	-4,800	-5,000
Rent	-11,400	-7,800	-9,600	-11,000
Current transfers	1,400	1,200	1,300	1,600

(f) Forecast.

Source: Central Bank of Chile.

Chile, which has focused on employment protection and access to credit for the most affected businesses. Locally, this projection is also contingent on the large-scale investment projects resuming their normal development and the institutional channeling of the social crisis reducing uncertainty and preventing new episodes of violence. In addition, the scenario considers the extra boost implicit in the Finance Ministry's measures announced in March.

It is worth noting that this Report's baseline projections were made in an even more uncertain environment than the December IPoM. Of particular importance is the difficulty in estimating how the pandemic will evolve in Chile and the world, and how the sanitary control measures will need to be adjusted to avoid loss of human lives. The unprecedented nature of these elements means that the projected ranges for growth have a lower than usual information content. All in all, the Board estimates that this year Chile's GDP will contract between 1.5 and 2.5%. In 2021, it should increase between 3.75 and 4.75%, while in 2022 it should grow between 3% and 4%

In this scenario, medium-term inflationary pressures have dropped significantly, so that inflation's convergence to the 3% target requires monetary policy to remain in a highly expansionary stance for an extended period of time. Consistently with this, in March the Board lowered the MPR by 125 basis points, to 0,5%, its technical minimum. Additionally the Board has announced that it will continue to implement the necessary measures to ensure the proper functioning of financial markets and compliance with the Bank's inflationary and financial stability objectives.

The Board estimates that there are scenarios in which growth may be within the projection ranges, but the convergence of inflation to the target requires a different MPR trajectory and/or a change in the measures supporting the financial market. Despite significant downward corrections, it is still possible that the economy will perform worse than expected, particularly towards 2021 and 2022. This could be the case if the control of the sanitary emergency and the containment measures around the world take longer than expected. It could also happen if the significant financial needs of businesses and households fail to be met by the supply of credit. Scenarios of this kind would imply solvency problems and bankruptcies of companies in the most affected sectors, with greater job losses and a slower speed of recovery for the next two years. In situations like these, convergence to the inflation target may require keeping the MPR at its technical minimum for longer and/or making use of additional extraordinary measures. This is reflected in the monetary policy trajectory describing the lower the lower part of the MPR corridor (Chapter V).

Naturally, there is also the possibility of the sanitary emergency being overcome faster and that economic activity begins to return to normal sooner than expected, which would lend support to inflation towards the end of 2020 and the turn of 2021. In such case, monetary policy could initiate a gradual normalization process a few quarters earlier than anticipated —consistent

INFLATION (1)

	2019	2020 (f)	2021 (f)	2022 (f)
	(annual change. percent)			
Average CPI inflation	2.3	3.3	3.2	3.0
December CPI inflation	3.0	3.0	2.9	3.0
CPI inflation in around 2 years (2)				3.0
Average CPIEFE inflation	2.2	2.9	2.7	3.0
December CPIEFE inflation	2.5	2.9	2.9	3.0
CPIEFE inflation in around 2 years (2)				3.0

(1) For 2018, it shows annual change obtained with the 2013=100 basket. As from 2019, the 2018=100 basket is used, so figures are not strictly comparable with those of earlier years.
(2) Inflation forecast for the first quarter of 2022.
(f) Forecast.

Source: Central Bank of Chile.

with the upper part of the MPR corridor (Chapter V). Inflation could also rise if the disruption of the normal functioning of firms leads to a major drop in the available supply of goods and services, giving way to significant increases in their prices. In this case, it is not evident that the trajectory of the MPR should be modified, particularly if medium-term inflation expectations are still aligned with the target. All in all, the Board estimates that the balance of risks to activity is biased downward in the short term and unbiased in the medium term, while it is unbiased for inflation.

There are other scenarios where the performance of the economy would fall outside the projection ranges discussed before. Although the vast majority of central banks and fiscal authorities have adopted very significant measures, the unprecedented nature of the sanitary emergency makes it difficult to estimate its short- and medium-term reach, and more so when considering the vulnerabilities in some segments of the financial markets after a decade of low interest rates. This is partly what explains the sharp increase in risk aversion and the search for safe assets. If this kind of process continues, it cannot be ruled out that a severe tightening of financial conditions will occur, which will end up affecting the global payment chain, seriously damaging the financial position of various public and private entities and causing much more severe drops in activity. In such a situation, in which Chile would not be spared, it would be necessary to use instruments that go beyond the usual management of monetary policy, giving priority to financial stability concerns.

The circumstances that both the world and the Chilean economy are going through are extremely complex. The spread of Covid-19 has imposed a very unusual scenario, where decisions regarding public health, necessary to avoid greater costs in terms of lost human lives, are significantly reshaping social and economic activity. The effects of containment measures are already being felt various areas of individuals' and firms' day-to-day lives, and will have a major impact on activity, the labor market and inflation, among many variables. The baseline scenario assumes that the economy will suffer a significant contraction in the second quarter, but will begin to recover from the third quarter onwards. The fundamental premise of the scenario hinges on the ability of businesses and households to supplement their income with government support and finance the remaining gap through access to credit at a reasonable cost. Absent such premise, the local economy might face a deeper, longer-lasting recession, with severe consequences on the population's well-being. With this in mind, the Board has adopted measures that go beyond lowering the MPR and which are oriented to grant easier access to credit by persons and businesses. Accordingly, it will continue to use its powers and tools to meet its objectives of controlling inflation and safeguarding financial stability.

BOX
UPDATING THE MONETARY POLICY FRAMEWORK

The Central Bank of Chile (CBC) implements its monetary policy under an inflation-targeting regime, which has been partially in use since 1990 and was fully adopted in September 1999, together with a floating exchange rate regime.

After twenty years of application, this framework has proven to be appropriate for the Chilean economy, allowing the Bank to manage monetary policy independently. Inflation averaged 3.2% between 2001 and 2019, and inflation expectations two years ahead have been anchored around the 3% target throughout most of the last two decades. The main advantage of this framework is that it has mitigated the effects of major external shocks, such as the global financial crisis of 2008–09, and internal shocks, such as the earthquake and tsunami of February 2010 and the eruption of social protests in late 2019. Most recently, this framework has also allowed the Bank to launch a series of monetary policy measures to address liquidity needs deriving from the Covid-19 pandemic (box II.1).

This monetary policy framework requires a high degree of transparency and an active communication of the policies and actions undertaken. The Bank's efforts in this area include the preparation and publication of the Monetary Policy Report (IPoM), the Financial Stability Report (FSR), and the press releases and minutes of the Monetary Policy Meetings (MPMs). This is complemented with a series of financial education initiatives, the generation and diffusion of a broad spectrum of economic statistics, the development of an active economic research agenda, and the Board's diffusion of the various publications, including the Monetary Policy Report and the FSR.

As part of this effort to increase transparency and improve communication with the community, in 2007, the Bank published "*La Política Monetaria del Banco Central de Chile en el Marco de Metas de Inflación*," which explains the main aspects of the monetary policy framework (MPF). The Board recently decided to review and update this document, in order to describe the Bank's experience over two decades of operating under the inflation-targeting and floating-exchange-rate framework, to report on institutional developments that have been implemented in this and other areas of economic policy, and to discuss the lessons learned from the challenges faced by the Bank during this period. Thus, the Bank recently published a revised edition of this report, in an ongoing effort to facilitate understanding by society and economic agents of the rationale behind monetary policy decisions. In conjunction with this document, the Bank also published "*La Política Financiera del Banco Central de Chile*," which describes the Bank's role in maintaining financial stability in the country.

It is important to emphasize that the updating of the MPF does not represent a shift in the monetary policy strategy described in the 2007 report or a significant change in the underlying fundamentals. Rather, this new edition incorporates the experience accumulated over more than a decade since the publication of the original report and the lessons learned from facing the different challenges that have arisen in a changing environment.

Main elements of the monetary policy framework

As in the previous version, the MPF presents the institutional framework in which monetary policy is conducted, the Board's vision of the policy framework, including its objectives, the transmission of monetary policy, its conduct and operation, and the role of transparency and communications.

One of the key components of the Central Bank's MPF is an inflation target that guides monetary policy conduct and serves as a nominal anchor for the economy. In operational terms, the target implies that at any time and regardless of the current inflation rate, the inflation forecast—measured by the consumer price index (CPI)—must be 3% in a horizon of up to two years. The parameters that define the inflation-target-based monetary policy regime, which are described in detail in the report, are the following: the index used to calculate inflation; the value of the target; the target horizon; and the operational instrument. The choice of the CPI reflects the fact that it is the price index that most closely reflects changes in the local cost of living, and it is widely used as a reference unit for prices, wages, and financial contracts and for the calculation of the UF (*unidad de fomento,* an inflation-indexed unit of account). The target is set at 3% because higher inflation can provoke distortions in relative prices and be a source of volatility that exacerbates shocks, while lower inflation can make it difficult for the economy to adjust to adverse shocks and hinder the efficacy of monetary policy. The two-year horizon acknowledges that there are lags in the impact of monetary policy on prices, and it provides room for implementing a countercyclical policy consistent with the Bank's primary objective of price stability. Finally, the Central Bank uses the monetary policy rate (MPR) as its main operational instrument for achieving the target.

Within the MPF, the inflation-targeting regime is complemented by a floating exchange rate regime, which facilitates the economy's adjustment to real shocks and avoids significant or protracted deviations of the exchange rate from its fundamentals. The floating exchange rate is a crucial aspect of the MPF, as it supports a countercyclical monetary policy. Under a float, the monetary authority can use its policy instruments flexibly and independently to respond to the shocks facing the economy, thus helping to bring the output level closer to the economy's productive capacity. Nevertheless, the Bank reserves the option of intervening in the foreign exchange market in the event that volatility in that market becomes so high that it could represent a risk to the Bank's primary mandate of price stability and the normal functioning of the payment system, but it must never do so with a final objective of a specific exchange rate level. From December 1999 through the cutoff date of this Monetary Policy Report, the CBC has announced its intention of intervening in the foreign exchange market on five occasions.

The other fundamental pillar of the MPF is transparency and communication. On the one hand, the Bank's independence itself entails a greater responsibility in terms of providing information on its performance. An independent monetary authority must report on its actions and the degree to which it is meeting its objectives. On the other, in order for monetary policy to be effective—that is, to have an influence on the inflation path—it must be well understood by economic agents. For these reasons, the Bank is constantly seeking to improve the efficacy of its communication, so as to ensure that the public can more clearly and precisely understand the current monetary policy stance and how it could change in response to future developments in the macroeconomic context. Thus, starting with this Report, the Board is introducing a new tool for communicating its monetary policy strategy: namely, the MPR corridor (box V.1), which describes the range of possible future monetary policy paths that the Board considers most plausible under the central forecast scenario and the sensitivity scenarios described in the Report.

Main innovations since the last edition

The updated MPF differs from the previous edition in three main areas, reflecting the experience of the past several years.

First, the new report puts more emphasis on how, in a context in which the Central Bank is fulfilling its fundamental role of price stability, monetary policy can also play a countercyclical role by reducing the volatility of output. This stabilizing role is extremely valuable in a small open economy like Chile, where the adjustment of relative prices to external shocks is facilitated by a monetary policy that responds through the interest rate and a floating exchange rate that quickly returns to its equilibrium value. For example, in the face of a negative external shock, such as the drop in the terms of trade in 2014–2015 after the end of the commodity price super-cycle, this scheme allowed the Bank to deliver a greater monetary stimulus despite the fact that short-term inflation temporarily deviated from the 3% target due to the depreciation of the peso. This was possible because the weaker demand than expected in the central forecast scenario reduced inflationary pressures in the two-year policy horizon. Of course, the credibility in the inflation target is crucial for this stabilizing role to be successful. Therefore, consistently meeting the inflation target is what allows the Central Bank to play a countercyclical role. Once it has demonstrated its commitment to the target, which the Bank has done successfully over the years, it will have the space to also use monetary policy to reduce the volatility of output and employment, although this can never be completely eliminated.

Second, the report no longer identifies an inflation range of 2 to 4% as one of the monetary policy parameters, but instead focuses on the 3% target for inflation two years ahead. Although the range was a component of the inflation target in the previous edition of the report, in practice it has ceased to be a major factor in the monetary policy decisionmaking process over the last decade. This implied that episodes in which inflation was outside the 2–4% range were not associated with a mechanically stronger monetary policy response. Essentially, the monetary policy response did not depend on the position of inflation relative to the range, but rather reflected the factors relevant for the two-year forecast, such as the nature and persistence of the shocks, the initial state of the economy, and the evolution of inflation expectations. The 2–4% range is still a useful metric for the evolution of monetary policy. Given the shocks that have affected the economy in the past, for the two-year inflation forecast to be 3% in annual terms, it should mostly fluctuate within the range, as has in fact been the case.

Third, the report provides a much more detailed discussion of the interaction between monetary policy and financial policy. The two are interdependent, although they use different instruments, and both play a central role in the Bank's two objectives. On the one hand, the monetary policy framework, based on an inflation-targeting regime and a floating exchange rate, contributes to general macroeconomic stability, which facilitates the achievement of the financial stability objective. A monetary policy that ensures low, stable inflation supports the medium- and long-term development of the financial markets and helps prevent sharp changes in long-term interest rates and in the asset and liability valuation of financial institutions. The financial system, in turn, plays a central role in the transmission of monetary policy, whereby changes in the MPR, which have a direct impact on interest rates in the money market, are passed through to other deposit and loan rates and to the credit supply. Monetary policy transmission is less effective in a weak financial system, because the different market rates respond less intensely and less predictably to monetary policy actions, putting price stability at risk. A recent example of the interaction and coordination of monetary and financial policy measures can be found in the Bank's response to the consequences of the Covid-19 crisis (box II.1).

MONETARY POLICY DECISIONS IN THE LAST THREE MONTHS

DECEMBER MEETING

For the December Monetary Policy Report, the macroeconomic scenario had changed abruptly when the social crisis erupted in mid-October. Successive waves of violence had had an impact on the productive system, which deepened in light of the greater uncertainty and the deterioration of expectations evident in the available data. The financial markets reacted sharply, with drops in the stock market, a substantial depreciation of the peso, and increases in interest rates and credit ratings. In some cases, the shifts went beyond what would be expected given the greater risk perception. In this context, the Board had adopted several measures to improve liquidity in pesos and in dollars and announced an intervention in the foreign exchange market to mitigate the extreme volatility and foster an adequate adjustment.

The baseline scenario in December incorporated a GDP contraction of 2.5% in the fourth quarter of 2019, and the year closed with growth around 1%, considerably below the September forecast. Going forward, the growth forecast ranges were revised downward, to 0.5–1.5% in 2020 and 2.5–3.5% in 2021 (versus 2.75–3.50% and 3.0–4.0% in September, respectively). With regard to demand, consumption and investment, especially nonmining investment, had been revised significantly, in particular in the tradable component. This was consistent with the sharp deterioration in expectations, the higher cost of imported goods due to the exchange rate depreciation, and a tighter credit supply, as revealed in a special round of the Bank Lending Survey. For consumption, there were also some indications of a weaker labor market; for investment, higher interest rates and corporate spreads and a drop in the stock market. Moreover, the external scenario would not provide a significant boost to the local economy.

The growth recovery projected for 2020 was based on several assumptions, including the maintenance of expansionary monetary policy, a greater fiscal stimulus, a recovery of exports facilitated by the peso depreciation, and the gradual dissipation of the uncertainty and disruptions that had affected the economy. These forecasts were clearly subject to a higher degree of uncertainty than normal, due to the doubts surrounding the duration of the disruptions and the evolution of the political situation and medium-term fundamentals.

Headline inflation was forecast at around 4% in 2020, mainly due to the idiosyncratic peso depreciation, which implied an above-average exchange rate passthrough to inflation. The GDP contraction in the fourth quarter and the more meagre outlook for 2020 widened the output gap, which was partially offset by higher price pressures from the tradable component of inflation.

In this context, all the Board Members agreed that the factors underlying the uncertainty and the evolution of output and inflation were beyond the scope of macroeconomic policies, although they could help mitigate some of the negative effects. All the Board Members agreed that the option of holding the MPR at 1.75% outweighed the other alternatives—first because the current degree of monetary policy accommodation was judged to be consistent with the cyclical weakness of the economy, the high degree of uncertainty about its future evolution, and the fiscal stimulus program announced by the government; and second because the necessary consistency between the foreign exchange intervention and monetary policy limited the space for reducing the MPR in the coming months.

According to the Board, holding the MPR at its current rate was in line with inflation convergence in the policy horizon and would help reduce uncertainty. Thus, the Board voted unanimously to hold the MPR at 1.75% and to signal that it would remain at this level over the coming months, while more information was collected. Future adjustments could be up or down, depending on the state of the economy and the inflation outlook.

JANUARY MEETING

For January, the volatility of the domestic macroeconomic scenario had diminished substantially. Internationally, the markets' favorable reaction to the signing of a phase one trade agreement between China and the United States, combined with better data on the main economies, was offset by an emerging pessimism following the appearance of the novel coronavirus (Covid-19).

Output data for the fourth quarter were in line with the December estimate, confirming the negative impact of the disruptions caused by the social crisis. In particular, the IMACEC index for October and November revealed a marked drop in annual terms in some services and trade. In the same period, construction recorded positive growth, as did the manufacturing industry in November. Some indicators suggested that the negative effects had eased in December.

In spending, there was a downturn in tradable consumer goods, with trade inventories still perceived as high according to the Monthly Business Confidence Index (IMCE) and with consumer expectations continuing to contract in the Consumer Confidence Index (IPEC). Consumer loans had slowed, suggesting greater caution on the part of households, together with tighter lending conditions as captured in the Bank Lending Survey for the fourth quarter of 2019. In the labor market, administrative data such as job termination letters showed early signs of deterioration, while hiring expectations (IMCE) were still pessimistic in several sectors. In investment, the data were nuanced. The trend was very negative for some components and expectations, but credit creation was still relatively reasonable and there had been a significant amount of overseas corporate bond issues with favorable financial conditions. At the same time, the investment components associated with large mining projects continued to unfold as planned.

The risks of a greater deterioration of the local economy were still present. As highlighted in the December Monetary Policy Report, the recovery would depend on a reduction of uncertainty, and the expectations data released since the publication of the Report had not improved. At the same time, progress had been made on the legislative agenda, in both political and economic terms and even in relation to law and order. The situation in the local financial markets and foreign investors' risk perception of the Chilean economy would need to be monitored going forward. Tracking the evolution of external risks would be particularly important, since more positive or more negative scenarios could have a similar probability of occurrence, but the latter could have a much larger impact on the local economy.

Inflation had been lower than forecast in December. While this surprise did not represent a substantial change, it did raise concern because it could reflect a lower exchange rate passthrough or sharper deflationary pressures, vis-à-vis projections. Medium-term inflation expectations remained around 3%, although shorter-term expectations were below the Bank's forecasts.

In this scenario, all the Board Members agreed that the option of holding the MPR at 1.75% prevailed over all other options. Given that the macroeconomic scenario had not changed substantially, this option was consistent with maintaining an expansionary monetary stimulus and with the Board's signal in the press release from the last Meeting. All the Board Members agreed that the economic recovery and convergence to the inflation target would require an expansionary monetary policy in the coming quarters, over and above the decision at this Meeting. The Board voted unanimously to hold the MPR at 1.75%, indicating that it would be difficult to anticipate future courses of action given the current levels of uncertainty.

SPECIAL MEETING ON 16 MARCH

On 16 March, the Board held a special session to address the rapid and significant deterioration of the macroeconomic scenario, due to the global Covid-19 pandemic.

At the time of the meeting, there were no domestic data available incorporating the effects of these disruptions. However, the progress of the disease in the country, the public health measures adopted, and a review of the experience in other countries all suggested that the impact on sales and cash flow could be severe, especially for small and medium-sized businesses.

Furthermore, the Chilean economy was facing this scenario from a weak starting point, despite a recovery in the IMACEC index in December 2019 and January 2020. There had also been a deterioration in several factors linked with domestic demand, including the labor market, local financial conditions, and agents' expectations. Additionally, many companies, especially small and medium-sized businesses, were already hurting financially due to the reduction in sales in October and November 2019.

In this context, the Board decided to lower the MPR by 75 basis points (bp), to 1.0%, with Governor Marcel, Deputy Governor Vial, and Board Member García voting in favor of the reduction. Board Members Naudon and Costa voted to reduce the MPR by 50 bp. Furthermore, the Board implemented additional measures to ensure the normal functioning of the credit markets and an effective transmission of the greater monetary stimulus. These included offering banks a funding facility conditional on increased lending (the Conditional Financing Facility for Increased Loans, or FCIC); adding corporate bonds to the set of eligible collateral for all current liquidity operations in pesos, including the FCIC; establishing a program to purchase bank bonds from participants of the open market operations system (SOMA) for an amount equivalent to US$4 billion; and extending the currency sales program through 9 January 2021.

I. INTERNATIONAL SCENARIO

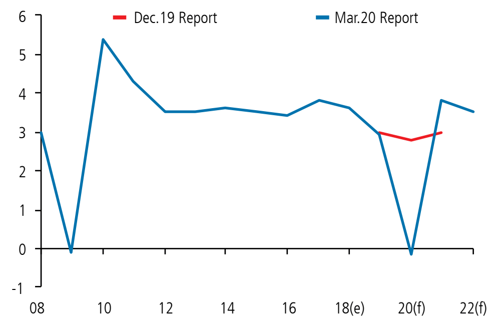
This chapter analyzes the recent evolution of the world economy and the outlook for the next two years and describes the most probable external scenario and the main risks.

The global Covid-19 pandemic, the containment measures, and the uncertainty surrounding its economic scope and duration have generated a series of real and financial effects that have had a significant impact on the global economy. Consequently, the baseline scenario forecasts a global recession in 2020 (figure and table I.1), a view that is shared by other counterparts. In the financial markets, risk aversion has increased substantially, triggering major price corrections in various assets and a worsening of financial conditions. In response, monetary authorities have reacted strongly, in many cases based on financial stability concerns. As the pandemic recedes, these stimulus measures will be crucial for the recovery of world growth projected over the next two-year period.

The marked deterioration of the external scenario will be transmitted to the local economy through three main channels. First, international trade flows will decline, given the dismal performance projected for Chile's main trading partners. In the case of the two largest—China and the United States—the 2020 GDP growth forecast is 3.0% for the former (the lowest since 1990) and –1.9% for the latter (5.5% and 1.6% in December). This channel will be reinforced by the effect on the terms of trade, where a sharp drop in the price of Chilean exports, in particular copper, will be partially offset by a lower oil price. Second, there will also be a negative impact on financial conditions. The greater risk aversion and the resulting flight to safety has translated locally into higher term and credit spreads, sharp stock market drops, and a significant nominal and real depreciation of the exchange rate, as well as other adjustments. Third, the general perception that the global economy will enter a recession also affects household and business confidence, intensifying the effect of the financial channel and further stifling the boost to spending. The magnitude of the impact associated with these channels will depend on factors such as Chile's participation in global value chains, specifically as a commodity supplier. Another consideration is that an external shock has an immediate effect on expectations and a more lagged impact on domestic demand components, with investment suffering the most[1].

[1]/ See the Monetary Policy Report, September 2019, box III.1, for a discussion of the effects of an external shock on the Chilean economy (in this case, the intensification of the trade war).

FIGURE I.1
World growth
(annual change, percent)



(e) Estimate. (f) Forecast.

Source: Central Bank of Chile.

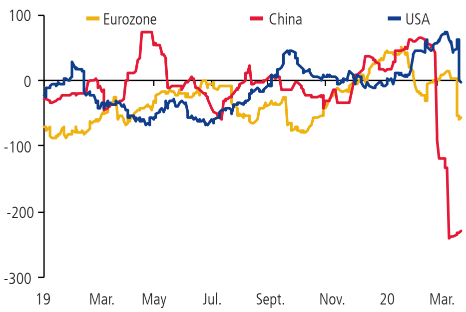
TABLE I.1
World growth (*)
(annual change, percent)

	Ave. 00-07	Ave. 10-18	2019 (e)	2020 (f)	2021 (f)	2022 (f)
World at PPP	4.5	3.8	2.9	-0.2	3.8	3.5
World at market FX	3.3	3.1	2.4	-0.9	3.4	3.0
Trading partners	3.7	3.9	2.9	-0.1	4.0	3.5
United States	2.7	2.3	2.3	-1.9	3.5	2.6
Eurozone	2.2	1.4	1.2	-3.3	2.3	1.8
Japan	1.5	1.4	0.7	-2.8	1.4	1.1
China	10.6	7.9	6.1	3.0	7.0	6.1
India	7.1	7.4	6.1	3.5	5.1	5.5
Rest of Asia	5.3	4.6	3.4	0.1	3.7	4.4
Latin America (excl. Chile)	3.4	2.0	-0.8	-3.0	2.2	2.2
Commodity exporters	3.1	2.4	1.8	-1.0	3.4	2.7

(*) See glossary for definitions.
(e) Estimate. (f) Forecast.

Source: Central Bank of Chile, based on a sample of investment banks, Consensus Forecasts, IMF, and the statistical offices of each country.

FIGURE I.2
Citigroup surprise indexes (1)(2)
(pivot point = 0)



(1) The Citigroup surprise indexes are calculated daily in a rolling three-month window and are defined as the historical standard deviations of data surprises (real data versus analysts' expectations), weighted by the effect of the surprise on the nominal exchange rate of each country. A value over (under) zero indicates a positive (negative) surprise. (2) Data through 27 March 2020.

Source: Bloomberg.

FIGURE I.3
China: Short-term indicators (*)
(annual change, percent)

(*)Three-month moving average.

Source: National Bureau Office of China.

The change in the international scenario has unfolded in a context where, prior to the emergence of the Covid-19 crisis, the global panorama was evolving relatively in line with the forecast, and there were even some positive surprises in the year-end 2019 data in the main economies (figure I.2). Furthermore, the United States and China reached a phase one trade agreement in mid-January, which underlay a nascent recovery in world trade and industrial output at the global level, as well as a more stable outlook for manufacturing. At the same time, dynamic labor markets in the developed world suggested that consumption would continue to record a positive performance.

However, in late January, the cancellation of the Lunar New Year celebrations in China to contain the Covid-19 epidemic triggered more pessimistic feelings in the markets. These were initially concentrated on doubts about the performance of the Chinese economy and its potential impact on rest of the world, a perception that became increasingly negative as the Chinese authorities instituted greater containment measures to slow the spread of the virus. The temporary shutdown of manufacturing led, on the one hand, to a disruption in supply, which had repercussions on value chains given China's high trade integration with the rest of the world. In a two-month period (January and February), China's industrial output fell 13.5% in annual terms, the worst drop in 30 years. As a result, exports declined on the order of 17% annually in the same period, while other short-term indicators also deteriorated (figure I.3). In terms of demand, the shock caused a drop in Chinese imports, which had a marked effect on emerging economies that produce commodities and manufacturing inputs. Some of the data released in recent weeks suggest that output in China has been gradually normalizing, but it has yet to recover to the levels recorded before the pandemic.

By March, transmission outside of China had begun to accelerate, which caused a major shift in the global scenario. At first, the rapid spread of the virus in countries like Italy and Spain sparked fears about the capacity of health systems to respond to a more massive outbreak, fears that ultimately materialized. In the days leading up to the publication of this Report, these doubts intensified in the United States, which surpassed the rest of the world in terms of the number of cases. Most recently, the actions that governments have implemented to slow the spread of the disease have generated new concerns on the state of the global economic cycle. The situation has become increasingly complex, with total quarantine in some cases, as well as voluntary social distancing on a massive level.

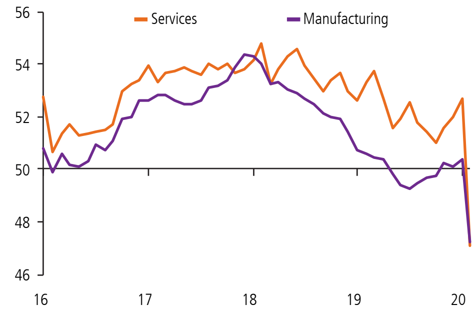
The lower population movement is comparable to a supply shock that reduces productive capacity. This has a huge potential for cross-country transmission given the high degree of integration among economies, accentuating the risk of an interruption of supply chains. In the manufacturing sector, which was already hard hit by the trade war, expectations have fallen substantially in recent weeks, as is also the case in the service sectors (figure I.4). This first-round effect on supply will be compounded by weaker demand, which will also affect world output. This reflects the impact of the public health measures on employment and on business and household income, as well as the reduction and/or deferral of spending plans in the face of high uncertainty. The deterioration of demand has been especially notable in sectors such as trade, tourism, and services in general. According to estimates by the International Air Transport Association released the last week in March, global income in the passenger segment will drop 44% in 2020 relative to the previous year.

The international financial markets have reacted strongly to these developments. Increased risk aversion has translated into historically high volatility, massive capital outflows, higher credit spreads, and a depreciation of most currencies against the dollar. Thus far in the year, the global stock market (MSCI World Index) has recorded an accumulated loss on the order of 25%, with daily ups and downs of exceptional magnitudes, reflecting the markets' hypersensitivity to news in one direction or the other. The decline has been especially marked in the economies of Europe and Latin America. In the fixed-income market, long-term interest rates fell significantly in the majority of countries, with exceptions in Latin America, in some cases hitting new lows. Most recently, long rates have tended to revert, in line with the increased demand for cash dollar liquidity, which has led to portfolio adjustments, and with the greater supply of sovereign securities, in relation to the fiscal stimulus measures that have been announced worldwide. Together with monetary measures, these actions have contributed to calming the markets somewhat in recent weeks (figures I.5, I.6, I.7 y I.8).

The financial shock that has accompanied the current pandemic mainly derives from doubts about the scope of the economic impact. With people staying home, there has been a significant reduction—and in some cases a total drop-off—in sales and, therefore, in businesses' cash flow. Many could face insolvency, especially considering the substantial increase in corporate debt in recent years, favored by the extraordinarily loose lending conditions. According to a report by the Institute of International Finance (IIF) published in mid-March, the global debt of nonfinancial companies is 93% of world GDP (versus 75% before the 2008–09 financial crisis), and some of the highest debt levels are found in sectors with a meager, highly volatile performance[2]/. According to estimates by the International Monetary Fund (IMF), in the event of an economic crisis half as serious as 2008, 40% of corporate debt in the developed world would be at risk, with insufficient income to even cover the interest[3]/. The sharp drop in the oil price is another risk factor for a segment of the corporate sector. In the United States, the largest crude oil producer in the world, energy companies account for a large share of bonds with the highest probability of payment default, and many are highly leveraged, which heightens the concerns about their solvency. The low oil price could cause a relevant share of these firms to default, resulting in even greater pessimism in the rest of the market. Importantly, the costs of production in the United States (shale oil) are relatively higher than in other countries, such as the oil producers in the Middle East. Moreover, crude oil prices are currently below the fiscal equilibrium price of the bulk of the oil-producing nations, some of which face an additional challenge due to the downward revision of their credit rating.

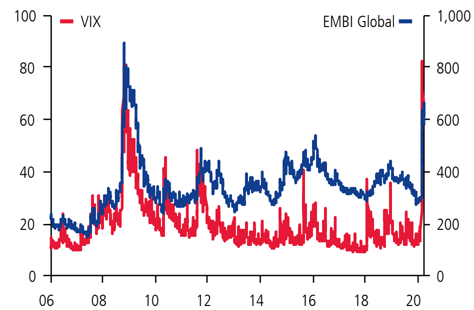
[2]/ Institute of International Finance (2020).
[3]/ IMF (2019b).

FIGURE I.4
Global PMI (*)
(seasonally adjusted index)



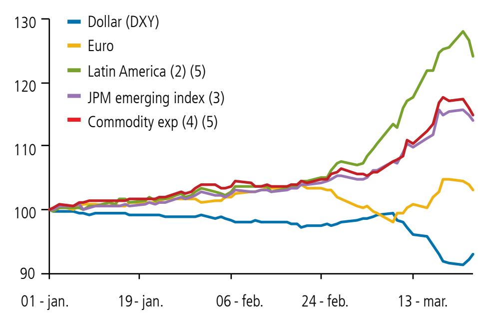
(*) A value over (under) 50 indicates optimism (pessimism).
Source: JP Morgan.

FIGURE I.5
VIX and EMBI Global
(percentage points; basis points)



Source: Bloomberg.

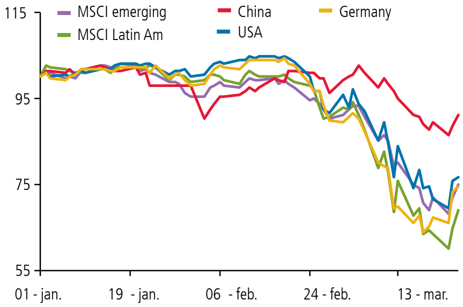
FIGURE I.6
Selected exchange rates in 2020 (1)
(index: 1 January 2020=100)



(1) Increase (decrease) indicates depreciation (appreciation). (2) Includes Brazil, Colombia, Mexico, and Peru. (3) JP Morgan index; includes Singapore, India, China, Chile, Mexico, Brazil, South Africa, Hungary, Russia, and Turkey. (4) Includes Australia, Canada, New Zealand, and South Africa. (5) Constructed using the PPP weights in the October 2019 WEO.

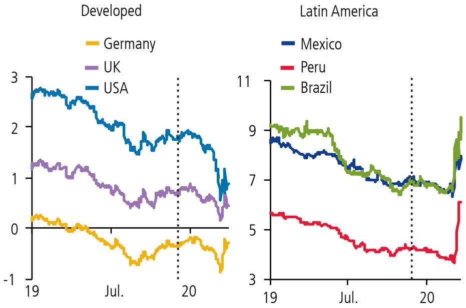
Source: Bloomberg and international Monetary Fund.

FIGURE I.7
Stock markets in 2020
(index: 1 January 2020=100)



Source: Bloomberg.

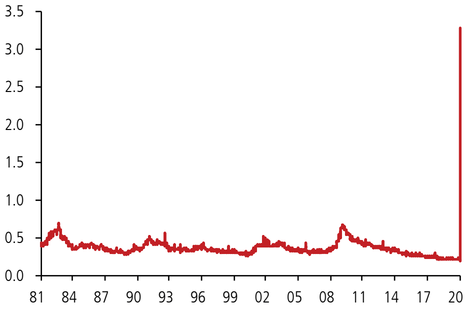
FIGURE I.8
Nominal 10-year interest rates (*)
(percent)



(*) The vertical dotted line marks the cutoff date of the December 2019 Report.

Source: Bloomberg.

FIGURE I.9
US jobless claims (*)
(millions)



(*) Data through 26 March 2020.

Source: Bloomberg.

The pandemic could also have a major impact on employment, due to bankruptcies or massive job cuts. In the United States, for example, new unemployment applications hit a record in the third week of March (figure I.9). Firms' spending decisions could also be affected, due to the loss of equity following the collapse of asset prices. At the same time, bank lending conditions could tighten in response to the perception of increased global risk.

Faced with this scenario, the monetary authorities have responded with a variety of measures to mitigate the economic effects of the pandemic, calm the markets, minimize the duration of the financial shock, and ensure sufficient short-term liquidity, taking into account the deterioration of some indicators related to the latter (figure I.10). At the same time, the global inflation outlook has been revised downward. Central banks have done everything from cutting their reference rate (figure I.11)—in many cases through extraordinary meetings—to implementing a range of unconventional measures, including a coordinated action by the central banks of Canada, England, the Eurozone, Japan, Switzerland, and the United States to preserve dollar liquidity in the markets. The U.S. Federal Reserve (Fed) has made the biggest adjustments. It lowered its reference rate to a range of 0.00–0.25% (the lowest rate since 2008), established an unlimited quantitative easing program, temporarily relaxed regulatory requirements while encouraging banks to use their regulatory capital to increase lending, and extended its repo operations. Many of these and other instruments have also been deployed by central banks in the rest of the world. The European Central Bank (ECB) reinforced its asset purchase strategy, with a new Pandemic Emergency Purchase Program (PEPP) and targeted longer-term refinancing operations (TLTRO), while the Bank of England cut its policy rate to a historical low, increased bond purchases, and authorized banks to use their capital buffer. China, India, Australia, New Zealand, and many other countries have adopted similar measures (box II.1). In Latin America, Peru, Colombia, Mexico, and Brazil have all lowered their monetary policy rate and, with the exception of Peru, have intervened in their foreign exchange market. Several have also bolstered their repo operations.

The fiscal policy response has included tax cuts or deferrals, subsidies, tariff reductions, and spending packages. The European Union has already relaxed the rules of the Stability and Growth Pact for its members. In this bloc, efforts have focused on protecting the jobs and income of workers who have been affected by the drop-off in activity. In the United States, the rescue plan will cost over US$2 trillion and includes the immediate provision of cash to U.S. citizens. In Latin America, the authorities have similarly implemented spending packages, targeting the most vulnerable segments of the population.

Several of the policy initiatives provide direct support to businesses. On the monetary front, the Fed has started buying corporate bonds for the first time and is also backing loans to small and medium-sized enterprises (SMEs) and other types of borrowers. In the United Kingdom, the Bank of England introduced a new term funding scheme with additional incentives for loans to SMEs, financed by the issuance of central bank reserves. On the fiscal front, some support measures have targeted specific sectors, most notably businesses in tourism and other services (including the airlines). Some governments are providing loan guarantees for the commercial segment, in particular in Europe.

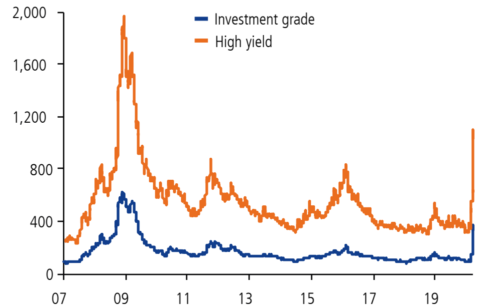
The German authorities have even indicated that these guarantees will be unlimited, under the framework of a stimulus plan that includes an economic stabilization fund authorized to take on direct equity stakes in firms.

The lower global demand has also reduced the prices of most commodities. In the case of oil, supply factors have exacerbated the situation, as the price war between Russia and Saudi Arabia led the latter to increase production and offer major discounts to its customers. As of the cutoff date, the crude oil price (the WTI-Brent average) was fluctuating just over US$20 a barrel, representing a drop of nearly 60% this year, with daily movements not seen since the Gulf War in the early 1990s (around –30%). The copper price, in turn, has declined around 20% thus far in the year, to around US$2.20 a pound on the cutoff date (figure I.12). The baseline scenario for 2020–22 assumes an average oil price of US$42 a barrel (WTI-Brent) and a copper price of US$2.50 a pound (down from US$58 and just over US$2.70 in December, respectively). Consequently, the terms of trade are also expected to fall this year.

Latin America has been strongly affected by the change in the international macroeconomic scenario. The financial shock has hit this bloc especially hard, with a deterioration in spreads, an increase in sovereign bond interest rates, and currency depreciation at the global level. Even before the pandemic, the region was already feeling the effects of various idiosyncratic factors, with a weakening in demand from the region's trading partners and limited space for fiscal policy. The measures implemented to contain the spread of the virus further complicate the picture. By country, Argentina and Mexico both recorded a GDP contraction in 2019. In the former, the current crisis could push back the country's debt renegotiation, potentially leading to a request for new external resources. Mexico, in turn, will be affected by the recession in the United States—its biggest trading partner—and by the reduction in oil income, which will also have an impact on Ecuador, Colombia, and Brazil. At the same time, Brazil and Peru, as well as Chile, will feel the effects of the weaker performance of the Chinese economy, their main export destination. Thus, Latin America is expected to contract 3.0% in 2020 (+1.1% in December), one of the largest revisions in the baseline scenario (figure I.13).

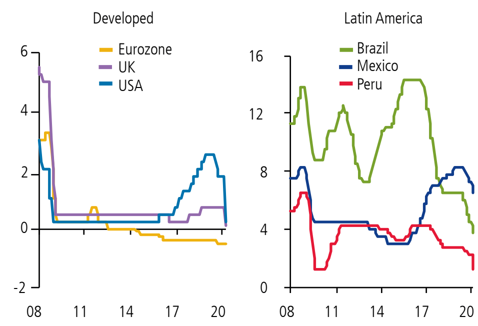
In comparison with the 2008–09 financial crisis, there are a number of differences in the current external crisis, although the global economic performance is expected to be similar to that period. First, the current situation originates in a temporary shock on the real sector, whose effects could be less persistent to the extent that there are no major financial disruptions and the impact on business sustainability is contained. Second, the banking system in the developed world is more solid today, with the exception of some European banks, thanks to a series of reforms oriented toward strengthening financial stability, based on the lessons learned from the previous crisis. Nevertheless, there are some sources of greater vulnerability, starting with the global scope of the shock and its rapid spread. Additionally, China's potential to boost the world economy is, in principle, much lower than in 2008–09, when it was the cornerstone of the subsequent cyclical recovery. Finally, corporate debt is high, as mentioned earlier—in contrast to the lower household debt in several developed countries—which puts the solvency of a large set of firms at risk. In this context, the baseline scenario of this Report incorporates a significant

FIGURE I.10
Corporate bond spreads in the USA
(basis points)



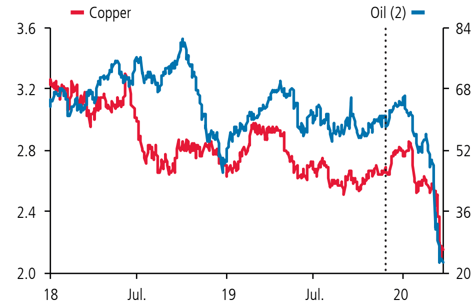
Source: Bloomberg.

FIGURE I.11
MPR in selected economies
(percent)



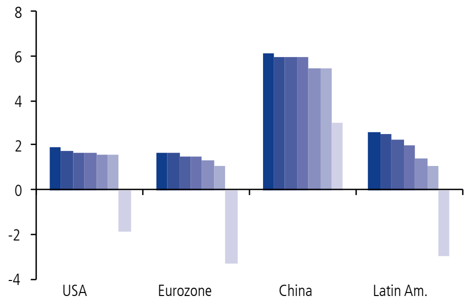
Source: Bloomberg.

FIGURE I.12
Commodity prices (1)
(dollars per pound; dollars per barrel)



(1) The vertical dotted line marks the cutoff date of the December 2019 Report.
(2) Simple average of the Brent and WTI crude oil prices per barrel.
Source: Bloomberg.

FIGURE I.13
2020 growth forecast in recent Monetary Policy Reports (*)
(annual change, percent)



(*) Evolution of the forecast from the September 2018 to March 2020 Reports.

Source: Central Bank of Chile.

reduction in the world growth forecast for this year, to –0.2%, in line with the –0.1% growth rate recorded in 2009 during the international financial crisis.

With regard to the risks, on the positive side, there are factors pointing to a faster recovery of the world economy, in particular the quick and sizable response of the monetary and fiscal authorities. This will be key for the global recovery, to the extent that it not only allows people and firms to endure the lower income during the social-distancing period, but also bolsters expectations. Together with the public health measures, these efforts will help minimize the human and economic costs. Additionally, the quick discovery of a vaccine against Covid-19 would reestablish confidence sooner, while also providing a medium-term solution to the health problem. As in any such situation, the global recovery will be V-shaped, while the markets will settle down more quickly.

On the negative side, the main risk is a longer duration of the epidemic and the isolation measures, which would increase the probability of widespread bankruptcies among firms and generate a significant spike in unemployment. This could compromise the solvency of the banking system in some countries and lead to a sharper deterioration of global financial conditions. The result would be a deeper recession and a much slower recovery of the global economy, similar to the events in 2008–09.

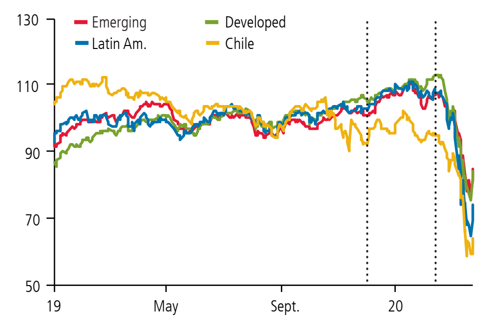
II. FINANCIAL CONDITIONS

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

In recent weeks, the local financial market has moved in step with global markets, in a context in which the Covid-19 pandemic is triggering sharp fluctuations in asset prices and risk aversion is rising, causing international financial conditions to deteriorate. Global stock markets have collapsed across the board, volatility has reached higher peaks than during the global financial crisis, capital is flowing out of both emerging and developed economies, credit spreads have increased, and most currencies have depreciated against the dollar. In Chile, the stock market, the exchange rate, the sovereign spread, and corporate spreads have all moved substantially, as is the case in comparable economies. In response to these rapid developments, the Board has adopted a series of measures in an effort to avoid a worse deterioration of the macroeconomic scenario and to ensure the proper functioning of the financial markets. These include reducing the monetary policy rate (MPR) by 125 basis points (bp), from 1.75 to 0.50%—its effective lower bound. The Board also announced a series of complementary measures to facilitate the provision of liquidity, safeguard the normal functioning of credit markets, and ensure an effective transmission of the greater monetary stimulus (box II.1). At the same time, the government announced a series of measures to support household income and ease firms' cash flow pressures. The Chilean economy is facing the crisis from a weak starting point, given that the events of the social crisis that erupted toward the end of last year have had an impact on economic growth, the financial position of some firms, and local financial variables.

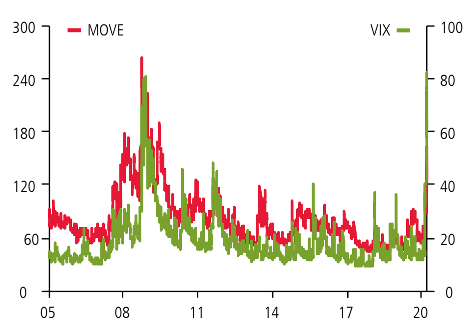
The Covid-19 pandemic has hit the international financial markets hard. Stock markets have been the most volatile, with major sell-offs in response to negative news related to the virus or the oil price war. Some exchanges have even had to temporarily halt trading. Thus, the S&P 500 lost 30% of value in just 30 days—faster than any other period in history, including the 1929 crash. The market rallies following the announcement of huge fiscal and monetary stimulus packages have not been sufficient to offset the earlier drops. Since 19 February, developed stock exchanges have fallen around 17%; emerging, 13%; and Latin American, 25%—all measured by the MSCI (figure II.1). Market volatility has escalated swiftly, reaching historical peaks in mid-March in the case of the VIX (figure II.2).

FIGURE II.1
Stock markets (1) (2)
(index: 2019-2020 = 100)



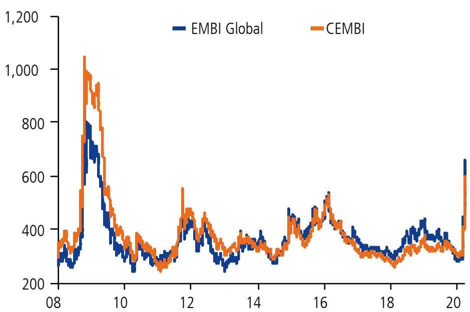
(1) Regional stock indexes measured in local currency, from Morgan Stanley Capital International. For Chile, the IPSA is used.
(2) The left vertical dotted line marks the cutoff date of the December 2019 Report; the right vertical dotted line marks the start of the stock market crash in reaction to the Covid-19 outbreak.
Source: Bloomberg.

FIGURE II.2
Volatility
(basis points; percent)



Source: Bloomberg.

FIGURE II.3
Emerging market credit spreads (*)
(basis points)



(*) Emerging Markets Bond Index Global and Corporate Emerging Markets Bond Index.
Source: Bloomberg.

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

	Change in NER, March 2020 Report			
	12.19	09.19	07.19	03.19
Latin America (2) (3)	**18,6**	**19,8**	**22,7**	**26,7**
Brazil	19,0	23,0	25,5	31,2
Chile	6,8	19,5	21,5	27,3
Colombia	17,1	18,4	20,8	30,3
Mexico	21,2	19,0	22,9	23,7
Peru	4,6	4,7	5,7	7,4
Commodity exporters (2)	**11,1**	**10,1**	**11,5**	**13,3**
Australia	14,0	13,6	16,1	19,2
Canada	7,2	7,2	5,8	6,7
New Zealand	9,6	9,1	11,4	17,1
South Africa	16,2	11,7	17,7	18,7
Developed economies (2)	**1,7**	**2,0**	**2,2**	**3,4**
Eurozone	1,1	1,7	2,5	3,8
Japan	-0,1	2,6	-0,5	-1,8
United Kingdom	8,5	2,5	6,4	11,2
Other emerging economies				
China	0,3	-0,5	2,2	5,1
Rep. Korea	5,6	2,6	4,5	9,7
India	4,6	4,7	7,6	8,6
Indonesia	10,7	9,5	8,4	9,8
Poland	6,0	5,0	7,5	9,1

(1) The values reflect the percent change between the cutoff date of the corresponding Monetary Policy Report and the cutoff of this Report. The NER of each series is calculated as the average of the last ten business days. Positive (negative) sign indicates depreciation (appreciation) of the currency against the U.S. dollar.
(2) Includes the currencies of the economies included in this table, using the weights in the October 2019 WEO.
(3) Excludes Chile.

Sources: Central Bank of Chile, Bloomberg, and International Monetary Fund.

Another important factor is the significant increase in risk aversion since the fourth week of February. As a result, sovereign interest rates have fallen sharply in several developed countries, although most recently, the flight to safety in short-term assets and even cash has reversed the trend somewhat. In the emerging economies, sovereign risk indicators have climbed significantly, reaching levels not seen since 2009. Corporate spreads have followed a similar trend, reflecting an increase in corporate financing costs at the international level (figure II.3).

Exchange rates have also been quite volatile, as investors have abandoned their positions in emerging and commodity currencies in favor of the U.S. dollar. Since the cutoff of the last Report, the currencies of Brazil, Mexico, Colombia, and South Africa have depreciated between 15 and 20% against the dollar (table II.1).

In response to the sharp deterioration of the world growth outlook and global financial conditions, the main central banks—many of which have held special meetings to address the issues—have lowered their policy rates to a minimum and established unconventional expansionary packages—some of which have never been tried before—aimed at maintaining liquidity in the money markets and ensuring the provision of credit in the financial markets, while also supporting the proper functioning of the credit channel of monetary policy transmission (box II.1). Thus, the U.S. Federal Reserve (Fed) reduced the federal funds rate to a range of 0.00–0-25%, established an unlimited quantitative easing program, and announced various loan programs to support businesses affected by the economic downturn. Similar measures have been adopted by the Bank of England, the European Central Bank, the Bank of Canada, and so on (chapter I). In recent days, the announcement of these measures helps explain the partial reversal of the deterioration of the global financial markets.

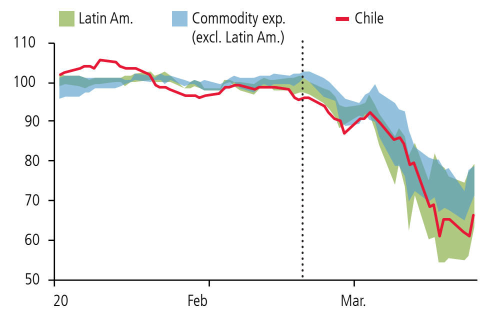
The local financial market has also responded strongly to the changes in the global scenario, most notably through the stock market, the exchange rate, and credit spreads. As in comparable countries, these variables have deteriorated to a degree not seen since the 2008 financial crisis. Since mid-February, the IPSA stock index has dropped 32%, recording its worst day in 30 years (–14.3% on 19 March) (figure II.4). Banking, retail, construction, and air transport were the hardest hit. With regard to sovereign risk indicators, the CDS spread and the EMBI increased 70 and 200 bp, respectively, in the past month. Corporate bond spreads have also risen, exceeding their November levels (figure II.5), while bank bonds approached that mark. In the money markets, dollar and peso liquidity were affected, with increases in onshore and deposit-swap rate spreads (figure II.6). Fixed-income rates, in line with the international scenario, have fluctuated with the flight to safety but, in sum, have recorded limited movements relative to the December Report. The biggest accumulated drops were in two- and five-year indexed bonds (BCU-2: –70 bp; BCU-5: –40 bp).

The exchange rate has again fluctuated significantly due to the increased risk aversion, albeit to a somewhat lesser degree than similar currencies (figure II.7). Since the December Report, the Chilean peso has depreciated 6.8% against the U.S. dollar. The depreciation was lower in multilateral terms: MER, 3.3%; MER-5, 6.1%; and MER-X, 2.4% (table II.1). Exchange rate volatility has increased, though not to the extent of last November. The real exchange rate is near 107, which is a bit higher than in the December Report and higher than the averages of the last 15 and 20 years.

With regard to lending conditions, data through February confirmed the tightening projected in the December Report based on qualitative information. The social crisis both reduced people's willingness to take on consumer credit and increased banks' risk assessment and funding costs. The former is seen in the slowdown in consumer loans, which contracted year-on-year in January and February. The annual growth rates of commercial and mortgage loans, in turn, were around the levels reported in the December Report (figure II.8). Interest rates rose in all segments (figure II.9). These trends are consistent with the results of the Bank Lending Survey for the fourth quarter of 2019, which reveals a perception of weaker demand for consumer loans and tighter supply for both businesses and households. Bank credit risk indicators, including both loan loss provisions and default, have increased since October. According to data from the Chilean Financial Market Commission (FMC), loan loss provisions grew from 2.46% of loans in September 2019 to 2.56% in January 2020. The FMC data also confirmed the weakening of payment capacity on the part of debtors. Between November and January, the nonperforming loan portfolio grew 6.8%, from 1.94% of loans to 2.06%. At the same time, the February Business Perceptions Report (BPR) indicated that the banks, to avoid a deterioration in default and portfolio indicators following the social crisis, had provided some relief in their payment terms.

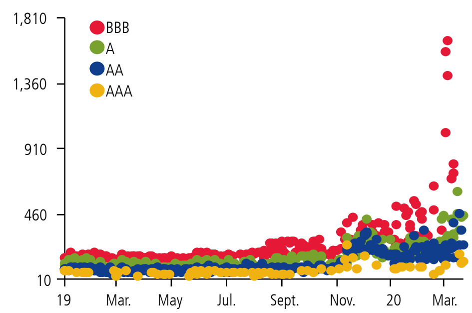
The baseline scenario in this Report incorporates a sharp downward revision in the growth forecast for 2020, projecting a contraction of 2.5 to 1.5%. This reflects the public health measures necessary to control the COVID-19 outbreak in the country and the negative consequences of the changes in the international scenario. Moreover, the economic sectors that are being hit the hardest are the same sectors that suffered the most from the disruptions caused by the social crisis.

FIGURE II.4
IPSA and selected stock indexes (1) (2) (3) (4)
(index: 01/01/20-19/02/20 = 100)



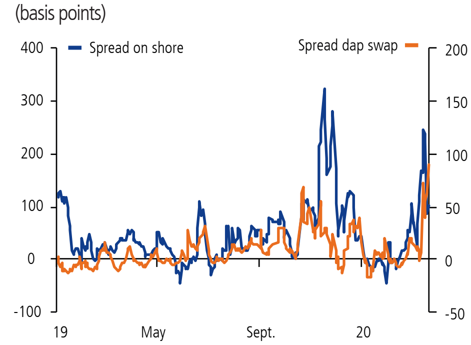
(1) Vertical dotted line: 19 February 2020.
(2) Stock index value at the close of each day. Shaded areas show the range of the normalized series for a group of countries.
(3) Latin America includes Brazil, Colombia, Mexico, and Peru.
(4) Commodity exporters (excl. Latin Am.) include Canada, Australia, New Zealand, and Norway.
Source: Bloomberg.

FIGURE II.5
Nonbank corporate spread by risk level (*)
(basis points)



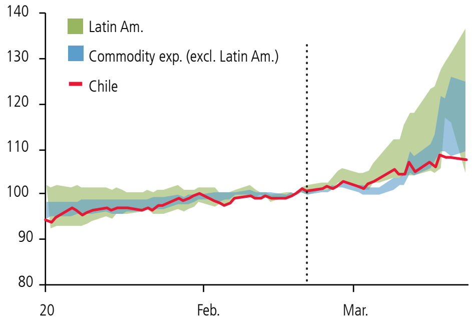
(*) The spread over the UF-denominated sovereign bond. Each point is the daily average weighted by the amount of each instrument in the category. Latest data are preliminary.
Source: Santiago Stock Exchange and Central Bank of Chile.

FIGURE II.6
Spread on shore and spread dap swap
(basis points)



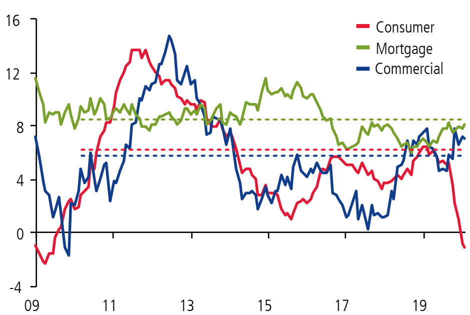
Source: Central Bank of Chile.

FIGURE II.7
Nominal exchange rate: Chile and selected countries (1) (2) (3) (4)
(index: 19/02/2020 = 100)



(1) Vertical dotted line: 19 February 2020.
(2) Nominal exchange rate at the close of each day. Shaded areas show the range of the normalized series for a group of countries.
(3) Latin America includes Brazil, Colombia, Mexico, and Peru.
(4) Commodity exporters (excl. Latin Am.) include Canada, Australia, New Zealand, and Norway.
Source: Bloomberg.

FIGURE II.8
Real loans (1) (2)
(annual change, percent)



(1) Real data constructed with the spliced CPI series with base year 2018.
(2) Horizontal dotted lines indicate the average of the last 10 years for each series.
Source: Central Bank of Chile, based on data from the FMC.

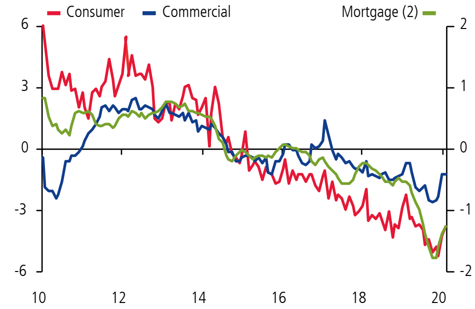
In March, the Board announced a series of measures aimed at mitigating the negative effects of the pandemic, facilitating the economy's adjustment process, and keeping the financial markets functioning adequately. The first, announced on 12 March, provides new liquidity measures for the money markets, through the extension of repo and foreign currency swap programs and the incorporation of new maturities for both instruments. Next, at a special Monetary Policy Meeting held on 16 March, the Board established five additional measures: (1) a 75 bp cut in the MPR, to 1%; (2) the opening of a funding facility conditional on increased lending (the Conditional Financing Facility for Increased Loans, or FCIC); (3) the inclusion of corporate bonds in the set of eligible collateral for all current liquidity operations in pesos, including the FCIC; (4) a program to purchase bank bonds from participants of the open market operations system (SOMA) for an amount in UF equivalent to US$4 billion (of which approximately US$ 2.55 billion has already been purchased); and (5) the extension of the currency sales program through 9 January 2021. Subsequently, on 18 March, a press release was issued announcing the temporary modification of the regulations on reserve requirements to expand the option of using foreign currency liabilities—not only U.S. dollars, but also euros, Japanese yen, and national currency—and to increase the daily supply of dollars in the foreign currency swap program. On 23 March, additional measures were announced to relax banks' liquidity requirements—namely, term mismatches and the liquidity coverage ratio (LCR). The operating conditions for the FCIC were also clarified, including the option of using national currency reserves as collateral. Finally, at the March Monetary Policy Meeting, the Board voted to increase the monetary stimulus further, reducing the MPR to its effective lower bound of 0.50%, while also expanding the bank bond purchase program by US$4.0 billion and eliminating the term restriction for eligible instruments. Thus, the residual balance of that program has increased to to US$5.5 billion.

The government and the commercial banks have also reacted to mitigate the effects of the Covid-19 outbreak on the economy and the local financial markets. The Finance Ministry announced a fiscal stimulus plan for US$11.75 billion, which includes measures to protect labor income and jobs, direct subsidies, a microbusiness protection fund, tax deferral or suspension, a new capitalization of the state bank (Banco Estado) of US$500 million, and an agreement with utility companies to provide certain benefits or special payment plans for customers in some segments. The FMC has also taken measures to facilitate the flow of credit to businesses and households. These include special treatment of provisioning for deferred mortgage loans, the use of mortgage collateral to back SME loans, and adjustments in the treatment of assets received in payment and derivative margins. In addition, several commercial banks have taken contingency measures such as deferring installment payments on mortgage and consumer loans, offering special loans to the SME segment, and increasing financing through SME support programs—in general, based on state guarantees (FOGAPE and FOGAIN).

The disruptions associated with the Covid-19 pandemic imply a major need for financing in order to endure the lower output and sales in the coming months. The baseline scenario assumes that the economy will suffer a strong contraction in the second quarter but will begin to recover in the third. The key assumption underlying this scenario is that the majority of people and firms will be able to return to their normal activities once the spread of the virus is contained, which they will only be able to do if their financing needs are satisfied. Therefore, the Board has adopted measures over and above the MPR cuts, aimed at facilitating access to credit for the people and firms that need it the most. The Board will continue to use its powers and instruments to meet the Bank's objectives of controlling inflation and safeguarding financial stability, while also contributing to softening the drop in output and employment.

FIGURE II.9

Interest rates by type of loan (1)
(deviation from the 2010–2020 average)



(1) Weighted average rates of all operations in a given month.
(2) UF-denominated loans.

Source: Central Bank of Chile, based on data from the FMC.

BOX II.1
MEASURES TAKEN BY THE CENTRAL BANK OF CHILE IN RESPONSE TO THE COVID-19 PANDEMIC

In response to the sharp deterioration in the domestic and international macroeconomic scenario due to the Covid-19 outbreak, the Bank has adopted a series of measures aimed at maintaining adequate access to credit and the normal functioning of the financial markets. This box reviews these measures, explains the rationale behind them, and presents international evidence on the use and impact of similar initiatives in other countries.

Rationale behind the measures implemented by the Central Bank of Chile

The Central Bank's Basic Constitutional Act establishes two primary objectives: price stability and the normal functioning of internal and external payments. Fulfilling these two objectives requires a well-functioning financial market, which assumes that there will be adequate levels of credit access and financial intermediation. The high degree of uncertainty deriving from the effects of the Covid-19 pandemic has put significant pressure on both these factors. On the one hand, it has generated a high demand for highly liquid short-term assets, to the detriment of less liquid assets. In periods of heightened financial stress, it becomes particularly difficult to sell a large quantity of riskier assets, given that the high levels of volatility and uncertainty make it hard to establish the correct price. The sharp drop in prices that accompanies these episodes then puts pressure on their issuers, by restricting their access to more credit and/or their ability to refinance existing liabilities. On the other hand, episodes like the current crisis are characterized by an abnormal increase in cash flow needs and substantial uncertainty regarding the payment capacity of the various agents, which puts tremendous pressure on the credit market.

In this context, the Bank has implemented a series of measures aimed at increasing the demand for longer-term, higher-risk assets; providing the banks with low-cost peso liquidity, so as to facilitate and promote the flow of credit toward those who need it; and facilitating access to financing in foreign currency. In general, these measures have a dual objective. In addition to contributing to the stability of the financial markets, in line with the objective of maintaining the normal functioning of payments, they also promote the correct transmission of monetary policy, by ensuring that a given level of monetary stimulus is quickly passed through to the different market rates that determine the cost of financing for households and firms. Moreover, the international evidence shows that measures such as these can increase the stimulus when the policy rate is near its lower bound, by acting more directly on financing costs at longer terms than are usually targeted in the implementation of monetary policy.

The next section reviews the application of measures adopted by other central banks and the evidence on their effectiveness, to provide context for the rationale and expected impacts of the measures adopted by the Central Bank of Chile.

International experience

During the global financial crisis of 2008–09, the U.S. Federal Reserve (Fed) was a pioneer in deploying unconventional monetary policy measures. These included multiple loan operations to provide direct liquidity, where the Fed expanded the definition of eligible institutions and the range of assets accepted as collateral, while also lengthening the maturity of the loans. As the macroeconomic situation worsened and the interest rate was already at zero, the Fed provided an additional monetary stimulus through multiple asset purchase programs, which included Treasury and mortgage-backed securities (MBS) in order to reduce long-term interest rates and credit spreads.

The European Central Bank (ECB) also implemented a wide range of unconventional measures during both the international financial crisis and the sovereign debt crisis that affected several countries in the Eurozone between 2010 and 2012. The measures included injecting liquidity into the banking sector; lengthening the loan maturity structure—through long-term refinancing operations (LTRO)—and expanding the range of eligible collateral; and implementing a purchase program for bonds issued by financial institutions and backed by loan portfolios. In a second phase, the ECB bought sovereign bonds in secondary markets for several more vulnerable countries and implemented a long-term loan program (four years) with incentives tied to the growth of nonfinancial corporate and personal loan portfolios (Targeted LTRO).

An assessment of the effectiveness of these measures shows, in general, that the emergency liquidity measures implemented by the Fed reduced the spreads on the assets involved and contained the massive withdrawal of funds from certain financial institutions.[1]/ The ECB measures had a positive effect on the bank credit supply to nonfinancial firms, although a considerable share of the funds obtained from the LTROs (with no incentives to give credit to the real sector) was used to buy risky European sovereign bonds[2]/.

With regard to the effect of the asset purchase programs on the financial markets and the real economy, several studies find that the Fed's quantitative easing program achieved reductions of 100 to 150 bp on long-term Treasury bonds (10 years), as well as the compression of spreads on riskier assets, such as mortgage-backed securities, corporate bonds, and bank bonds. In the Eurozone, the ECB asset purchase programs reduced sovereign interest rates for vulnerable countries during the debt crisis. Similarly, the bank bond purchase program reduced the rates on these instruments[3]/. Several studies also find that the resulting compression of rates and spreads had an indirect effect in terms of increasing the credit supply from the banking sector, as well as affecting nonfinancial firms' decisions regarding debt issues, investment, and employment[4]/.

With the global Covid-19 pandemic, in addition to cutting their policy rates to historically low levels[5]/, the central banks have again resorted to unconventional measures. The primary objective of these initiatives is to provide liquidity in the money markets and to support bank and nonbank lenders, so that they will be able to transfer this liquidity to the end users: namely, households and firms affected by the pandemic. On 12 March, the Fed established a repo program for US$1.5 trillion (later increased) to reestablish liquidity in the short-term debt market, and a few days later it reopened the Primary Dealer Credit Facility (PDCF), a money market liquidity and commercial paper finance facility, aiming specifically to support the flow of credit to households and firms. The Fed also announced a new facility to promote the flow of credit to large employers and another for loans backed by assets such as student loans, automobile loans, credit card debt, and small business debt with a federal guarantee.

The Bank of England established a term funding scheme with additional incentives for small and medium-sized enterprises (SMEs), short- and medium-term repos in U.S. dollars, and finally a funding scheme for firms entailing the purchase of commercial papers in representation of the English Treasury. The ECB also established new LTROs to provide immediate liquidity to banks and money markets and modified key parameters of its targeted LTROs, which will be in effect from June of this year through June 2021[6]/. In addition to these measures, many central banks have asset purchase programs in place, including mortgage-backed securities, corporate bonds, and Treasury bonds, with the dual objective of increasing the monetary stimulus and minimizing episodes of volatility in key asset prices[7]/.

Measures Taken by the Central Bank of Chile

Like other countries, the Chilean economy is being severely affected by the Covid-19 pandemic. In particular, many sectors are experiencing a sharp drop in sales, which will cause a rapid and significant rise in the liquidity needs of the affected firms, especially small and medium-sized enterprises. If these needs

[1]/ Duygan-Bump et al. (2010) show that the Fed contributed to stabilizing withdrawals from money market mutual funds and significantly reduced interest rates on certain classes of financial assets (asset-backed commercial papers). Campbell et al. (2011) show that the el Term ABS Loan Facility (TALF) progarm reduced the interest rate spread on some asset classes.

[2]/ See Beirne et al. (2011); Garcia-Posada and Marchetti (2016); Carpinelli and Crosignani (2017); Cahn et al. (2018); Andrade et al. (2018); Crosignani et al. (2019); Daetz et al. (2019).

[3]/ See, for example, Gagnon et al. (2011); Krishnamurthy and Vissing-Jorgenson (2011); Ehlers (2012); D'Amico et al. (2012); Ihrig et al. (2012), Hamilton and Wu (2012); Bauer and Neely (2014); Eser and Schwab (2016); Altavilla et al. (2016); Markmann and Zietz (2017); Krishnamurthy et al. (2018).

[4]/ For the United States, Rodnyansky and Darmouni (2017) find that the banks with the most MBS investment were more willing to increase their lending. Luck and Zimmerman (2017) obtain a similar result when differentiating between mortgages and commercial loans. Foley-Fischer et al. (2016) find a positive effect on long-term debt issues, which financed increases in investment and employment. Wu and Xia (2016) suggest that these effects contributed to reducing the unemployment rate by 1%. For Eurozone, Galema Lugo (2019) also reports a positive effect on corporate debt issues, while Grosse-Rueschkamp et al. (2019), Arce et al. (2017), and Ertan et al. (2018) show that large firms eligible for the bond purchase program reduced their demand for bank loans, freeing up space for smaller, investment-grade firms.

[5]/ The Fed lowered its target rate from a range of 1.5–1.75% to 0.0–0.25%; the Bank of England cut its rate from 0.75 to 0.10%; and the ECB held the cost of deposits at –0.5%. Other central banks that reduced their rates in March include Australia, Brazil, Canada, China, Rep. de Korea, Denmark, Hong Kong, Indonesia, Malaysia, Mexico, New Zealand, Norway, Philippines, Sweden, and Turkey.

[6]/ Other countries using repo operations include Australia, India, Israel, Canada, China, and Turkey. Countries that have established some type of term liquidity facility include Australia, Denmark, Rep. Korea, Canada, China, Mexico, and New Zealand.

[7]/ Other countries that have resorted to asset purchases include Australia, Canada, India, Israel, Norway, and Sweden.

are not met through greater access to financing, it could trigger bankruptcies and lead to larger, faster impacts on employment. To prevent this from affecting financial stability and impeding the correct transmission of the monetary stimulus, the Board has adopted a series of measures in addition to the MPR cut.

(1) The opening of a funding facility conditional on increased lending (the Conditional Financing Facility for Increased Loans, or FCIC). The main objective is to give local banks access to lines of credit with the Central Bank under favorable terms, so that they can continue financing and refinancing loans, thereby channeling an adequate transmission of the current monetary stimulus. The initial size of the unconditional credit line granted to each bank is 3% of the (consolidated) total of its local commercial and consumer portfolios, as reported by the Financial Market Commission (FMC) on 29 February 2020 (baseline portfolio). The banks also have access to an additional line proportional to their baseline portfolio, defined as a function of the observed increase in loans and the share of credit line funds allocated to smaller firms. The total amount granted through this additional credit line could ultimately be many times larger than the baseline. To ensure that the banks' cost of funding is favorable, the interest rate is set at the MPR in effect at the time the funds are withdrawn from the credit line; in the event that the MPR is modified during the six months the program will be implemented, the lower value of the MPR will be applied. The FCIC is available to all banks that have commercial or consumer loans and that secure the credit line by pledging acceptable collateral (credit and debt securities) defined by the Board, which will be updated over the course of the program. The FCIC will be complemented by a Liquidity Credit Line (LCL), based on each bank's average reserves in national currency. Access to and use of the LCL is subject to the same conditions of increased lending established for the FCIC, with the same available credit as that line.

(2) The addition of corporate bonds to the set of eligible collateral for all peso liquidity operations offered by the Bank, including the FCIC and the LCL.

(3) The introduction of a program to purchase bank bonds from participants of the open market operations system (SOMA) for an amount equivalent to US$4 billion, launched on Friday, 20 March. At the Monetary Policy Meeting held on 31 March, when US$2.5 billion had already been purchased, the Board voted to increase the plan by an additional US$4 billion, thereby increasing the residual balance of the program to US5.5 billion. At the same time, for the residual balance, term restrictions on the eligible securities were eliminated.

This was complemented by an extension of the currency sales program through 9 January 2021 and an increase in maturities in the repo and FX swap programs for peso and dollar liquidity management. At the same time, the regulations on reserve requirements were temporarily modified, to expand the options for using foreign currency liabilities—from only U.S. dollars to euros, Japanese yen, and Chilean pesos. Banks' liquidity requirements were also relaxed, with a temporary suspension of the regulation on term mismatches and a loosening of the limit for the liquidity coverage ratio (LCR) to 70% of its current value for 2020.

Thus, the Banco has deployed a set of complementary measures to inject liquidity into the economy, to support the flow of credit, and ultimately to promote the adequate transmission of monetary policy to the Chilean economy. All of these measures have been formulated within the Central Bank's monetary policy framework (summary box), which provides the foundation for implementing the inflation-targeting regime and accomplishing the Bank's constitutional mandate of price stability and the proper functioning of the payment system.

III. OUTPUT AND DEMAND

This chapters reviews, based on the recent developments, the short-term outlook for output and demand, in order to examine possible inflationary pressures.

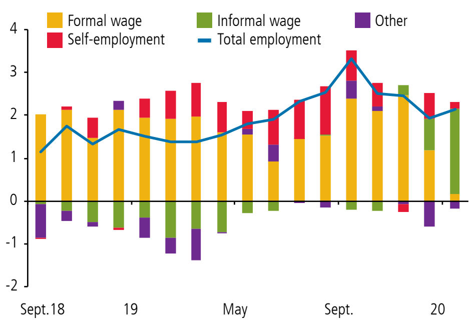
The local economic scenario has deteriorated drastically due to the global and local spread of Covid-19. In Chile, as in other economies, the social distancing measures—necessary to contain transmission—will have a major effect on output and demand, which will be exacerbated by the worsening of expectations and its impact on consumption and investment decisions. Additionally, the world recession projected for this year will be transmitted to the local economy through a significant contraction in international trade and a tightening of global financial conditions, derived from higher risk aversion. The terms of trade will be reduced this year, since the lower prices of Chilean exports will be only partially offset by the drop in oil and other fuel prices. The Chilean economy is facing this scenario from a weak starting point. The national accounts for the fourth quarter of 2019 confirmed a sharp contraction in output and domestic demand in that period due to the social crisis that started in October, which was a key factor in the deterioration of the various components of domestic demand, the labor market, local financial conditions, and business and consumer expectations.

In the short term, the most important effects for the local economy arise from the social distancing measures implemented to slow the spread of the virus and ensure that the health system is able to deal with it. These measures, decreed by the authorities and/or adopted voluntarily by the population, result in the partial or total stoppage of a wide range of services and limit the normal operation of other productive activities. This will affect businesses' cash flow and investment decisions and will have consequences for employment. The reduction in household income will have a direct impact on consumption decisions. Thus, the baseline scenario projects a drop in output starting in the second half of March and continuing through the second quarter, in line with government announcements of increased public health restrictions. As the restrictions are lifted, the economy will begin a recovery process in the third quarter, which will, however, still record an annual contraction. The growth rate is expected to pick up significantly in the last quarter of 2020 and all of 2021.

The projections in the baseline scenario are subject to an even higher degree of uncertainty than in December. In particular, it is difficult to estimate how the pandemic will unfold and how the public health measures will need to be adjusted to minimize the loss of human life. Given the unprecedented nature of these elements the growth forecast ranges have less informative content than usual. That said, the Board estimates that GDP will contract between 1.5 and 2.5% in annual terms this year. Going forward, the annual growth rate is expected to range from 3.75 to 4.75% in 2021 and 3.0 to 4.0% in 2022. The market has revised its forecasts downward for this year, and estimates released after the adoption of isolation measures point to a contraction.

The recovery projected in the baseline scenario assumes that the majority of people and firms will be able to return to their normal activities once the spread of the virus is under control, which will depend on their being able to meet their financial needs. This explains the major response on the part of fiscal and monetary authorities in Chile and worldwide, focused on protecting jobs and credit access in most affected firms. The forecast also assumes that large investment projects will return to their normal schedule; that the institutional management of the social crisis will reduce uncertainty and prevent the resurgence of violence; and that the additional stimulus implicit in announcements by the Finance Minister in March will come to fruition. Given the lower inflationary pressures in the medium term and the substantial effects that overcoming the public health crisis will have on variables such as output and employment, it will be necessary for monetary policy to remain highly expansionary for a long period of time, to ensure the convergence of inflation to the 3% target. Thus, in March, the Board cut the monetary policy rate (MPR) to 0.5% (–125 basis points), bringing it to its technical lower bound. The Board has also adopted measures beyond cutting the MPR, which are oriented toward facilitating credit access for people and firms. The Board will continue to use its powers and instruments to meet the Bank's objectives of controlling inflation and safeguarding financial stability (box II.1).

FIGURE III.1
Total employment (*)
(contribution to annual change, percentage points)



(*) First quarter of 2020 includes data through the moving quarter ending in January. Formal wage employment: dependent workers with access to social security, that is, that receive welfare benefits -simultaneously health and pension funds contributions- through their work. Informal wage employment: dependent workers that receive neither health nor pension funds contributions from their employer. Other: Business owners, domestic service workers, and unpaid family workers.

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

RECENT EVOLUTION OF OUTPUT AND DEMAND

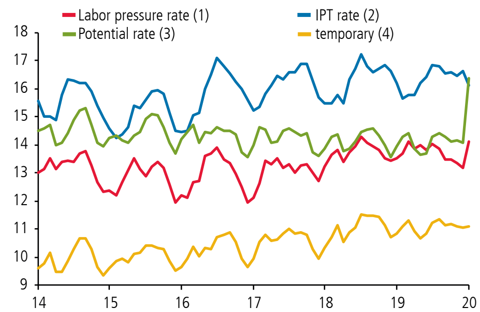
The local economic indicators available as of the statistical cutoff date of this Report (25 March) do not yet incorporate the effects of the public health measures to control Covid-19. Starting in mid-March, the government has taken a range of actions, including suspending classes throughout the country, closing the borders, temporarily shutting down some retail businesses, establishing curfews and quarantine areas, and restricting movement. In addition, many people have adopted voluntary social distancing measures, and some firms have partially or totally shut down operations.

In the second half of March, the Bank surveyed the group of people who are regularly interviewed for the Business Perceptions Report (BPR), which covers companies from all over the country and different economic sectors. Almost all the people surveyed expect their company's performance to be worse in the next six months than in the last six months, and they expressed major concerns about the impact of Covid-19, the evolution of the world economy, and the development of the social crisis (box III.1).

The economy's performance from October to March provides a weak starting point for facing the Covid-19 epidemic. Although the most recent IMACEC indexes (December 2019 and January 2020) revealed faster output recovery than projected in the last Report, the current situation has badly affected sectors that had already been hit hard by the social crisis. These include personal services, in particular education; retail and wholesale trade; transportation and communication; and restaurants and hotels. All of these sectors contracted in annual terms in late 2019. On the spending side, consumption contracted strongly in the fourth quarter of last year, especially household consumption, while investment continued to be buoyed by the performance of construction and other works, mainly mining projects.

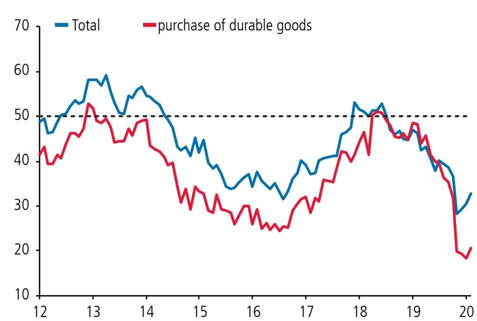
In the labor market[1]/, the national unemployment rate reported by the National Statistics Office (INE) increased only slightly in the moving quarter ending in January, while other indicators reveal a significant worsening in job quality and labor underutilization. Job growth has primarily been based on on informal wage work, which does not pay health, pension, or welfare benefits and is not guaranteed by the employer (figure III.1). In a situation like the current Covid-19 epidemic, this type of employment puts people's income at greater risk. At the same time, there are signs that the slack in the labor market has been increasing. The potential unemployment rate—which considers the unemployed (including available future starters[2]/) and inactive people who express some interest in entering the labor market—has increased significantly in recent months (figure III.2). In terms of income, the annual growth rate of real wages—WI and LCI—fell to around 1%. Given these employment and wage dynamics, the real wage bill also recorded a lower annual growth rate of 2.5% in the fourth quarter of 2019, below the rates in the first three quarters of that year. Actual hours worked by self-employed workers and overtime hours by wage employees, derived from the LCI, remain low.

FIGURE III.2
Broad unemployment rates
(percent)



(1) Share of people who are unemployed (including available initiators) plus those who say they have looked for a job in the reference week, measured relative to the labor (including available future starters).
(2) Also known as SU2. The share of people who are unemployed (including available future starters) plus involuntary part-time (IPT) workers (that is, people who want to work more hours and are available to do so within the next 15 days), measured relative to the labor force (including available future starters).
(3) Also known as SU3. The share of people who are unemployed (including available future starters) plus those who are part of the potential labor force, measured relative to the broad labor force (including available future starters and the potential labor force).
(4) The share of people who are unemployed (including temporarily inactive workers), relative to the labor force (including temporarily inactive workers).
Sources: Central Bank of Chile and National Statistics Institute (INE).

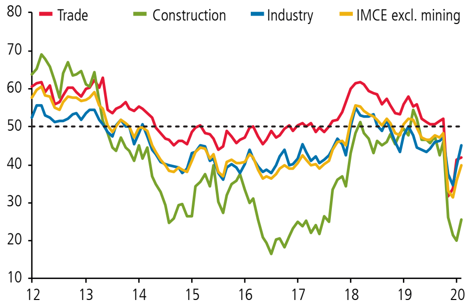
FIGURE III.3
IPEC: Consumer expectations (1)
(index)



(1) A value over (under) 50 indicates optimism (pessimism).
(2) Simple average of the question on the perception of the family situation in one year and the questions on whether this is a good or bad time to buy a house, car, and household durable goods (furniture, refrigerator, or stove).
Source: Gfk Adimark.

[1]/ The INE made a series of methodological changes to the National Employment Survey, including updating the sample framework to reflect the 2017 census and recalibrating the expansion factors. There are two key results deriving from the main changes: (i) a significant increase in the labor force, in favor of the younger population segments, with a resulting reduction in the inactivity rate; and (ii) a higher job growth rate than suggested by the old survey, with a closer correlation to the economic cycle. For more information, see INE (2020).
[2]/ People who are available to work, but who are not looking for a job because they have recently been hired and are waiting to start.

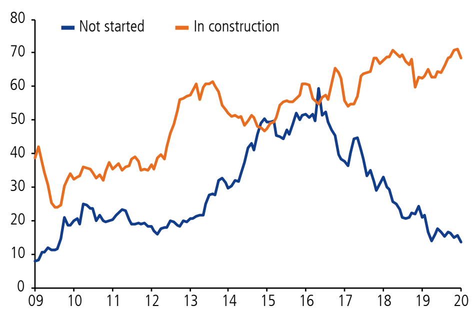
FIGURE III.4
IMCE: Business expectations (*)
(index)



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

Sources: Icare/Universidad Adolfo Ibáñez.

FIGURE III.5
Housing construction in Greater Santiago, by project phase (*)
(number of units)



(*) Real estate projects in execution, whether in initial phases (planning, ground-breaking) or intermediate phases (foundation, structural work).

Source: Chilean Chamber of Construction (CChC).

Turning to qualitative sources, business expectations on hiring (IMCE) and consumer perceptions of unemployment (IPEC) remain pessimistic. The people interviewed for the February 2020 BPR mentioned that they had not hired any new workers and signaled greater hesitance and/or deferral of this type of decision. Some sectors have laid off workers, while others have reduced their seasonal hiring, especially in sectors that were more affected by the social crisis. In the March survey, the majority of the interviewees cited difficulties maintaining operational continuity, stating that the adoption of remote work measures could only partially resolve these problems. Consequently, the outlook worsened significantly in terms of workers' jobs and income, as the majority indicated that they will have to adjust their personnel this year and that some of their employees will see a cut in pay.

Business and consumer expectations (IMCE and IPEC) were already pessimistic before the outbreak of the public health emergency, and they are unlikely to change under the current circumstances (figures III.3 and III.4). This will have a direct impact on consumption and investment decisions. The data available on the cutoff date—which do not incorporate the impacts of Covid-19 in Chile—had only recovered a small share of the drop recorded after the eruption of the social crisis. The survey conducted by the Bank in the second half of March shows a deterioration.

With regard to investment, some firms have reported in recent weeks that they are cutting back their investment plans for this and/or next years, with some initiatives being temporarily put on hold, including some of the large projects that were being developed. The business survey shows that investment decisions are also being affected: the vast majority of respondents are either reviewing their investment plans for this year or have decided to scale them down or cancel them altogether. This comes on top of the deferments previously reported by a large fraction of those interviewed of the February BPR.

Information collected prior to the intensification of the Covid-19 epidemic pointed to different trends. The CBC survey (January 2020) did not show any major changes in the amounts committed for the 2019–23 period. The national investment survey (OGPS) for February indicated a reduction in the amount and number of projects considered for the 2020–24 period, relative to the data available on the cutoff date of the last Report, due to fewer projects in the pre-investment, permit processing, and construction phases. At the same time, the number of projects in the construction phase in the Greater Santiago had increased as of January 2020 (CChC). However, the outlook was less favorable, given that total projects—both under construction and not yet started—had shrunk at the margin and home sales had declined in the fourth quarter of 2019 (figure III.5). In the case of the machinery and equipment component, the data available on the cutoff showed a weakening of nominal capital goods imports (excluding other transport vehicles) (figure III.6). These trends will be exacerbated by the poor performance of the local stock market (IPSA) and the real exchange rate depreciation.

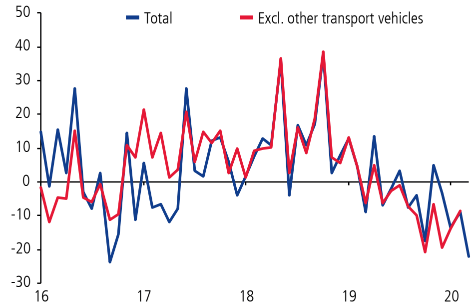
Local financial conditions have also deteriorated, with an increase in interest rates across all segments and a rise in mortgage and consumer loan default. In addition, the growth rate of consumer loans fell precipitously (figures II.8 and II.9). The Bank Lending Survey (BLS) for the fourth quarter of 2019 revealed tighter lending conditions in all portfolios and a perception of weaker demand, especially in the consumer segment. The BPR for February 2020 reported that banks had provided some relief measures for their customers, such as loan payment deferrals. Most recently, some financial institutions have announced the resumption of this type of assistance. In the March business surveys, a slight majority indicated that financial conditions have not changed, but they mentioned lower income and cash flow problems, as well as difficulty collecting on outstanding invoices.

In response to the deterioration of local financial conditions, the Board began offering, for a limited period of six months, a bank funding facility conditional on increased lending (the Conditional Financing Facility for Increased Loans, or FCIC). The resources offered will be proportional to the increase in loans at each institution, relative to its baseline portfolio, with a larger expansion factor for loans to people and small businesses (SMEs). Banks that use this facility will pay an interest rate equal to the MPR in effect at the time they withdrew the money and, in the event the MPR changes while the program is in place, the rate for the residual loan maturity will be adjusted to the lowest value of the MPR in the period.

On the fiscal front, the Finance Ministry has announced an Economic Emergency Plan entailing US$11.75 billion, which contains a set of measures aimed at protecting jobs and labor income; injecting liquidity into the production system, with a focus on SMEs; and supporting family income. This plan, which was in the legislative pipeline as of the cutoff of this Report, would be financed through mechanisms such as the constitutional provision for the use of 2% of GDP in the event of an emergency; the Economic and Social Stabilization Fund (ESSF); sovereign bond issues; and resource reallocation.

With regard to the external sector, the current account deficit was 3.9% of GDP in the moving year ending in the fourth quarter of 2019, very similar to the 4.0% recorded in the same period of 2018. This mainly reflects the net payment of revenues overseas, in relation to foreign direct investment. The trade balance also recorded a deficit, which is mainly explained by services exports, where the travel component was affected by lower spending by foreign tourists who visited Chile last year. In February and the first half of March, there was drop in nominal goods exports in annual terms (figure III.7). The baseline scenario considers that the current account balance will become positive over the course of this year, since the sharp adjustment in business and household spending will not be fully offset by the government spending implied in the announced fiscal package.

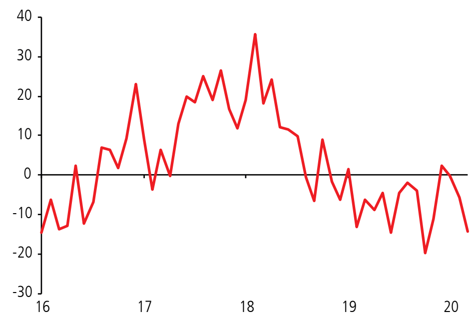
FIGURE III.6
Nominal capital goods imports (*)
(annual change, percent)



(*) March 2020 includes data through the cutoff date, so it is the annual change in the data accumulated through the 15th relative to the first 15 days of March 2019.

Source: Central Bank of Chile.

FIGURE III.7
Nominal goods exports (*)
(annual change, percent)



(*) March 2020 includes data through the cutoff date, so it is the annual change in the data accumulated through the 15th relative to the first 15 days of March 2019.

Source: Central Bank of Chile.

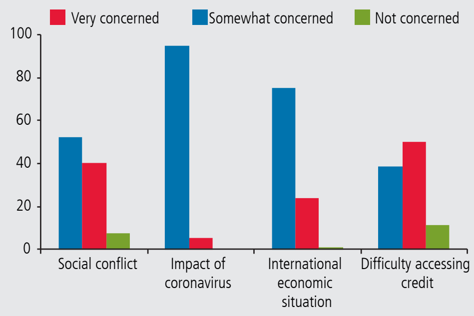
BOX III.1
IMPACT OF THE COVID-19 PANDEMIC ON FIRMS

Like the rest of the world, the Chilean economy is being severely affected by the Covid-19 pandemic, in particular because containing the spread requires limiting social contact, which has a direct impact on the normal development of productive activities. Quantifying the magnitude of the impact is complex, given that the output disruption does not derive from problems in the financial markets, regulatory deficiencies, or economic events. Moreover, as of the cutoff of this Report, aside from the financial markets' reaction to these events, there are, as yet, practically no short-term data that capture the effects of the public health emergency.

In this context, between 19 and 26 March, the Central Bank conducted an online survey of the people who regularly participate in the Business Perceptions Report (BPR), receiving a total of 320 responses. The survey respondents include people from all the country's regions, with a high participation rate in the Santiago Metropolitan Region. By sector, the responses cover a wide range of economic activities, and just over half are from a variety of services sectors, including retail and wholesale trade[1]/. The survey results were complemented by telephone conversations with business executives, with regional and national coverage, so as to provide qualitative information for better interpreting the findings of the survey.

The results show a dramatic worsening in the business outlook. Almost all the people surveyed expect their company's performance to be worse in the next six months than in the last six months. Considering that the reference period includes the effects of the social crisis that erupted in October, the drop in expectations could indicate a large-magnitude impact on business performance. Covid-19 is the biggest concern, but the respondents also mentioned factors such as the evolution of the world economy and the development of the social crisis (figure III.8). In the follow-up conversations, it was clear that the situation is generating high levels of anxiety and uncertainty. In particular, unlike past crisis episodes, people's lives are at stake, and there are no clear guidelines for estimating the duration or magnitude of the effects.

FIGURE III.8
Concerns about business performance in the next six months
(percentage of total responses)



Source: Business survey, Central Bank of Chile.

The vast majority of firms that responded to the survey indicated that they have scaled back operations or shut down altogether due to the pandemic. Some of the people contacted alluded to the difficulty of maintaining normal operations, given the necessary measures taken to protect workers health. Examples include restrictions on the number of people at a jobsite or the travel restrictions affecting certain areas. There was also mention of having to shut down operations after a worker tested positive

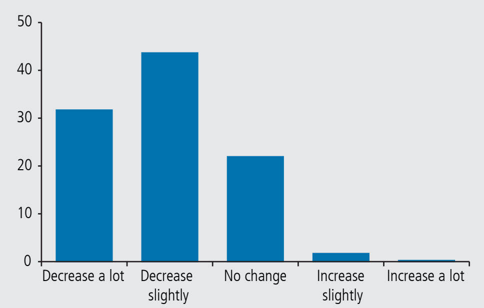
[1]/ The survey results were obtained from the BPR business sample and thus are not necessarily representative of the universe of firms in the country. Therefore, the results should be considered referential rather than definitive, and they should not be used for statistical inference. This box therefore analyzes the general trends, rather than specific data points.

for the virus. Other companies described having had to slow or shut down operations due to slower sales. In terms of production continuity for shuttered businesses, some raised the possibility of solving this problem through remote work, but this option is far from being applicable in all cases. In fact, the results suggest that for the vast majority of firms, it would only be feasible to implement remote work for a small share of their activities (for example, some administrative tasks), and it would be impossible for many firms (for example, production jobs in manufacturing industries).

The survey also indicates that people's income could be strongly affected. A large majority of respondents believe that it will be difficult to maintain their total payroll. As a relief measure, some of the interviewees said they might initially take measures similar to those adopted during the social crisis, such as paying sales commissions based on the average of previous months. However, their ability to do so will be limited by the duration of the more restrictive measures to contain Covid-19, which is highly uncertainty.

The job outlook has also worsened significantly. A large share of respondents believe that they will have to let people go this year, in some degree (figure III.9). Some mentioned that they have already had to fire workers. Most of those who have lost their jobs are people without a formal contract (freelancers), people with a short-term contract, or newer workers with a short job tenure. Some interviewees added that they have asked people to use their vacation time early.

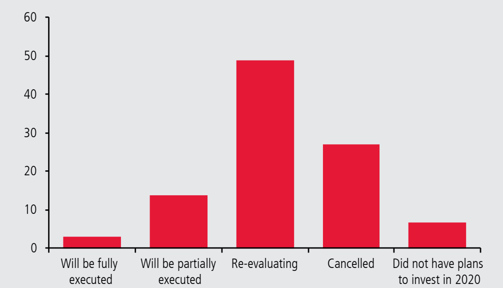
FIGURE III.9
Expected workforce adjustments in 2020
(percentage of total responses)



Source: Business survey, Central Bank of Chile.

Investment decisions have also been affected. There have been announcements in recent days that some large investment projects are being put on hold. Additionally, the vast majority of survey respondents are either in the process of reviewing their investment plans for this year or have already decided to scale them down or cancel them altogether (figure III.10).

FIGURE III.10
2020 investment plans
(percentage of total responses)



Source: Business survey, Central Bank of Chile.

During the follow-up telephone conversations, there were repeated mentions of reduced business income and heightened cash flow problems, as well as difficulty collecting on outstanding invoices and the resulting problems that this creates in the payment chain. In fact, some people mentioned that they were having trouble paying their suppliers. Nevertheless, a small majority of the survey respondents indicated that their financial conditions had not changed significantly.

The Covid-19 epidemic has caused drastic changes in the global and local economy. As summarized above, a special survey of the people who are regularly interviewed for the Business Perceptions Report confirms these trends. The Board has implemented a set of measures to mitigate the effects of this new scenario. These measures include cutting the MPR to 0.5% and adopting a set of extraordinary measures to maintain the normal functioning of the financial markets and ensure adequate access to credit, while promoting the correct transmission of monetary policy. The measures aim to facilitate the flow of credit to the people and businesses that need financing to overcome this difficult phase, thereby reducing the impact on jobs, income, and household well-being.

IV. PRICES AND COSTS

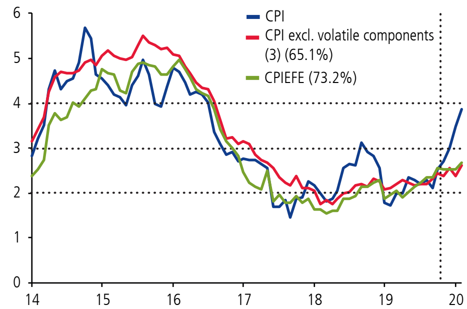
This chapter analyzes the recent evolution of the main components of inflation and costs, identifying the current sources of inflationary pressure and their likely evolution in the future.

INFLATION[1]/

Since the December Report, medium-term inflationary pressures have declined significantly as a result of the drastic worsening of the economic scenario. The excess capacity deriving from the effects of the Covid-19 epidemic at the global and local level, together with the significant drop in oil and other fuel prices, have outweighed the cost pressures associated with the depreciation of the peso. Consequently, the inflation trend has been revised downward, especially in the case of core inflation. This change in the inflation outlook has occurred in a context in which annual headline inflation was around 4%, between November and February. This increase was driven by the food and energy components, while annual core inflation—measured by the CPIEFE and the CPI excluding volatile components[2]/—rose to a lesser degree, due in part to a lag in the exchange rate passthrough to prices relative to the projection in the December Report, as well as the size of the output gap over the past several quarters (figure IV.1).

Since the start of this year, the world scenario has changed drastically due to the viral epidemic that originated in China and then spread globally. Uncertainty has risen significantly worldwide, and the economic outlook has deteriorated sharply. As a result, a global recession is now expected in 2020, and inflation forecasts have been revised accordingly (chapter I). Among the many consequences, this has translated into a generalized depreciation of emerging currencies and a significant drop in the oil price, a trend that was magnified by the breakdown of negotiations in OPEC and the decision to increase the crude oil supply in Saudi Arabia, one of the main oil producers.

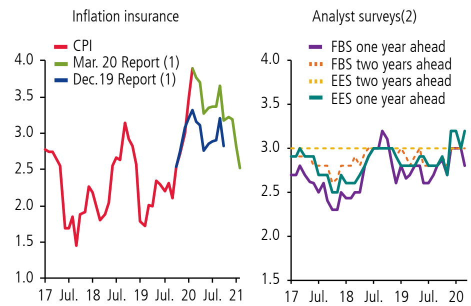
FIGURE IV.1
Inflation indicators (1) (2)
(annual change, percent)



(1) The vertical dotted line marks the cutoff date of the December 2019 Report. (2) In parentheses: the share in the total CPI basket. (3) For more details, see Monetary Policy Report (December 2019, box IV.1) and Carlomagno and Sansone (2019).

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

FIGURE IV.2
Inflation expectations
(annual change, percent)

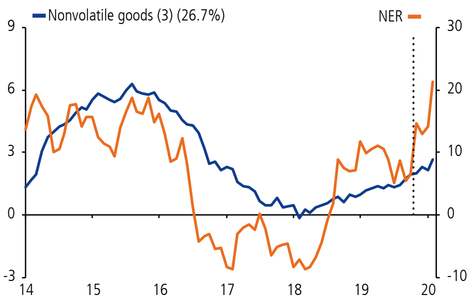


(1) The December 2019 and March 2020 Monetary Policy Reports use the average of the last ten business days through 02-Dec-2019 and 25-Mar-2020, respectively.
(2)The FBS is for the first half of each month through January 2018. From February 2018 on, the data are from the last survey published in the month, including the survey published on 26-Mar-2020. In months when the survey is not published, the last available survey is used.

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

[1]/ Unless indicated otherwise, 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]/ For definitions and methodological details on these indicators, see box IV.1 in the December 2019 Monetary Policy Report and Carlomagno and Sansone (2019).

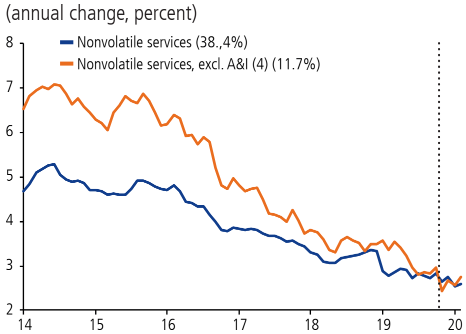
FIGURE IV.3
Core goods inflation and the nominal exchange rate (1) (2)
(annual change, percent)



(1) The vertical dotted line marks the cutoff date of the December 2019 Report. (2) In parentheses: the share in the total CPI basket. (3) For more details, see Monetary Policy Report (December 2019, box IV.1) and Carlomagno and Sansone (2019).

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

FIGURE IV.4
Core services inflation (1) (2) (3)
(annual change, percent)



(1) The vertical dotted line marks the cutoff date of the December 2019 Report. (2) In parentheses: the share in the total CPI basket. (3) For more details, see Monetary Policy Report (December 2019, box IV.1) and Carlomagno and Sansone (2019). (4) Excluding adjusted and indexed services, following Marcel et al. (2017).

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

Domestically, the GDP growth forecast has been revised downward, with a significant widening of the output gap in the second quarter, which will close later than projected in December. The behavior of output and demand, together with the low oil price and the expected reduction in the EPI, will result in lower inflationary pressures, which will be only partially offset by the peso depreciation in recent months. Thus, the baseline scenario considers a downward revision in inflation for 2020 relative to the December Report. Specifically, inflation will come down from its current level of around 4% to reach 3% by year-end (3.6% in the December Report).

The private sector has also adjusted its inflation outlook. The Financial Brokers Survey (FBS) for 26 March projects inflation of 2.8% in one year and 3.0% in two years. Inflation insurance also declined in March, to 2.5% in twelve months as of the cutoff of this Report. Finally, the Economic Expectations Survey (EES) for early March foresees more drastic changes in the macroeconomic scenario, leading to inflation of 3.5% in December de 2020 and 3.2% in one year, while the two-year-ahead forecast remains at 3.0% (figure IV.2).

This change in the inflation outlook has occurred in a context where annual CPI inflation approached 4% between November and February. The increase in inflation was driven by the food and energy components, while core inflation—measured by the CPIEFE and the CPI excluding volatile components—rose only marginally, to just over 2.5% in annual terms. The peso depreciation in the last quarter of 2019 caused food and energy prices to rise. In core inflation, the inflationary effect was offset by lower pressure from the excess capacity in the economy.

Annual core goods inflation— excluding volatile items[3]/—increased from 2.0 to 2.7% between November and February, accelerating in the first part of the year in line with projections in the December 2019 Report. This increase is consistent with qualitative information collected in the February BPR, where the people interviewed noted that the price of imported inputs had increased due to the exchange rate depreciation, something they thought could intensify going forward. Some indicated that this cost increase had translated into higher end prices, while others signaled that they had put off raising prices due to the high exchange rate volatility in late 2019 and that the passthrough would only happen once they began to draw down their current inventories (figure IV.3).

Core services inflation remained low, reflecting the state of the capacity gap (figure IV.4). The data available in late 2019 and early 2020 did not point to any major changes in the different wage indicators. The information collected in

[3]/ For definitions and methodological details on these indicators, see box IV.1 in the December 2019 Monetary Policy Report and Carlomagno and Sansone (2019).

the February BPR, in turn, showed that the wage requirements of job applicants remained low in a slack labor market. Nevertheless, higher cost pressures were expected going forward, as a result of various legal reforms being discussed.

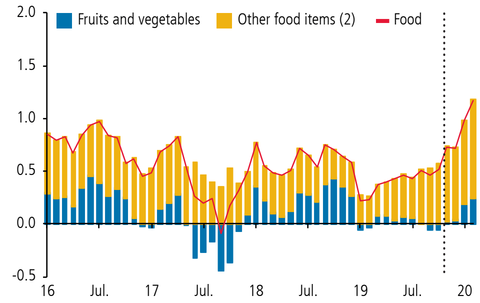
With regard to the noncore components—energy, food, and volatile goods and services[4]/—annual inflation rose to 6.3% in February (3.3% in November). Other foods and fuels drove the upward trend. There were also hikes associated with higher meat prices in international markets and, in the case of fuels, an increase in the oil price due to the rekindling of geopolitical tension between Iran and the United States in late 2019 (figures IV.5 y IV.6). More recently, fuel prices have reverted in the domestic market, which could intensify to the extent that the drop in the international oil price, at nearly 60% thus far in the year, is incorporated into the MEPCO price adjustment mechanism. In particular, fuel price inflation is expected to fall in annual terms in the second and third quarters, with a recovery in 2021.

Cost pressures deriving from import prices in dollars were stable in late 2019. Imported consumer goods prices (IVUM) recorded annual inflation of –3.5% in the last quarter of the year, versus a drop of 2.2% in the third quarter.

With regard to inflation surprises, the inflation data have deviated from the market forecasts and the December Report. As mentioned in December, the forecasts were subject to an unusual degree of uncertainty, since it was difficult to predict how the lower inflationary pressures deriving from the capacity gap would interact with the higher cost pressures associated with the exchange rate depreciation. In particular, monthly CPI inflation was low in late 2019, such that headline inflation closed the year at 3% (versus a forecast of 3.4% in the Report). However, the low inflation tended to revert in early 2020, as the exchange rate passthrough began to be felt in the goods prices that make up core inflation, generating a trend more in line with the forecast. There were also some positive surprises in the food and energy components, especially the former, such that annual headline inflation in February was in line with the forecast in the last Report—albeit with a different composition, with lower core inflation and higher inflation in the volatile components.

FIGURE IV.5

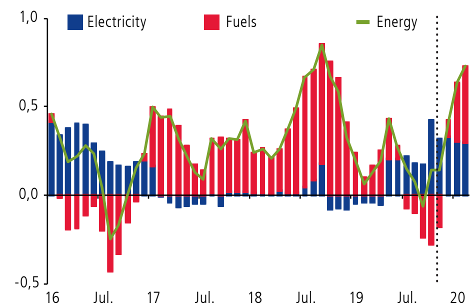
Contribution of food to annual headline inflation (1)
(percentage points)



(1) The vertical dotted line marks the cutoff date of the December 2019 Report. (2) Includes food items and nonalcoholic beverages excluding fresh fruits and vegetables.
Source: Central Bank of Chile and National Institute of Statistics (INE).

FIGURE IV.6

Contribution of energy to annual headline inflation (*)
(percentage points)



(*)The vertical dotted line marks the cutoff date of the December 2019 Report.
Source: Central Bank of Chile and National Institute of Statistics (INE).

[4]/ For definitions and methodological details on these indicators, see box IV.1 in the December 2019 Monetary Policy Report and Carlomagno and Sansone (2019).

V. FUTURE EVOLUTION OF MONETARY POLICY

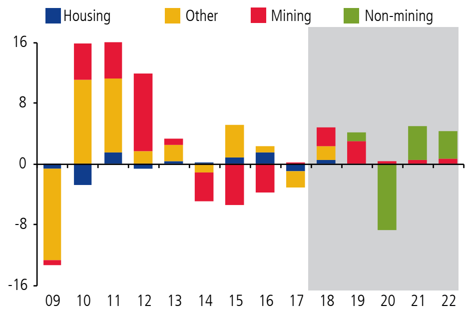
This chapter presents the projections for the main macroeconomic variables and monetary policy strategies that, in the Board's opinion, are consistent with the inflationary convergence derived from them. The described baseline scenario features the anticipated core trajectories of the main variables, together with sensitivity scenarios that are consistent with the width of the forecast growth range, but which could require alternative MPR trajectories to ensure the convergence of inflation to the 3% target in the policy horizon. Trajectories in more extreme risk scenarios are also described.

ACTIVITY AND DEMAND OUTLOOK

The spread of Covid-19 has triggered a sharp deterioration of the macroeconomic scenario. The freeze of local firms' operations is coupled with a substantial contraction of external demand for Chilean exports. Financial conditions have tightened as the markets have factored in the effects that a protracted quarantine may have on the solvency of companies—which will be hard it in their cash flows and some of which were already highly indebted—and households—faced with increased unemployment and reduced income. The fiscal and monetary authorities throughout the world are applying enormous stimulus packages of non-conventional measures aimed at ensuring the functioning of financial markets and supplying the necessary funds to mitigate the effects of the sanitary emergency. The baseline scenario assumes that the world —Chile included—will see a contraction of activity this year, but will resume its growth rates towards 2021. Naturally, the evolution of both world and domestic activity is subject to higher uncertainty than usual. Particularly important is the difficulty in estimating the future course of the pandemic in Chile and elsewhere, and how the sanitary control measures will need to adjust to limit the loss of human lives.

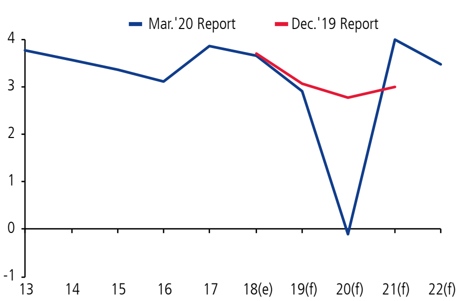
In the baseline scenario, Chile's GDP drops between 2.5% and 1.5% this year. The unfolding of the sanitary emergency leads to estimate that activity fell during the second half of March, by even more than it did in the second half of October 2019. Thus first-quarter growth is reduced and the estimated second-quarter contraction begins. This forecast includes the greater constraints already applied by the authority until the close of this Report, which are assumed to intensify over the course of the second quarter. For the third quarter, depending on improvements in the sanitary situation and an alleviation of such constraints, the recovery process of the economy should begin, which even so

FIGURE V.1
Real annual contribution to GFCF (*)
(percentage points)



(*) 2018 mining investment is estimated using available FECU information. Housing investment uses household investment data from National Accounts by Institutional Sector. The Other GFCF component is treated as a residue. Forecasts for 2019, 2020 and 2021 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.

FIGURE V.2
Trading partners' growth
(annual change, percent)



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

will not avoid a contraction in annual terms for said period. Towards the last quarter of the year, the growth rates are foreseen to post a significant rebound that will extend into 20201. These projections are contingent, aside from the aforementioned relief in the restrictions applied towards the second half, on the large investment projects resume their normal development and the institutional management of the social crisis eases uncertainty and prevent new episodes of violence. Also, both the fiscal stimulus package and the expansionary stance of monetary policy, plus measures adopted to ensure pass-through and the normal functioning of credit market will help cushion the adverse effects of the sanitary crisis on economic and financial areas. All the above, combined with an important rebound in the performance of our trading partners, will drive a fast recovery of GDP in 2021 to see growth between 3.75% and 4.75%. For 2022, in line with the economy approaching its medium-term growth rates, it will expand between 3.0% and 4.0% annually.

On the activity side, the hardest hit sectors, especially in the short run, are precisely those that already endured the toughest consequences of the disruptions associated with the social crisis, namely retail, hotels & restaurants, and personal services. The latter sees opposing phenomena, as part of the reduction in activity due to suspended classes is offset by increased health-care services. The sharp drop in corporate sales will have a significant impact on firms' cash flows and capacity to meet their payment obligations, including salaries. Thus, a key premise for such recovery is that most firms will be able to overcome the isolation period and go back to business as usual as the spread of the virus is controlled. This depends on the funding needs of the most affected sectors and businesses being met. This is particularly important in the case of households and firms whose financial solvency had already been tested after the disruptions caused by the social outbreak, especially smaller firms.

External financial conditions do not offer a favorable outlook either. Increased global uncertainty and risk aversion has raised volatility to new record highs. Stock markets have plummeted, risk premiums have risen, capital has flowed out of emerging economies, whose currencies have depreciated against those perceived as safe havens, such as the US dollar. Moreover, there are signs that some fixed-income markets may not be operating properly. This is combined with corporate debt levels that are higher than they were in recent years.

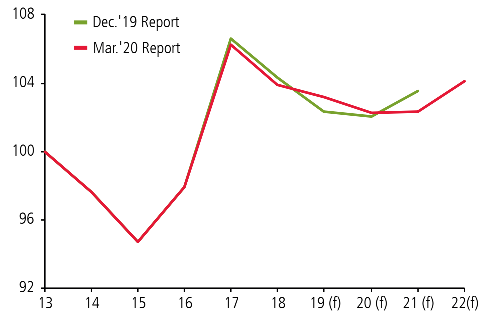
The monetary and fiscal authorities have taken exceptional measures to mitigate the effects on the real economy and on the functioning of the financial system. The response of central banks has been unprecedented in many respects, ranging from cuts in the benchmark rate, often in special meetings, to various non-conventional tools, such as the strengthening of repo operations or the promotion of special credit access or refinancing conditions for specific economic sectors and even the purchase of corporate bonds. The Federal Reserve has included quantitative incentives for unlimited amounts. The announced fiscal measures are related to tax cuts and/or large spending packages that have led several countries to abandon their austerity plans and even become "buyers of last resort" (box II.1).

The evolution of expectations, which plays a key role in consumption and investment decisions, will also be negatively affected. In Chile, the usual indicators of business and consumer expectations —as of the statistical closure— still do not reflect the full impact of the spread of Covid-19. It should be noted, however, that their starting point was already in negative territory as a consequence of the social crisis, and the current situation makes a reversal unlikely. In the last half of March, the Bank conducted a survey to participants in the Business Perceptions Report (IPN), which showed a marked deterioration in their outlook for employment and activity over the next six months (box III.1). Expectations indicators in several countries already show a sharp decline during March.

Regarding domestic demand, the greater cash needs to cover companies' operations will be reflected in a contraction of investment, and the baseline scenario estimates that gross fixed capital formation (GFCF) will fall by 8.2% in 2020 (-4% in the December Report) (figure V.1). This result is also affected by downtime that several works have reported associated with the sanitary crisis. By sectors, both mining and non-mining investment are revised downwards, the latter more intensely. In both cases, temporary suspensions of some big projects have been announced[1], which adds to a more widespread reassessment of investment projects that would be carried out by companies in all sectors, which is in line with the results of the Bank's survey. This survey showed that a high proportion of the respondents had halted their investment plans for this year and about half were re-thinking them. By GFCF components, machinery and equipment sees the greatest correction, consistent with the y-o-y contraction of imports of these goods that can already be observed in the first months of 2020, coupled with the significant fall of stock prices —a variable that is strongly correlated with the performance of investment—, the higher costs implied by the peso depreciation and the already mentioned increased need for cash by firms. Considering all of the above, by 2020 GFCF will represent 20.5% and 21.2% of GDP in real and nominal terms, respectively.

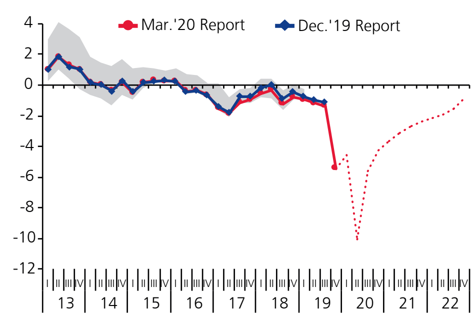
Our projections also consider a 1.9% contraction in consumption in 2020, which on the private side will concentrate in durables. This is in line with the significant depreciation of the peso and the double-digit fall in consumer goods imports in the early months of 2020. The recovery of consumption will depend mainly on the evolution of employment and income, and on the way businesses manage to get through the most critical period without needing to destroy a significant number of jobs.

FIGURE V.3
Terms of trade
(index, 2013=100)



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

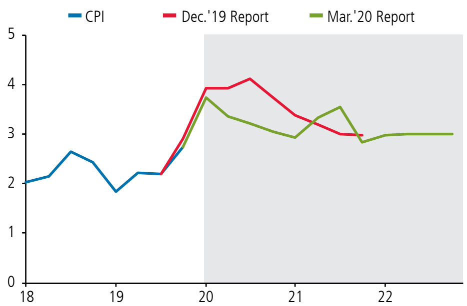
FIGURE V.4
Activity gap (1) (2)
(percentage points)



(1) Gray area shows minimum and maximum ranges for gap estimates, using different potential GDP inference methods (trivariate, FMV-X, HP, SVAR, MEP, SSA and XMAS Migration gap). See Aldunate et al.(2019).
(2) Dotted lines show forecast from the semi-structural forecast model (MSEP) .
Source: Central Bank of Chile.

[1] Among mining projects, the stoppage of Quebrada Blanca phase 2 and Chuquicamata underground is worth mentioning, together with cuts to the year's investment plans announced by other companies. As for non-mining investment, the temporary shutdown of the MAPA project stands out.

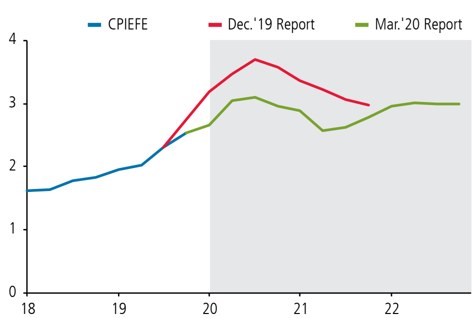
FIGURE V.5
CPI inflation forecast (1) (2)
(annual change, percent)



(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.
(2) Gray area, as from first quarter 2020, shows forecast.

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

FIGURE V.6
CPIEFE 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.
(2) Gray area, as from first quarter 2020, shows forecast.

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

In any case, the decrease in household and corporate income will be partly mitigated by the emergency plan announced by the government. This plan involves resources amounting to US$11.75 billion and a set of measures intended to protect employment and labor income by making use of unemployment insurance, injections of liquidity in the productive system and actions to sustain household income. Plus initiatives to postpone payment of utility bills.

Regarding the external impulse, the world will live through a recession this year, which will drastically reduce external demand and commodity prices. China, Chile's main trading partner, will grow by only 3% this year, its lowest since decades. In the United States and the Eurozone, GDP will contract by 1.9% and 3.3%, respectively. Latin America will be one of the most affected regions, as in addition to the real and financial impacts of the containment measures, several of them were already suffering by idiosyncratic factors, and the fall in commodity prices will take a big toll on their economies. Thus, activity in the region will fall by 3% this year. In the baseline scenario, world and trading partners' growth will be negative in 2020. The baseline scenario foresees a significant recovery beginning in 2021, when world activity will post an expansion of nearly 4.0% (figure V.2).

Commodity prices have also seen across-the-board falls because of the lower world demand. In the case of oil, it is compounded by the price-war that started after the failed negotiation between Saudi Arabia and Russia. At our statistical close, the oil price was fluctuating somewhat above US$20 per barrel, accumulating a drop of more than 60% this year, with overnight declines not seen since the early 1990s. The price of copper has fallen more than 20% this year to date, and is trading around US$2.1 per pound, its lowest since late 2016 and nearly 20% below its long-term price. Thus, the baseline scenario assumes that this year the terms of trade will fall and will only begin rising towards 2022 (figure V.3).

Chilean exports will see a contraction during 2020, reflecting the reduced trade flows owing to the world recession. Actually, February and March already posted drops in annual terms. Imports will also contract due to lower domestic demand. The substantial adjustment in spending by businesses and households cannot be offset by the government's savings depletion implicit in the announced fiscal package, so this year the current account balance will turn positive (0.3% of GDP after a deficit of 3.9% in 2019). Lower terms of trade also play a role in this correction. The current-account deficit as measured at trend prices[2]/ sees a somewhat more pronounced adjustment, from 4.9% of GDP in 2019 to 0.4% of GDP this year.

[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).

CAPACITY GAPS AND ACTIVITY GAP

As anticipated in the December Report, end-of-2019 national accounts showed a substantial widening of the activity gap in the last quarter of the year, driven by the events that broke out on 18 October. Although the partial figures for the first two months of this year suggest that the economic recovery had managed to reverse part of this widening, the major slowdown of the economy from mid-March will cause the gap to open again, even more strongly in the second quarter. Going forward, closing the gap will take longer than was expected in December. These estimates, always subject to a high degree of uncertainty, do not consider changes in potential growth (figure V.4).

CONVERGENCE OF INFLATION

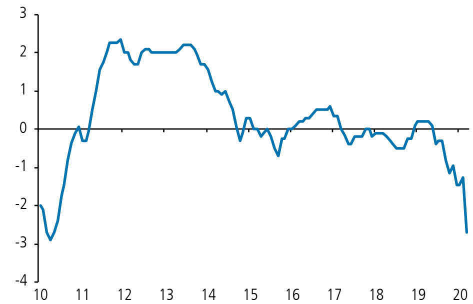
The medium-term inflation trajectory is dominated by the big widening of the activity gap that is foreseen in the scenario just described. In the short term there are forces operating in opposite directions: on one hand, the significant drop in the oil price and, on the other, the depreciation of the peso. About the latter, it is important to note that, unlike what happened after the social outbreak, the most recent depreciation is not idiosyncratic, but a response to the appreciation of the US dollar. Thus, its pass-through to local prices should be smaller[3]/. Meanwhile, although in the present circumstances there could be price hikes originating in the supply side (e.g. emptying shelves or inventory depletion) this Report estimates that a sharp drop in demand for other goods and services will dominate the medium-term inflation dynamics.

The baseline scenario assumes a downsloping trajectory for inflation in the coming quarters, declining from February's 3.9% figure to around 3% annually in the fourth quarter of this year, to then remain in the neighborhood in 2021. It must be stressed that the recovery of fuel prices foreseen in 2021 will be the main factor explaining the transitory rise in inflation that year (figure V.5). Core inflation will fluctuate around 3% during a big part of the projection horizon (figure V.6).

MONETARY POLICY STRATEGY

The Board has taken a set of measures to cushion the effects of the dramatic change in the macroeconomic scenario. First, during March it cut 125 basis points off the policy rate to 0.5%, its technical minimum. Thus monetary policy became highly expansionary, with the MPR in real terms becoming more negative and which, in the group of comparable economies, is among the most expansionary (figures V.7 and V.8).

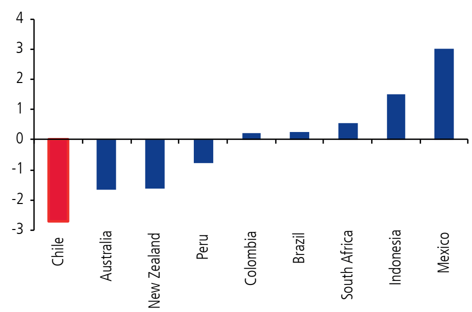
FIGURE V.7
Real MPR in Chile (*)
(percent)



(*) Calculated as nominal MPR minus inflation expectations one year ahead from the Economic Expectations Survey. Considers the decision made on March 31st, 2020.

Source: Central Bank of Chile.

FIGURE V.8
Real MPR in selected economies (1) (2)
(percent)



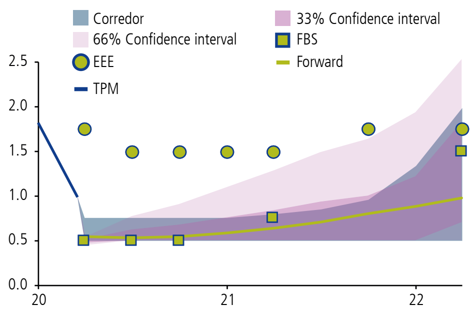
(1) Current monetary policy rate minus expected inflation one year ahead

(2) For Colombia, considers monetary policy rate announced on March 27th, 2020. For Chile, considers monetary policy decision of March 31st, 2020.

Source: Central Banks of each country.

[3]/ See box IV.1, Monetary Policy Report, March 2018.

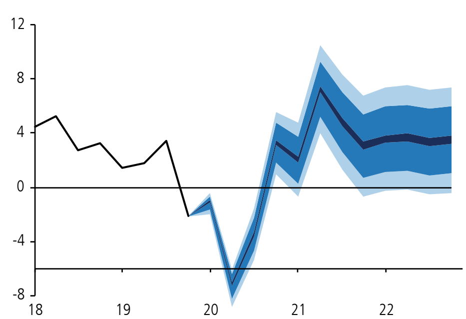
FIGURE V.9
MPR corridor (*)
(percent)



(*) The corridor is constructed using the methodology explained in Box V.1. Includes the FBS of March 26th, the EES of March 10th, and the forward curve derived from financial assets prices as of the statistical closing of this Report.

Source: Central Bank of Chile.

FIGURE V.10
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 MASMEP models from 2009 to 2017. Also, the intervals contain the risk evaluation on growth performed by the Board.

Source: Central Bank of Chile.

Also, and in order to ensure the proper functioning of the financial markets and be able to properly transmit this monetary impulse, the Bank has implemented a series of extraordinary measures. These include opening for banks a funding facility conditional on increased lending (FCIC). The additional resources channeled through the FCIC will be proportional to the increase in loans of each institution with respect to its benchmark portfolio, with a higher expansion factor for loans directed to smaller companies (SMEs). Banking companies using this facility will obtain financing for up to four years at an interest rate equal to the MPR in effect at the time of access. In the event that the MPR were to be modified during the six months of the program's duration, the rate for the residual term of the credit would be adjusted to its lower value over that period. In addition, the Board decided to include corporate bonds as eligible collateral for all the Bank's peso liquidity operations and initiate the purchase of bonds from SOMA system participants, for an amount equivalent in UF of up to US$4 billion. At the end of March, this amount was raised to US$8 billion and established that the remaining amount—up to US$5.5 billion—would bear no maturity constraint on the eligible instruments.

Beginning with this Report, the Board has decided to implement a more explicit communication policy regarding the possible future trajectories for the MPR, based on the conviction that this measure will contribute to communicate the rationale of monetary policy decisions, boosting its effectiveness and accountability to the public. As described in box V.1, the MPR corridor (figure V.9) shows the range of trajectories consistent with the baseline scenario, which includes the baseline projections and the sensitivity scenarios that are consistent with activity growth in the upper and lower bounds of the projection range, but which could require different MPR trajectories to ensure the convergence of inflation in the policy horizon. The MPR corridor emphasizes uncertainty in three dimensions: a) the initial reading of the economic indicators, b) future developments in the macroeconomic scenario and their impact on inflation's convergence, and c) the long-term equilibrium level of the monetary policy rate.

The first dimension —i.e. the initial reading of the economy— is reflected in the starting points of the corridor, which are obtained from the monetary policy options that the Board deemed possible in the current situation at the monetary policy meeting held on March 31st. At that meeting, the Board considered that the plausible options were to lower the MPR by either 25 or 50 basis points. Notwithstanding, their analysis led to the conclusion that the option of 50 basis points was more consistent with the evolution of the macroeconomic scenario and the need for a significant monetary impulse. Accordingly, the Board voted unanimously for reducing the MPR to 0.5%.

The second dimension —which refers to future developments in the macroeconomic scenario— is reflected in the width of the corridor on the projection horizon. The upper and lower ranges are justified to the extent that future developments in activity and demand, and the associated inflationary pressures, are manifested in line with the various scenarios outlined above.

Towards 2021 and 2022 the lower part of the corridor reflects scenarios in which the economy shows a worse performance than the baseline scenario and therefore the MPR should be kept at its technical minimum for a longer period and/or extraordinary measures should be used. This could be the case if the control of the sanitary crisis and the containment measures at the international and local levels remain in place for longer. It could also happen if, while not stretching in time for longer than projected, the significant cash needs of firms and households are not matched by a comparable increase in their access to credit. Scenarios of this kind would imply more widespread solvency problems and bankruptcies in the most affected sectors, with greater job losses and a slower speed of recovery for the next two years. In any case, convergence to the inflation target may require keeping the MPR at its technical minimum for a longer period and/or the use of additional measures.

The upper part of the corridor reflects scenarios where growth could be at the top of the projection ranges or inflation convergence calls for an early withdrawal of the monetary stimulus. This could happen in situations where isolation succeeds in soon reducing the speed of contagion and economic activity begins to normalize earlier than expected, avoiding more persistent effects on the solvency of companies and significantly cushioning the adverse effects on the labor market.

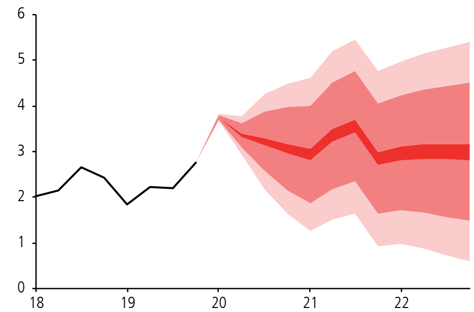
There may also be scenarios in which the interruption of the normal functioning of companies leads to important reductions in the available supply of goods and services, giving way to significant price hikes. In these cases it is not evident that the policy response should be the early withdrawal of the monetary stimulus, especially if inflation expectations remain anchored to the target.

The third dimension of uncertainty —the long-term or neutral MPR— is captured in the corridor by allowing, over longer horizons, the policy rate to gradually converge to its lower and upper limits, currently estimated at between 3.75% and 4.25%. This dimension of uncertainty is less relevant in the current situation because all the macroeconomic settings considered within the baseline scenario require maintaining a significant monetary stimulus throughout the policy horizon, foreseeing the normalization of the MPR towards its neutral levels in more than two years' time.

Considering all these possible scenarios, the Board estimates that the risk balance for activity is biased downwards in the short term and unbiased in the medium term. For inflation, it is unbiased (figures V.10, V.11 and V.12).

Taking into account the background depicted above, the Board's opinion is that monetary policy should use all its expansionary power over an extensive period of time, therefore placing the MPR on the floor of the corridor.

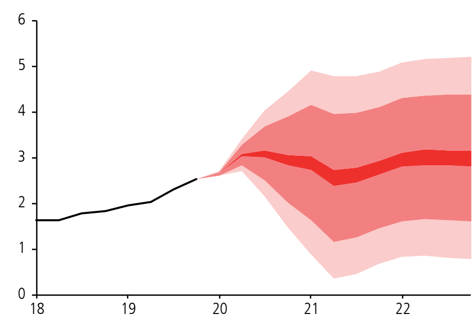
FIGURE V.11
CPI inflation forecast (*)
(annual change, percent)



(*) 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 MAS-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.12
CPIEFE 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 MAS-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).

Finally, there are also trajectories for the MPR outside the corridor. On this occasion, these trajectories are related to scenarios where the sanitary and economic measures that have been adopted to contain the crisis fail to achieve positive results at the global level. In such a scenario, it cannot be ruled out that a severe tightening of financial conditions could eventually affect the payment chain at a global level, seriously damaging the financial position of various public and private entities and triggering much more severe falls in activity. In such a situation, it would be necessary to keep the MPR at its minimum level for a longer time, in addition to using instruments going beyond the usual monetary policy making, probably prioritizing considerations of financial stability.

BOX V.1
MONETARY POLICY RATE CORRIDOR

As part of its continuous improvement plan, the Bank has been increasing the transparency of its monetary policy decisions. This box describes an additional step in the communication process, introducing the concept of a corridor for the monetary policy rate (MPR). This tool, which will now be included in the forecast material in each Monetary Policy Report, shows a band for the MPR forecast consistent with the baseline scenario. This includes the central forecast scenario, as well as 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.

The way central banks communicate their monetary policy decisions has changed significantly in recent years. Today, communication is understood to be a key tool for policy effectiveness: when economic agents understand the rationale behind the decisions made by the Central Bank, they will be better able to make predictions, aligning the communicated monetary policy strategy with information in the yield curve. In this line, the Bank has emphasized the importance of communication and transparency as central pillars in its recently updated monetary policy framework (summary box).

The content of a central bank's public communication is usually broken down into three general areas: (a) the policy framework governing its behavior, including its monetary policy objectives and strategy; (b) the central bank's perspective on the current economic situation; and (c) monetary policy decisions and their justification[1]/.

Monetary policy objectives tend to be stable, quantifiable, well defined, and clearly communicated. With regard to the economic situation and outlook, central banks usually publish their projections for output, the components of demand, and inflation. In general, inflation-targeting countries provide more information on their forecasts via regularly published reports—like the Monetary Policy Report. Finally, policy decisions are generally published the same day they are made, with a clear explanation of how they are consistent with the reading of the macroeconomic scenario.

Many central banks also provide some form of guidance on the future path of interest rates, which is known as forward guidance. The majority give a description of what they estimate will be their future decisions, based on their inflation and output forecasts. Others provide numerical forecasts of the expected rate path.

By presenting a forecast for the MPR corridor, the Central Bank of Chile joins this latter group of central banks, adapting the international practice to its own monetary policy communication framework developed over the past decades. Thus, the MPR corridor contains elements that differentiate it from the methodologies used by other central banks to present their forecasts. This box describes the methodology used to construct the corridor[2]/.

Benefits and challenges of forward guidance

The literature highlights two major benefits of a forward guidance policy that describes possible future paths for the policy rate: (a) greater clarity for transmitting the bank's perspective on the macroeconomic environment and the monetary policy reaction function vis-à-vis changes in scenarios; and (b) greater coherence in the communication of the central banks' internal analysis.

With regard to the former, monetary policy acts on the economy by influencing not only the value of very short-term market rates, but also—and primarily—the expected path reflected in the yield curve. A monetary policy will be easier for the market to understand and anticipate if the communication is able to

[1]/ Blinder et al. (2008) emphasize that a central bank's communication strategy should tend to not provoke greater volatility in the financial market.

[2]/ For more technical details on the construction of the MPR corridoor, see Albagli et.al (2020).

describe the possible future scenarios considered, their rationale, and how the Central Bank would react in each case.

The second benefit—of improving the coherence of the communication of internal analysis—is generated by facilitating consistency between the communicated macroeconomic scenario and the reported path for the probable evolution of the interest rate. In other words, the goal is to communicate not only how inflation convergence will evolve, but also the policy strategy that makes convergence possible under different macroeconomic scenarios. This strengthens the capacity for accountability, which is especially important in an inflation-targeting regime.

However, there are also challenges that need to be addressed before explicitly publishing the monetary policy path. Internally, it can be difficult to agree on the definition of the path to be communicated, especially in collegiate bodies. Externally, the main challenge is clearly indicating that what is being published is a projection based on assumptions about the future macroeconomic scenario, but that in no case does it constitute a commitment. Given the variety of possible strategies for addressing these challenges, different central banks have, in practice, opted to use different strategies for their forward guidance.

International experience

Several central banks have decided to explicitly and regularly publish their expected rate paths. The first, in June 1997, was New Zealand, followed by Norway (November 2005), Sweden (February 2007), Iceland (March 2007), Israel (July 2007), and the Czech Republic (January 2008). Others have published their forecasts but not systematically, especially during and after the 2008–09 financial crisis. These include the Bank of England, the European Central Bank, the Bank of Japan, the Bank of Canada, and the U.S. Federal Reserve (Fed).

There is a lot of heterogeneity in the communication of the future rate path. For example, Iceland, Israel, and the Czech Republic communicate a single monetary policy path, but the forecast is developed by their economic staff and not through a consensus of the Board. The Fed complements its monetary policy reports with explicit forecasts for the monetary policy rate submitted by each policymaker (anonymously), the so-called Fed dots. Given that some of the participants change from one meeting to the next, the dots do not constitute a consensus forecast by a collegiate body.

Current state of monetary policy communication in the Central Bank of Chile

The Bank has a number of different channels of communication: namely, the press release and minutes from the Monetary Policy Meetings, the Monetary Policy Report, the Financial Stability Report, and Board presentations. The most frequent, quantifiable, and direct communication is the decision adopted at each Meeting. Depending on the economic climate, the decision could be accompanied by a bias, which indicates the Board's perspective regarding the most probable direction of movements in the short term. The second most frequent is the Monetary Policy Report, which describes the current state and different forecast scenarios for both the local and international economy, with a focus on the evolution of output, demand, and inflation dynamics. These different communication channels are formulated within the CBC monetary policy framework (see the summary box).

Historically, the Monetary Policy Report has included references on the most probable monetary policy path. However, the Board has identified two areas for improving the current communication strategy. First, the reference to future rates does not always follow the same pattern. For example, the most frequent approach is to contrast the path in the central forecast scenario with the MPR implied in the swap curve. Different strategies have been used, however, when these paths diverge, for example, by indicating an approximate number of movements in the next year or conditioning changes on the closing of the output gap or inflation convergence. The new strategy aims to standardize communication, so as to minimize possible confusion deriving from the change in the message.

Second, and perhaps more importantly, reporting a single MPR path associated with the baseline scenario has the disadvantage of ignoring the existence of other paths that are also compatible with the baseline while also omitting other possible paths deriving from sensitivity scenarios whose probability of occurrence is comparable to the central scenario. Thus, one of the objectives of the MPR corridor is to highlight the conditional nature of the Board's decisions, favoring the communication of a range of paths associated with the most plausible scenarios.

Monetary policy rate corridor

Based on the considerations described above, the Board has decided to implement a more explicit communication policy regarding the possible future paths of the MPR. This will contribute to diffusing the rationale behind its decisions and improving its policy effectiveness and public accountability.

To demonstrate how the corridor is constructed, figure V.13 recreates the corridor that would have been published in the September 2019 Monetary Policy Report. Panel A presents all the inputs used to construct the corridor; panel B shows what the corridor would have looked like if it had been published. Finally, both panels also show the MPR paths that the market expected at that time, according to market surveys and financial prices.

The figure highlights four sources of uncertainty: (a) the initial reading of the economy; (b) future developments in the macroeconomic scenario and their impact on inflation convergence; (c) the long-term equilibrium level of the MPR, called the neutral MPR; and (d) the historical uncertainty about the MPR forecast. The MPR corridor is the blue area of the figure, and it reflects the first three sources of uncertainty. The pink areas capture the fourth source of uncertainty.

With regard to the first source, the initial range of the corridor is constructed based on the monetary policy options discussed by the Board at the Monetary Policy Meeting immediately prior to the publication of the Monetary Policy Report. This reflects the fact that for a given combination of current data, there is no single interpretation of the economy's starting point—for example, the strength of demand or the presence of temporary factors affecting output and/or inflation that could revert within a few months. Therefore, different decisions could be justified under different interpretations of the most probable evolution of the macroeconomic scenario in the coming quarters. At the same time, there are risks for inflation convergence that, under certain circumstances, could support different decisions, even under the same forecast scenario. Consequently, there is generally more than one policy option that would be consistent with the available information and the Board's risk assessment, whether individually or collectively. In panel A of figure V.13, this starting point considers the three options discussed at the September 2019 Meeting: a reduction in the MPR from 2.5 to 2.25%; a reduction to 2.0%; and a reduction to 1.75%.

With regard to the second source—changes in the macroeconomic scenario—the width of the corridor across the policy horizon communicates the range of the MPR that could be expected in the event that any of the sensitivity scenarios materialize, which would lead to a different MPR path from the one associated with the Board's preferred central forecast scenario (the solid light blue line in panel A). Thus, the corridor describes possible implementation strategies consistent with the baseline scenario. The sensitivity scenarios, whose narrative and interpretation are described in the summary and chapter V of each Monetary Policy Report, are alternative macroeconomic paths consistent with output growth in the forecast ranges. Panel A of figure V.13 shows two sensitivity paths (S1 and S2), which serve to delineate the range. The first (S1) is consistent with a scenario in which inflation convergence to 3% in the policy horizon would require reducing the MPR to 1.75% and then holding it between 1.75 and 1.5% for several months. The second (S2) assumes that the necessary monetary stimulus would be lower, so that the MPR would only have to be reduced to 2.25%. In practice, the corridor does not present a specific path for each sensitivity scenario, but rather represents the upper and lower limits. This decision was made to reinforce the idea that the estimates should not be associated with a commitment to a given MPR path (panel B, figure v.13). Finally, while other paths outside the corridor are certainly possible, they are considered to be less probable, and they correspond to the risk scenarios that are explained in the summary and chapter V of each Report.

The third source of uncertainty—the long-run or neutral MPR—is based on the same sensitivity scenarios, but assuming the upper and lower values of the neutral MPR range (3.75 to 4.25%) as a point of reference for evaluating the degree of accommodation of monetary policy. Notably, the forecasts are made based on inflation convergence to the 3% target within the two-year policy horizon. While the MPR will also converge to its neutral level, it could require a longer forecast horizon.

Finally, the fourth source is the historical uncertainty of the MPR forecast, which can derive from multiple causes, such as correct model specification, possible changes in the structural parameters, deviations of the policy rule incorporated in the model, future shocks, etc. This type of uncertainty is quantified by calculating the historical variability of the MPR at different maturities. The pink areas in panel A of figure V.13, graph this variability by adding it to the MPR path associated with the central scenario (panel B del figure V.13). The pink areas do not necessarily coincide with the blue area of the MPR corridor, since the former reflect the average historical variability, and not the sensitivity scenarios that the Board considers most relevant at the time and that materialize with the corridor.

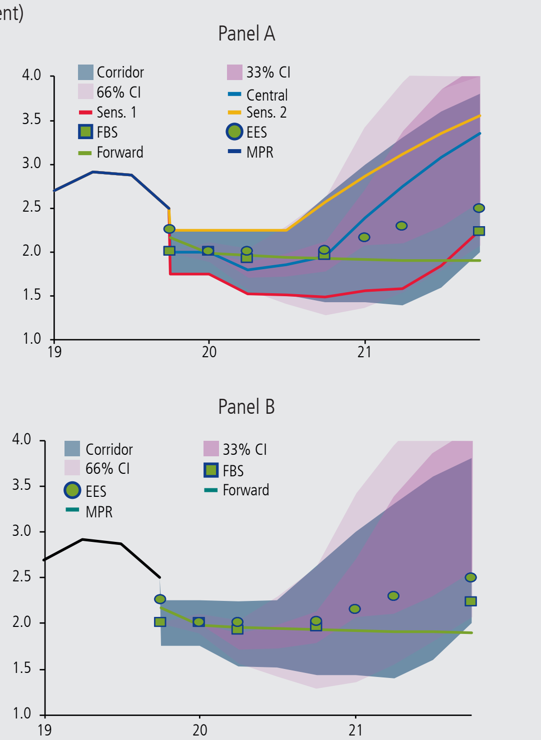
The effective lower bound of the MPR

Finally, the corridor presented in chapter V of this Monetary Policy Report (figure V.9), incorporates the technical lower limit for the MPR—or the effective lower bound, as it is known in the specialized literature. This is a structural parameter (as are the neutral MPR and the trend and potential growth of the Chilean economy), which the Board periodically evaluates. On this occasion, as in 2009, the Board estimates that the effective lower bond of the MPR is 0.5%[3]/. Consequently, the bulk of the corridor presented in this Monetary Policy Report is concentrated around that value for a given future horizon. This is not the case with the sample corridor discussed above (figure V.13), because at that time, none of the MPR paths associated with the central or alternative scenarios crossed the threshold of the lower bound. In the corridor presented in this Report, the MPR path does cross the threshold.

Conclusions

The Central Bank of Chile, in its effort to increase transparency, has been gradually modifying its communication strategy in line with international best practices. This box presents the next step in this process, introducing the concept of the MPR corridor, which illustrates the monetary policy paths considered to be most probable. By communicating a range of paths, rather than a single specific path, the Board is highlighting the fact that these decisions are subject to multiple sources of uncertainty, which could lead to modifications in the policy path. Thus, the Board seeks to communicate the general orientation of monetary policy given the current climate, while its decisions are conditional on the materialization of the different scenarios.

FIGURE V.13
MPR corridor (*)
(percent)



(*) Panel A shows the MPR paths for the different sensitivity scenarios that make up the baseline scenario in the September 2019 Monetary Policy Report. Panel B shows how the corridor would have been published in that Report. Pink areas: 33 and 66% confidence intervals (CI).

Source: Central Bank of Chile.

[3]/ EThe money market is operated by different agents who compete with each other and with the banking system. They offer short-term investment instruments that help households and businesses satisfy their immediate cash flow needs, since they can withdraw their funds the next day. When market agents sell these instruments, they may have to cover price differences. Therefore, as the MPR approaches zero, the probability that firms and households will incur losses rises. To maintain the proper functioning of this mechanism, the Board estimates that the effective lower bound of the MPR is 0.50%. If conditions change, this parameter will be reviewed and, if necessary, revised in the future.

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.

CEMBI: Corporate Emerging Market Bond Index. A measure of corporate risk, calculated by J.P. Morgan as the difference between the interest rate on dollar-denominated bonds issued by banks and corporations in emerging economies, and the interest rate on U.S. Treasury bonds, which are considered risk free.

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).

CPIEFE: CPI excluding food and energy prices, leaving 73.2% of the total CPI basket.

CPIEFE goods: The goods component of the CPIEFE, which represents 27.3% of the total CPI basket. It includes the following categories:

• **Recreation goods:** Digital storage units; games; videogame consoles; sporting goods; camping equipment; musical instruments; school textbooks; books; newspapers; notebooks; craft materials; and office supplies.

• **New automobiles**.

• **Alcoholic beverages:** Pisco; rum; whisky; vodka; wine; sparkling wine; and beer.

• **Health goods:** Antibiotic, antiviral, and antifungal drugs; cardiovascular drugs; hormones and medications for the genitourinary system; nonsteroidal anti-inflammatory drugs, anti-migraine drugs, and musculoskeletal drugs; respiratory drugs; dermatological, disinfectant, and antiseptic drugs; medications for the central nervous system; digestive and metabolic drugs;

ophthalmological preparations; cancer drugs, immune system modifiers, and pain relief medications; homeopathic drugs and food supplements; wound-care products; condoms; eyeglasses; health monitoring devices; electric razors and epilators; disposable razors; miscellaneous personal care products; sunblock and tanning lotions; colognes and perfumes; deodorants and antiperspirants; oral hygiene products; toilet paper; soap; disposable diapers; feminine hygiene products; shampoo and conditioner; skin creams; makeup products; and hair dye and hairspray.

• **Cigarettes.**

• **Household electronics:** Cellular telephones; televisions; sound equipment; portable audio and video recorders; cameras; computers; and printers.

• **Other transport goods:** Used automobiles; motorcycles; bicycles; electrical car parts; tires and rims; and mechanical car parts and accessories.

• Tourism packages.

• **Other household goods:** Beds; mattresses; dining room furniture; kitchen cabinets and furniture; living room furniture; carpets and other floor coverings; decorations; bed linens; bath and kitchen towels; dining and living room textiles; water heaters; ovens, cooktops, and ranges; space heaters; electric toaster ovens and microwaves; washing machines; refrigerators; small kitchen appliances; irons; tableware; cooking utensils; air fresheners and disinfectants; laundry detergent and softeners; dish soap; cleaners; insecticides and other pesticides; cleaning products; paper towels and napkins; flowers; plants; pet food; and pet accessories.

• **Clothing and footwear:** Fabrics for making clothes; men's outerwear; men's trousers and shorts; men's shirts and sweaters; men's underwear and sleepwear; women's outerwear; women's trousers, skirts, and dresses; women's blouses and sweaters; women's sportswear and bathing suits; women's underwear and sleepwear; children's outerwear; children's trousers, skirts, and dresses; children's shirts, blouses, and sweaters; children's sportswear, shorts, Bermuda shorts, and swimwear; children's underwear and sleepwear; baby apparel; school uniforms and tracksuits; clothing repair items; clothing accessories; men's sneakers; men's dress shoes; women's sneakers; women's dress shoes; women's seasonal footwear; children's sneakers; children's shoes; school shoes; jewelry; wristwatches; handbags and purses; baby carriers; and sunglasses.

• **Household:** Home repair items; paints and varnishes; bathroom fittings and accessories; sealants and glues; electrical tools and accessories; other tools and accessories; lighting accessories; locks; electrical accessories; and batteries.

CPIEFE services: The services component of the CPIEFE, which represents 45.9% of the total CPI basket. It includes the following categories:

• **Water.**

• **Rent.**

• **Education:** Education services, including preschool, kindergarten, primary school (first through fourth grades), middle school (fifth through seventh grades), high school (eighth through twelfth grades), university preparatory school, technical schools, vocational schools, universities, graduate schools, and training courses.

• **Communal expenses.**

• **Financial expenses.**

• Other services: Cleaning and clothing repair services; car maintenance and repair services; car wash services; parking services; toll services; driver's license; motor vehicle inspection; insurance; certification services; photocopy services; professional association membership fees; notary services; funeral services; parent association fees; residential services for the elderly; and childcare services.

• **Other household services:** Home maintenance and repair services; sanitation services; home alarm services; furniture repair services; home appliance repair services; and veterinary services.

• **Food services:** Foods consumed outside the home; sandwiches and hotdogs consumed outside the home; alcoholic beverages consumed outside the home; nonalcoholic beverages consumed outside the home; ice cream and desserts consumed outside the home; and take-out food.

• **Recreation services:** Services provided by recreational centers; tickets to sporting events; nightclub entry fees; birthday party services; gymnasiums; exercise classes; recreational classes; cinema tickets; tickets to cultural events; photographic developing services; paid residential television services; online subscription services; gambling; and tourist accommodations.

• **Health services:** Medical appointments; outpatient surgical procedures and interventions; dental appointments and treatments; radiology and imaging services; clinical laboratory exams; other professional health services; hospitalization; hair styling services; and beauty treatments.

• **Telecommunication services:** Internet connection; mobile broadband; telecommunication packages; cellular telephone service; and fixed-line telephone service.

• Transport services: **Air transport; interurban buses; shared taxis; taxis; school** transport; urban buses; airport transfers; and multimodal transport.

• **Domestic services.**

CPI excluding volatile components: The nonvolatile component of the CPI, which represents 65.1% of the total CPI basket. It includes the following categories: Flours and cereals; bread and other bakery products; canned fish and shellfish; milk; yoghurt and dairy desserts; butter and margarine; dried and preserved fruits; sugar and sweeteners; jams, dulce de leche, and other sweet spreads; candy, chocolate, and other confections; ice creams; salt, herbs, spices, and cooking condiments; sauces and dressings; soups, baby food, and nondairy desserts; coffee and substitutes; tea; cocoa and nutritional powders; mineral water and purified water; soft drinks; liquid and powdered juices; distillates; beer; fabrics for making clothes; men's clothing; school uniforms; clothing accessories; clothing repair and cleaning services; rent; home maintenance and repair items; home maintenance and repair services; sanitation services; other household services; household furniture; furniture repair services; household textiles; white goods; household appliances; appliance repair services; household goods and utensils; tools; home accessories; household cleaning products; household cleaning tools; domestic services; therapeutic goods; medical services; dental services; medical and diagnostic laboratory services and radiology services; other professional health services; hospitalization services; new automobiles; used automobiles; motorcycles; bicycles; auto parts and accessories; automobile oil and lubricants; automobile maintenance and repair services; parking services; vehicle registration services; urban passenger transport services; telecommunication services; audio equipment; computers and printers; games and videogame consoles; sporting, camping, and recreational equipment pet food and accessories; veterinary services; services provided by recreational and sports centers; sports and recreation classes; photographic services; television services; school textbooks; books; newspapers; school supplies; office supplies; preschool, primary, and middle school education services; high school education services; university preparatory education services; higher education services; food and drink consumed outside the home; take-out food; accommodation services; hair styling and personal care services; personal care products; personal hygiene products; beauty products; jewelry and wristwatches; other personal items; and other services.

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. In the most recent assessment, as in 2009, the Board estimates that the current value of the effective lower bound of the MPR is 50 basis points; that is, the lowest MPR level that allows the adequate functioning of the money markets. I could, however, be reevaluated in the future.

EMBI: Emerging Market Bond Index. A measure of country risk, calculated by J.P. Morgan as the difference between the interest rate on dollar-denominated bonds issued by emerging economies, and the interest rate on U.S. Treasury bonds, which are considered risk free.

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 1990–2018 period.

IVUM: Import price index.

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, Thailand, 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 productive 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 productive 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 90% of world growth. For the remaining 10%, an average growth rate of 2.5% is used for the 2019–2021 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 period 2019–2021 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.

ABBREVIATIONS

BCP: Central Bank bonds denominated in pesos

BCU: Indexed Central Bank bonds denominated in UFs

BLS: Bank Lending Survey

BPR: Business Perceptions Report

CBC: *Corporación de Desarrollo Tecnológico de Bienes de Capital*

CPI: Consumer price index

CPIEFE: Consumer price index excluding food and fuels

EES: Economic Expectations Survey

FBS: Financial Brokers Survey

FFR: Federal funds rate

FMC: Financial Market Commission

IMCE: Monthly Business Confidence Index

IMF: International Monetary Fund

INE: National Statistics Institute.

IPEC: Consumer Confidence Index

IPSA: Selective Stock Price Index

LCI: Labor Cost Index

MER: multilateral exchange rate.

MPR: Monetary policy rate.

MSCI: Morgan Stanley Capital International

OECD: Organization for Economic Cooperation and Development

OPEC: Organization of the Petroleum Exporting Countries

PDBC: Central Bank discount promissory notes

RER: Real exchange rate.

RPI: Retail price index

SNA: System of National Accounts

WI: Wage Index

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