MONETARY POLICY REPORT

December 2019

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*/ This Monetary Policy Report uses data available as of 2 December 2019, except where indicated otherwise. It also takes into account the monetary policy decision announced on 4 December.

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 most probable path for monetary policy in the next two years and describes sensitivity scenarios to show 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 4 December 2019 for publication on 5 December 2019.

The Board

SUMMARY

The macroeconomic scenario changed abruptly from mid-October onwards. Until then, the economy had performed in line with the September IPoM, with GDP growth of 3.3% annually in the third quarter and a y-o-y change in the CPIEFE of around 2%. The crisis that broke out on 18 October has been characterized by social demands that have led to the discussion of relevant institutional changes —such as a new Constitution— and increased pressures on fiscal spending. This process, however, has been accompanied by significant and prolonged episodes of violence, which have caused major disruptions in the productive system, resulting in reduced activity and weakening employment. The information at hand shows significantly higher uncertainty and eroded confidence that would be amplifying these effects. Financial markets have been strained by sharp price movements, which in some cases have gone beyond what the greater perception of country risk would warrant. The Board has adopted various measures to improve liquidity in both pesos and dollars, and decided to intervene in the foreign exchange market to mitigate the high volatility of the exchange rate and help ensure adequate adjustment processes.

Consistently with this and the convergence of inflation to the target, the Board kept the MPR at 1.75% at its December Meeting. The recently announced increase in the fiscal impulse, coupled with the already high expansionary monetary policy stance, will help to contain the deterioration of the economy, so that after a contraction of 2.5% in the fourth quarter of this year, GDP would grow between 0.5 and 1.5% in 2020. The significant economic slowdown is expected to widen the activity gap over the monetary policy horizon, putting downward pressure on inflation. However, the financial impacts of greater uncertainty, as well as the more persistent effects of the peso depreciation, will increase inflationary pressures over the policy horizon. Accordingly, the Board estimates that the monetary stimulus is adequate for the accomplishment of the inflation target, bearing in mind the current state of the fiscal impulse and the foreign exchange policy. Market expectations, which do not foresee major adjustments in the MPR and consider inflation two years ahead at 3%, are consistent with this diagnosis.

It is important to note that projections in this Report have been constructed within a context of unusual uncertainty. The baseline scenario assumes a pattern of a shy economic recovery beginning in December, to then continue to gradually improve demand. A crucial condition for this scenario to become

ECONOMIC GROWTH AND CURRENT ACCOUNT

	2018	2019 (f)	2020 (f)	2021 (f)
	(annual change, percent)			
GDP	4.0	1.0	0.5-1.5	2.5-3.5
National income	3.8	0.7	0.8	3.5
Domestic demand	4.7	0.3	-1.6	4.1
Domestic demand (w/o inventory change)	3.9	1.4	0.0	3.1
Gross fixed capital formation	4.7	2.5	-4.0	3.2
Total consumption	3.7	1.1	1.1	3.1
Goods and services exports	5.0	-1.1	2.2	2.2
Goods and services imports	7.6	-3.8	-7.3	5.5
Current account (% of GDP)	-3.1	-2.9	-0.2	-0.8
Gross national saving (% of GDP)	19.6	19.6	19.9	20.1
Gross national investment (% of GDP)	22.7	22.5	20.2	21.0
GFCF (% of nominal GDP)	21.3	22.0	21.1	21.0
GFCF (% of real GDP)	21.2	21.5	20.4	20.5
	(US$ million)			
Current account	-9,157	-8,200	-600	-2,500
Trade balance	4,669	4,900	12,600	11,500
Exports	75,452	70,500	72,000	75,600
Imports	70,783	65,600	59,400	64,100
Services	-3,996	-4,700	-4,600	-4,600
Rent	-12,241	-10,100	-9,900	-10,800
Current transfers	2,411	1,700	1,300	1,400

(f) Forecast.

Source: Central Bank of Chile.

true is a significant decrease in uncertainty and the various economic sectors resuming production. Given the origins of the uncertainty, its reduction depends on broad-based agreements between different social agents. The evidence of similar episodes in other countries shows that those societies that have reached agreements that improve institutionality and governance can go through these profound changes with limited effects on activity and employment (box V.1). However, if this scenario does not occur, the evidence points to a significantly bleaker outlook for the economy, where even the joint thrust from monetary and fiscal policy will be insufficient to avert a recession and a persistent rise in unemployment.

The social crisis prompted major changes in the macroeconomic scenario. For one, it has had negative effects on short-term activity. In October, the Imacec dropped 3.4% annually—with a fall of 4% in its non-mining component—due to various disruptions that hit every economic sector, which included damage to and destruction of facilities, interrupted commuting services and shorter working days. The most marked falls occurred in trade, manufacturing production and different service lines such as education, transportation, business services and hotels & restaurants. All this after third-quarter figures had shown higher growth than in the first half, in line with projections in the September Report.

For November, the available data suggests that economic performance would be affected by the persistence of difficulties to operating in normal conditions, especially by extended episodes of violence and various impediments to the normal functioning of the economy. In the third week of November, the Central Bank surveyed companies throughout the country, finding that during that month a large majority of them were affected in their performance, something they expect will continue over the next two quarters (box III.1). November's IMCE showed a significant drop in the use of installed capacity in the manufacturing sector, mirroring the aftermath of the 2010 earthquake. The baseline scenario assumes that activity will have an annual fall of 2.5% in the fourth quarter this year, concentrated in October and November. December should improve somewhat, but there is high uncertainty around this projection. With this, in 2019 total GDP will accumulate growth of around 1%, considerably below what was expected in September. This projection contemplates that both consumption and investment will have negative annual variations in the last part of 2019, concentrating weakness in its tradable components.

Poor performance in the last quarter of 2019 provides a low starting point for the economy in 2020. Actually, although it is expected to resume quarter-to-quarter growth, its annual variation would again be negative in the first quarter of next year. For the year as a whole, GDP is expected to grow between 0.5 and 1.5%. The current scenario presents a higher-than-usual degree of uncertainty, both because of doubts surrounding how long the disruptions will last, and because of the evolution of the political situation and the medium-term fundamentals. A key factor in the future evolution of the economy will

be the confidence of households and companies, and its relationship with the performance of the labor market, consumption and investment. With regard to consumption, various surveys show that personal confidence deteriorated significantly after 18 October. Worth noting is the fall in perceptions about the present and future evolution of the economy, employment, and the time for durable goods purchase, which show the lowest levels in recorded history (March 2002).

Various sources of information point at the labor market already worsening. On the one hand, in the Bank's survey slightly more than half of the respondents believe that their staff will see some decrease in 2020. On the other hand, with respect to the same month in 2018, the figures from the Labor Department for November show an increase of almost 13% in the number of labor terminations, which is almost entirely explained by layoffs due to company needs. If the historical ratio between labor demand and activity is maintained, and absent any significant changes on the supply side, the unemployment rate could exceed 10% in early 2020. Inasmuch as activity improves over the next year, this figure could decline gradually, which would also be supported by monetary and fiscal expansion. At the statistical closure of this Report there was no wage numbers for October. However, a reduction in personal income can be expected, due to lower sales commissions, reduced overtime, missed shifts and self-employed workers unable to operate as usual.

About investment, its expected evolution for 2020 is revised significantly, with a 4% year-on-year fall projected in the baseline scenario. This obeys to a substantial decline in private non-mining investment, consistent with the greater uncertainty and the sharp drop in business confidence —as reflected in the November IMCE—, the higher costs faced by companies in various areas (among them, due to the effects of the peso depreciation on the cost of imported machinery) and the deterioration of financial conditions, including the fall in stock prices and increases in corporate interest rates and spreads. The negative impacts on investment are offset, partially, by large mining investment projects that are already in progress, the significant increase in public investment and the expansionary monetary policy. The foreseen performance of investment relies, also, on qualitative information garnered by the Bank, which confirms that the development of the main investment projects in the mining and manufacturing sectors has not been affected, while in other areas previously committed investments are being reassessed in their timing and amounts. The Bank's survey showed that more than half of the respondents were rethinking their investment plans for 2020, while a minor portion had already decided not to carry them out.

The sharp adjustment of fiscal expenditure will significantly reduce the current-account deficit of 2020, to 0.2% of GDP (2.9% in 2019). The relevance of this adjustment is increased when considering that it occurs in a context of reduced government savings. Although to a lesser extent, there is also the contribution of increased exports, favored by the depreciation of the peso in real terms.

INTERNATIONAL BASELINE SCENARIO ASSUMPTIONS

	Avg. 00 - 07	Avg. 10 - 17	2018	2019 (f)	2020 (f)	2021 (f)
	(annual change. percent)					
Terms of trade	8.2	2.0	-2.1	-1.9	-0.2	1.4
Trading partners GDP (*)	3.7	3.9	3.7	3.1	2.8	3.0
World GDP at PPP (*)	4.5	3.9	3.6	3.0	2.8	3.0
World GDP at market exchange rate (*)	3.3	3.1	3.0	2.4	2.2	2.4
Developed economies' GDP at PPP (*)	2.4	1.8	2.2	1.7	1.3	1.5
Emerging economies' GDP at PPP (*)	6.5	5.3	4.8	4.0	4.0	4.2
External prices (in US	4.6	0.8	2.3	-2.2	0.3	2.2
			(levels)			
LME copper price (US¢/lb)	154	312	296	270	270	275
WTI oil price (US$/barrel)	44	75	65	57	56	53
Brent oil price (US$/barrel)	42	83	71	64	60	58
Gasoline parity price (US$/m3) (*)	366	633	544	491	474	443
Libor US$ (nominal, 90 days)	3.6	0.5	2.3	2.4	2.1	2.3

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

Source: Central Bank of Chile.

INFLATION (1)

	2018	2019 (f)	2020 (f)	2021 (f)
	(annual change. percent)			
Average CPI inflation	2.4	2.3	3.9	3.1
December CPI inflation	2.6	3.4	3.6	3.0
CPI inflation in around 2 years (2)				3.0
Average CPIEFE inflation	1.9	2.3	3.5	3.2
December CPIEFE inflation	2.3	3.0	3.5	3.0
CPIEFE inflation in around 2 years (2)				3.0

(1) For 2018, it shows annual change obtained with the 2013=100 bas-ket. 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 fourth quarter of 2021.
(f) Forecast.

Source: Central Bank of Chile.

The recovery of growth foreseen throughout 2020 will be favored by a monetary policy that will remain expansionary, a greater fiscal impulse, the aforementioned recovery of exports, and the gradual dissipation of the uncertainty and disruptions that have affected the economy. In the fiscal area, this considers the announcements of the Ministry of Finance on Monday 2 December, which imply a 9.8% increase in public spending over the previous budget. The Board estimates that this greater fiscal impulse is consistent with the boost to demand required in the current macroeconomic scenario because, among other reasons, it has greater capacity to influence growth, in a context where uncertainty could be downplaying the effectiveness of the traditional channels for monetary policy pass-through (box V.1).

The change in the macroeconomic scenario has also been reflected in the domestic financial market. In the days immediately after 18 October, the effects were relatively limited. In the weeks that followed, however, a number of financial indicators deteriorated. Thus, the stock market fell, the peso depreciated significantly, interest rates and risk perception rose (box II.1). These movements have been characterized by high volatility related to the local events. For example, improvements after an agreement was signed for a new Constitution or, in the opposite direction, intensified violent outbreaks. As of the statistical close of this Report, external markets have not been a major source of volatility.

The higher local uncertainty has begun to affect domestic credit conditions. Although interest rates are still low by historic standards, various sources of qualitative information show a tightening in financial conditions. In particular, a special poll of the Bank Credit Survey shows a sharp drop in the perception of credit demand, a fall in delinquency and tighter conditions in the supply of loans to persons and businesses (box III.1).

This higher uncertainty has resulted in strong movements in financial market prices, occasionally stronger than the greater perception of country risk would suggest. The Bank has responded to these changes by adopting various measures to provide an adequate degree of liquidity to markets and mitigate volatility in key financial prices. These measures are not intended to set "levels" for certain prices, such as the exchange rate, but rather to avoid excessive volatility or abrupt movements that may prevent the healthy adjustment of the economy and cause concern in markets and households. In particular, the Board decided to intervene in the exchange market with an amount of up to US$20,000 million, spanning from Monday 2 December 2019 to 29 May 2020. This will be implemented via a spot sale of dollars in the amount of up to US$10 billion and a sale of forex hedging instruments of up to US$10 billion. The monetary effects of this measure will be sterilized, so that the provision of liquidity in pesos is consistent with the monetary policy interest rate.

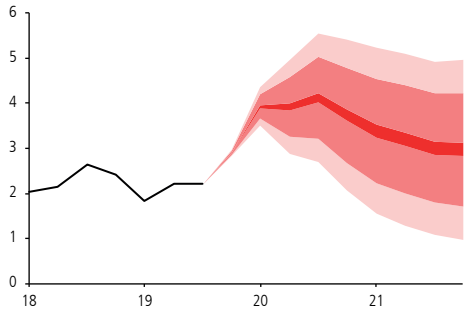
Towards 2021, the baseline scenario forecasts that GDP will grow between 2.5% and 3.5%. This assumes that the disruptions affecting the economy will fade out over the course of the next few quarters, and at the same time that the uncertainty surrounding consumption and investment decisions also will. In such scenario, investment should resume expansion rates above GDP growth.

The projections just described assume that the international scenario will not provide a big boost to Chile's economic growth. The baseline scenario —after the sharp downward correction of September— continues to foresee that world growth in 2020-2021 will be among the lowest of the last decade. The projected evolution of the terms of trade is revised down somewhat from September, with the copper price averaging US$2.7 per pound in 2020-2021.

In the baseline scenario, inflation is forecast to approach 4% in 2020, largely in response to the idiosyncratic depreciation of the peso, which would result in an above-average degree of pass-through to inflation. This, because in these circumstances there are no shock-absorbing factors, like the fall in dollar prices of imported products that occurs when the dollar appreciates globally. Certainly, the contraction observed in fourth-quarter GDP and the weaker outlook for 2020 widen the activity gap, partly cancelling out the greater inflationary pressures of the tradable component of inflation. However, the recent idiosyncratic depreciation of the Chilean peso limits the scope for monetary policy action, with respect to a situation where currency weakness is transversal for all the trading partners.

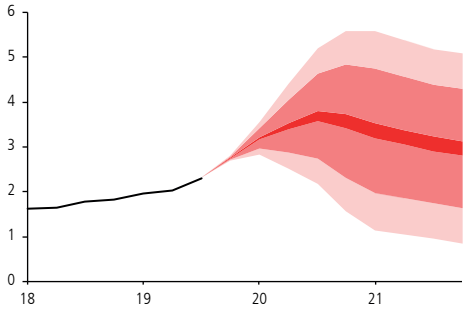
The Board estimates that there are scenarios in which growth can be within the forecast ranges, but require a different MPR path to ensure the convergence of inflation to the target. On the one hand, it is possible that the economy will perform below expectations. This could happen if the investment is hurt beyond projections, for example if the large-scale mining projects and/or housing investments suffer a more pronounced adjustment. In a scenario like this, unemployment could increase even further and growth could fall in the bottom of the forecast range, increasing the probability of a recession (i.e. two consecutive quarters with a negative quarterly GDP variation) during 2020. There are also scenarios of more intense pressures for a peso depreciation, due to, say, a resurgence of external uncertainty and/or a deepening of the crisis at home. While this scenario would also imply a wider activity gap, it would be accompanied by a depreciation that would increase inflationary pressures. Finally, one cannot rule out a scenario where more significant labor cost pressures predominate, leading to higher unemployment and inflation, together with a deeper contraction of activity. Although a scenario of lower uncertainty and more quickly restored confidence is also possible, the Board considers that, in the current context, scenarios with weaker activity and labor market are more likely, although it is more difficult to anticipate their consequences on inflationary dynamics.

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.
Source: Central Bank of Chile.

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.
Source: Central Bank of Chile

The Board anticipates that, the monetary policy rate will be held at its current level during the next months, which is consistent with the inflation target being met, in a context of increased fiscal impulse and foreign exchange intervention. Calibrating the monetary stimulus will pose a particularly big challenge going forward, and it will depend, among other factors, on the evolution of activity, the labor market, the exchange rate and inflation expectations.

Other scenarios exist where economic performance would escape the projection ranges previously discussed. For example, a deeper deterioration of consumption and investment fundamentals could result in a reduction in demand and precipitate a more persistent period of economic contraction. To the extent that the deflationary pressures associated with that scenario —particularly the evolution of the activity gap— dominate the inflation dynamics over the policy horizon, this could use up an important part of the remaining monetary policy space. It is also possible that the economy's trend growth could be affected by a more sustained reduction in investment, the existence of distortions in the labor market and/or a deterioration in productivity. In such case, although the monetary impulse required to reach the inflation target would be lower, the convergence would occur with a lower level and pace of economic growth. A particularly worrying scenario could be one where regulatory changes lead to significant increases in labor costs, in a context of economic weakness. Although this could increase unemployment substantially and affect economic growth, the higher inflationary pressures would limit the countercyclical role of monetary policy.

The impacts of the social crisis on the macroeconomic scenario are obvious. On the spot the country has seen a dramatic fall in activity growth and increased volatility of financial prices, especially the exchange rate. Uncertainty is still high and the expectations of households and businesses have worsened dramatically, anticipating low growth in 2020, in a context of a stronger commitment to conduct monetary policy with flexibility, so that projected inflation stands at 3% in the two-year horizon.

MONETARY POLICY DECISIONS IN THE LAST THREE MONTHS

SEPTEMBER MEETING

The September Monetary Policy Report indicated that both headline and core inflation had stayed around 2% in annual terms, while the macroeconomic outlook had weakened, increasing the risks for a timely convergence to 3%. To a large extent, the change in the macroeconomic scenario was due to the evolution of the international scenario, where trade tensions had heightened global uncertainty, growth had slowed in various countries, and trade volumes had contracted. The persistence and increasing complexity of the conflicts, as well as the predominance of greater market pessimism, supported projections that over the rest of the year and a good part of 2020, the external boost to the Chilean economy would substantially lower than considered in the June Report. In particular, the annual growth forecast for the world and for Chile's trading partners had decreased, especially for 2020, when the forecast was the lowest since the global financial crisis.

With regard to the domestic scenario, output and demand had grown less than expected in the second quarter. Although this reflected, in part, the effect of one-off factors in some sectors, there had been a slowdown in consumption and a deterioration in its fundamentals, including less dynamic private wage employment and a decline in consumer expectations relative to the start of the year. Investment was somewhat more dynamic at the margin, but this was mainly associated with large mining projects, whereas the decline in business expectations, the depreciation of the peso, and the poor stock market performance suggested that investment growth in the rest of the year would be lower than previously projected. Both headline and core inflation remained low. In particular, there had been a considerable slowdown in the services component, which is more sensitive to the output gap.

The baseline scenario of the September Report considered that output growth in the 2019–21 period would be lower than estimated in June. GDP would increase between 2.25 and 2.75% in 2019 (versus 2.75 to 3.5% in June) and between 2.75 and 3.75% in 2020 (3 to 4 % in June), while the 2021 forecast was kept at 3 to 4%. This assumed higher annual growth rates in the second half of 2019, which would not fully offset the low rates recorded in the first half of the year. Thus, the negative factors that had affected output in the second quarter would not be totally reversed, and the lower dynamism of consumption will show some persistence. Additionally, the heightened global uncertainty and the lower growth of trading partners would reduce exports. With regard to inflation, convergence to the target was expected to occur toward the end of the policy horizon.

In this context, all the Board Members agreed that given the evolution of the macroeconomic scenario and the forecast, it was clear that the monetary policy rate (MPR) would have to be reduced in order to ensure the convergence of inflation to the target. There was also consensus that while the magnitude of the expansionary shift was still a matter for discussion, the analysis in the Monetary Policy Report indicated that an MPR cut of at least 50 to 75 basis points (bp) would be necessary. According to the Board, the plausible options were a reduction of 25, 50, or 75 bp.

The entire Board agreed that since there was no doubt regarding the need to lower the MPR, the decision had to do rather with tactical and communicational aspects. With regard to the option of a 75 bp cut, the Board was unanimous in their assessment that this course of action was complex. If the cut was made with a neutral bias, it could signal that the real magnitude of the required monetary stimulus was known with certainty, which was not compatible with the downside risks in the baseline scenario. Several Board Members added that this type of action ran the risk of generating opposing interpretations: it could transmit an unrealistic degree of certainty about the Board's decisions and forecasts, or it could cause greater uncertainty by feeding interpretations that the Chilean economy was more vulnerable than it actually was. The latter perspective could be exacerbated if the decision to reduce the MPR by 75 bp la TPM was accompanied with a downward bias.

With regard to lowering the MPR by 25 or 50 bp, all the Board Members agreed that both options were consistent with the baseline scenario and presented fewer communication problems, since they left the door open to further adjustments, given the expansionary bias considered in both cases. However, several Board Members argued that a 25 bp cut was not the best option, since it ran the risk of communicating excessive caution or passivity by the Bank, at a time when the economic scenario was changing quickly, and the analysis in the Monetary Policy Report suggested a larger stimulus. Thus, the Board voted unanimously to reduce the MPR by 50 bp.

OCTOBER MEETING

At the October Meeting, the external scenario had evolved in line with the forecast in the September Report. In particular, it continued to be marked by major sources of tension and a drop in industrial activity, investment, and international trade. Consistently, market forecasts had been revised downward for several economies. In this context, a large group of monetary authorities at the global level had continued to increase their stimulus measures, with several countries lowering their reference rates and implementing other unconventional measures. At the same time, inflation remained low, in general.

Domestically, the output data available for the third quarter were also consistent with the baseline scenario in the last Report, with the economy recording a higher annual growth rate than in the first half of the year. This was in line with the dissipation of some supply factors that had temporarily affected the performance of some sectors in the first half, such as mining, and with the lower basis for comparison from the second half of 2018. On the spending side, investment remained dynamic, especially in mining, which continued to support output in other sectors, such as business services and construction. This contrasted with the deterioration in business expectations (IMCE) and capital goods imports. Private consumption continued to record moderate growth, in a scenario in which the wage bill had not changed significantly and continued to expand more than consumption, while consumer confidence had worsened again, consumer goods imports had declined, and the increase in private wage employment was limited. Exports remained weak, in part due to the poor performance of some trading partners and the impact of the trade war.

Headline inflation had stayed around 2% in annual terms since the September Meeting. With regard to core inflation, the services CPIEFE was still low, while the goods CPIEFE had continued to rise. Among the most volatile items, certain foods recorded lower inflation, in some cases below their historical trends, as did fuels.

With regard to the recent events unfolding in the country, there was no doubt that the social and political turbulence would have implications for the evolution of the economy in the short and medium terms. In the immediate future, it was clear that the partial paralyzation of the country over several days, the destruction of public and private infrastructure, and the heightened sensitivity of some key sectors, such as trade and transport, would have a significant impact on output, which would negatively change the growth outlook for the year. However, the effects on inflation in the short term were difficult to assess, as they would depend substantially on how long the interruptions in the production and distribution of goods and services lasted.

In the medium term, there would also be consequences for production, expectations, consumption, investment, fiscal policy, and financial indicators. Nevertheless, the net effect of this combination of factors on inflation was not obvious. It would depend not only on the dynamics of some key prices, but also on the evolution of real output and potential growth.

At the time of the Meeting, the financial markets' reaction had been limited, with a depreciation of the peso and adjustments in the fixed-income market. The stock market had fallen, which could be explained by the fact that the adverse effects on economic activity in the short term had reduced the expected earnings of firms and provided fewer incentives for longer-term investment. In any case, the possibility of greater volatility in the future could not be discarded.

All the Board Members agreed that the behavior of the macroeconomic scenario confirmed the analysis in the September Monetary Policy Report. This implied that the convergence of inflation to the target would require a greater monetary stimulus, part of which had already been applied with the MPR cut at the last Meeting. Unequivocally, the recent events would have a negative impact on output in the short run, but the effects on short- and medium-term inflation were not at all clear. Some Board Members emphasized that the possible negative effect on demand would dominate in the evolution of inflation, while others held that the consequences for productive capacity and the potential impact on demand of some of the proposals being considered could not be underestimated, such that the effect on inflation in the medium term was even more uncertain.

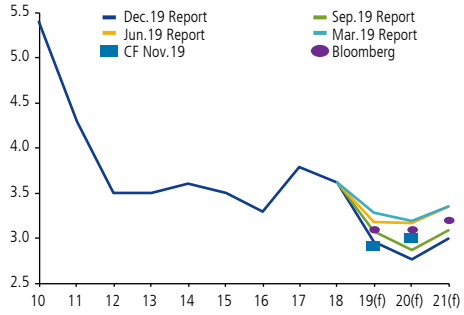
Consequently, all the Board Members agreed that the option of reducing the MPR by 25 bp was clearly the best alternative. On the one hand, it was in line with the analysis of the data and the message delivered in the September Report. On the other, it was consistent with market expectations, which had correctly internalized the Board's message. Thus, the Board voted unanimously to reduce the MPR by 25 bp, to 1.75%.

I. INTERNATIONAL SCENARIO

This chapter analyzes the recent evolution of the world economy and the outlook for the next two years.

Following a significant downward revision to the forecasts made in September, the baseline scenario of this Monetary Policy Report continues to project that over the next two years, the international context will provide a lower boost to the Chilean economy than in previous years. In 2020, world growth rates and the growth of trading partners will be the lowest in a decade (figure I.1). A series of stress points have sustained the doubts about the performance of global output, whose downturn has been fairly pervasive across economies. The main source of tension is the trade conflict between the United States and China, although idiosyncratic factors have had a significant impact in Latin America, where the growth forecasts are among those that have fallen the most since the last Report. The terms of trade have also been revised downward somewhat. With regard to international financial conditions, interest rates remain historically low despite a partial recovery relative to September, while the main stock exchanges have followed a positive trend.

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



(f) Forecast.
Source: Central Bank of Chile, Bloomberg, and Consensus Forecasts.

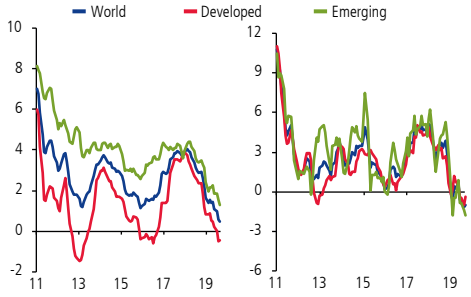
RECENT EVOLUTION AND OUTLOOK

World attention continues to be largely concentrated on the trade war between the United States and China, over which the uncertainty remains regarding the results of the negotiations and their direct and indirect effects. While the parties have moved toward reconciliation since the last Report, the materialization of an agreement is by no means certain, as other more political issues are being drawn into the central conflict. In recent months, the United States has amplified frictions with other trading partners, including the application of new customs duties on certain imports from the European Union, a bloc with which tariff decisions are pending. On the other hand, an important advance since September is the legal impossibility of a no-deal Brexit, although the terms of the future trade relation between the United Kingdom and the European Union have yet to be defined.

The persistence of tensions continues to affect the performance of global trade and investment, mainly in the industrial sectors, with a general downturn in most indicators (figure I.2). The manufacturing outlook has recently recovered from the trough of the past few years, rising slightly above the neutral threshold on aggregate (figure I.3). This again contrasts with the resilience of expectations in the services sectors—despite having eased over recent months—and with the performance of private consumption and its fundamentals, especially the labor market in the developed world (figure I.4).

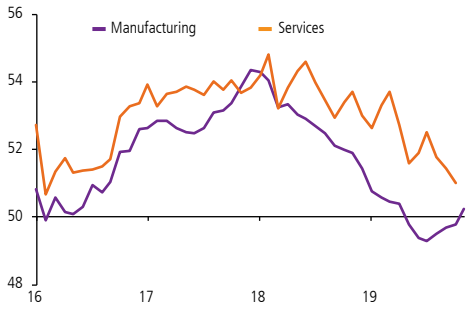
FIGURE I.2
Industrial production (*)
(annual change, percent)

Exports (*)
(annual change, percent)



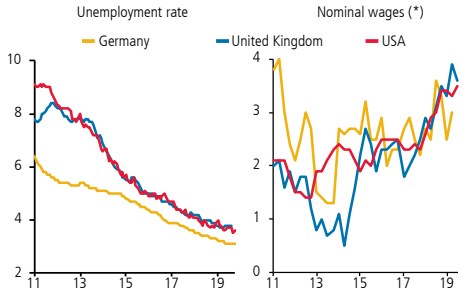
(*) Three-month moving average.
Source: CBP World Trade Monitor.

FIGURE I.3
Global PMI (*)
(seasonally adjusted index)



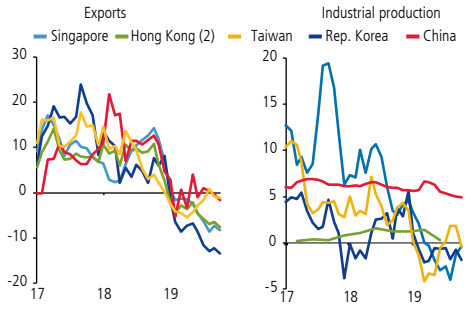
(*) A value over (under) 50 indicates optimism (pessimism).
Source: JP Morgan.

FIGURE I.4
Labor market indicators in selected economies
(percent; annual change, percent)



(*) Quarterly data.
Source: Bloomberg.

FIGURE I.5
Emerging Asia (1)
(annual change, percent)



(1) Three-month moving average.
(2) Industrial production data are quarterly.
Source: Bloomberg.

Emerging Asia continues to suffer the worst effects of the trade war, due to the region's high exposure to global value chains, primarily through the close relationship of several of these countries with China. In the third quarter, the latter recorded an annual growth rate of 6%, the lowest of recent decades. Weak construction and industry offset the better performance of services. Manufacturing, retail, and credit data were disappointing at the margin, while the external sector continued to contract in annual terms. Several of these trends have been replicated in the rest of the region, especially the meager performance of manufacturing and foreign trade, which largely explains the slowdown in countries such as Singapore and the Korea, among others (figure I.5).

The scenario is more complex in Hong Kong, which entered a technical recession in the third quarter for the first time in ten years. The lower external boost has been exacerbated by the sharp impact of the political and social crisis of recent months, which has caused a significant reduction in domestic demand. Investment and consumption have slowed visibly. The latter is largely associated with the closing of businesses and the interruption of public transportation on protest days, as well as a reduction in tourism. Unemployment has risen sharply in sectors related to consumption and tourism in the second half. Business expectations in the fourth quarter fell to the lowest level since 2009, intensifying the contraction of previous periods[1]/. The bulk of the people interviewed anticipate additional reductions in production levels this quarter.

Nevertheless, some emerging Asian economies have benefitted from the trade tensions to a degree, due to the relocation of investment or the reorganization of trade flows. With regard to the latter, a recent report by the United Nations identifies Taiwan as the main beneficiary, following a strong increase in shipments to the United States[2]/. A similar trend is found in Vietnam.

Latin America has seen an escalation of political and/or social conflicts that has accentuated the deterioration of economic activity and the growth forecast. Confidence indicators have declined in the face of the uncertainty associated with these events. According to monthly data, Argentina averaged an annualized contraction of 1.7% between July and September, in the midst of doubts regarding the government-elect's economic policy that have sustained latent fears of a default. Mexico has been in a recessionary phase since late 2018. In annual terms, GDP contracted –0.3% in the third quarter (–0.9% in the second). Secondary sectors, including mining, manufacturing, construction, and oil, were especially weak. The energy sector, in particular, has had a disappointing performance, which is a source of concern considering the markets' rejection of the rescue of the state-owned oil company. In Peru, the annual growth rate rose to 3% in the third quarter (1.2% in the second),

[1]/ Census and Statistics Department, Hong Kong Special Administrative Region (2019).
[2]/ UNCTAD (2019).

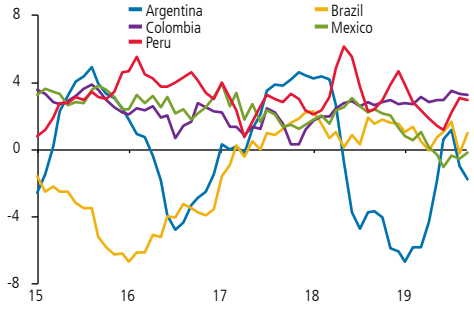
and the announced fiscal stimulus should provide good support in the coming months. However, questions surrounding the call for early elections add a note of caution to the economy's performance. The situation in Ecuador and Bolivia became more complex following the outbreak of social unrest, accompanied by intense protests—in the former, in opposition to the austerity measures negotiated with the IMF, as a result of which the government will have to negotiate new mechanisms for complying with this plan; in the latter, amidst accusations of electoral fraud, which culminated in the resignation of the president and the call for new elections (figure I.6).

Colombia has recently faced a wave of protests. It is too early to predict the persistence and economic impact of these events, although the economy has been more dynamic than other countries in the region. In the third quarter, GDP grew 3.3% annually, the highest rate since late 2015. The main driver was domestic demand, with a strong performance by the trade and financial sectors and a weak external sector, which has affected the current account. In Brazil, the political situation also poses important challenges, but the economic reform package underway has been received positively by the market, which has improved confidence somewhat and has underpinned a gradual recovery of output, as evident in the retail, industrial, and services sectors, among others.

In the developed world, growth in the United States exceeded the forecast in the third quarter. Consumption remains dynamic, while consumer confidence indicators are high despite the greater political uncertainty associated with the impeachment process that has unfolded in recent weeks. The industrial and external sectors recorded meager results, as did private investment, which exhibits a degree of improvement at the margin according to data on capital goods orders. Eurozone activity also surprised on the upside in the third quarter, with a similar outlook by component. Germany avoided the recession, supported, in part, by the recovery of shipments toward the end of the period, related to the restructuring of global trade flows. However, it remains one of the most complicated countries in the bloc. Measures of expectations (IFO and ZEW) reflect the weakness of this economy, despite a recent improvement. In the same quarter, the United Kingdom posted its lowest growth rate in almost a decade (1% annually). The uncertainty surrounding the final form of Brexit has depressed inflation and business activity. In Japan, the recent tax hikes threaten to exacerbate the slowdown in the coming months.

In this context, after the sizeable revision in September, the baseline scenario of this Report incorporates a smaller adjustment in world growth and the growth of trading partners, which are forecast at about 3% for the 2019–2021 period (table I.1). Larger revisions are considered for Latin America, with reductions of 5 and 3 tenths of a point for 2019 and 2020, respectively. For this year, it also stands out a downward revision in the forecast for India, due to idiosyncratic factors, and the rest of emerging Asia (excluding China). Changes in market forecasts are also centered on these regions. According to Consensus Forecasts, Argentina leads the adjustments in Latin America for the 2019–2020 two-year period (figure I.7). In emerging Asia, the biggest cuts were for Hong Kong, India, and Singapore.

FIGURE I.6
Monthly activity index in Latin America (*)
(annual change, percent)



(*) Three-month moving average.

Source: Bloomberg

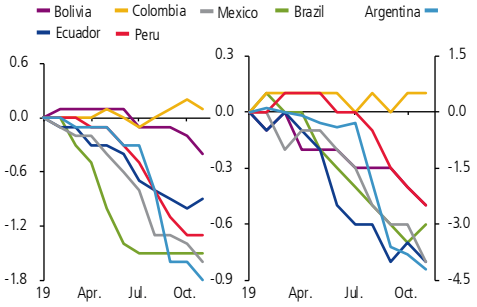
TABLE I.1
World growth (*)
(annual change, percent)

	Ave. 00-07	Ave. 10-16	2017	2018 (e)	2019 (f)	2020 (f)	2021 (f)
World at PPP	4.5	3.9	3.8	3.6	3.0	2.8	3.0
World at market FX	3.3	3.1	3.3	3.0	2.4	2.2	2.4
Trading partners	3.7	4.0	3.8	3.7	3.1	2.8	3.0
United States	2.7	2.2	2.4	2.9	2.3	1.6	1.7
Eurozone	2.2	1.1	2.7	1.9	1.1	1.1	1.3
Japan	1.5	1.4	1.9	0.8	0.8	0.3	0.7
China	10.5	8.1	6.8	6.6	6.1	5.5	5.7
India	7.1	7.5	6.7	6.8	6.1	6.5	6.6
Rest of Asia	5.2	4.7	4.8	4.2	3.4	2.8	2.9
Latin America (excl. Chile)	3.4	2.4	1.1	1.0	-0.3	1.1	1.7
Commodity exporters	3.1	2.4	2.7	2.3	1.8	2.0	2.2

(*) 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.

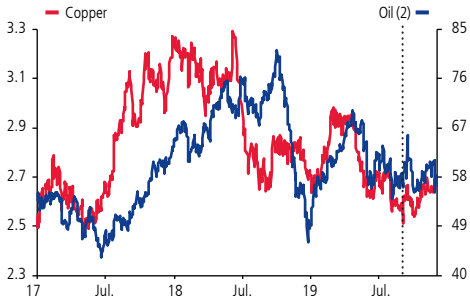
FIGURE I.7
Latin America: Change in the annual growth forecast (*)
(percentage points)



(*) Change relative to the forecast in January 2019.

Source: Consensus Forecasts.

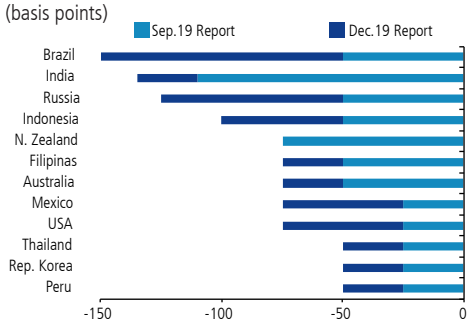
FIGURE I.8
Commodity prices (1)
(dollars per pound; dollars per barrel)



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

Source: Bloomberg

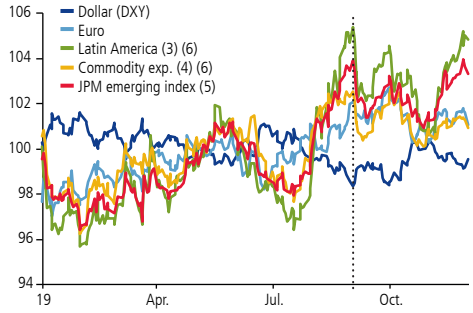
FIGURE I.9
MPR adjustments in 2019, selected countries (*)
(basis points)



(*) Adjustments made this year, as of the cutoff date of the September Report and between the cutoff dates of this and the last Reports.

Source: Bloomberg.

FIGURE I.10
Selected exchange rates (1) (2)
(index: average 2019=100)



(1) Increase (decrease) indicates depreciation (appreciation). (2) Vertical dotted line marks the cutoff date of the September Report. (3) Includes Brazil, Colombia, Mexico, and Peru. (4) Includes Australia, Canada, New Zealand, and South Africa. (5) Includes Singapore, India, China, Chile, Mexico, Brazil, South Africa, Hungary, Russia, and Turkey. (6) Constructed using the PPP weights in the October 2019 WEO.

Source: Bloomberg and International Monetary Fund.

The terms of trade are expected to be lower than estimated in the last Report, throughout the forecast horizon. Many commodity prices have risen since September, albeit with fluctuations. In the case of copper, the increase was around 3.5%, fluctuating just under US$2.70 per pound on the cutoff date of this Report, while for oil, the increase averaged 4.8% between the Brent and the WTI (figure I.8). In the baseline scenario, both commodities are projected to be a little higher. On average, copper is estimated at a little over US$2.70 in 2019–2021 (slightly less than in September), primarily due to the expected depreciation of the dollar, and oil at US$58 per barrel (US$56 in September). The latter revision reflects expectations of upward pressures from the sanctions on Iran and Venezuela and the evolution of various geopolitical conflicts, in particular in the Middle East.

Global monetary policy has continued to become more expansionary, in the midst of mostly low inflation. This trend includes the United States and the Eurozone in the developed world. In October, the Fed implemented a new cut to its benchmark rate, the third in the year. Although the market continues to bet on additional cuts, the outlook has eased, in line with more favorable data and a communication by the monetary authority that the current levels are appropriate thus far. The European Central Bank implemented a series of stimulus measures, including reducing its interest rate and reactivating its asset purchase program. In the emerging Asian bloc, monetary policy in China has become more lax at the margin, with cuts in the short-term rate and in the medium-term lending facility rate. In Latin America, several economies similarly lowered their monetary policy rates, including Brazil, Mexico, and Peru (figure I.9).

Financial conditions remain sensitive to the evolution of the current tensions, as reflected in some volatility indicators. In a context of more expansionary global monetary policy, news on the trade war has been a common factor in market trends, while idiosyncratic elements have significantly affected market performance in the emerging world, as in the case of Latin America. Since the last Report, long-term interest rates have risen in the main economies, in line with the slight decompression of term spreads, but they remain low in historical terms. Stock markets rose almost universally, especially in the developed bloc, although there is still a latent risk of a sharp correction in those markets. In the United States, the stock market hit new peaks, also buoyed by positive corporate results in the third quarter. Spreads also improved in a large set of economies. The bulk of the currencies are similar to their levels in the last Report, although there have been substantial fluctuations (figure I.10).

II. FINANCIAL CONDITIONS

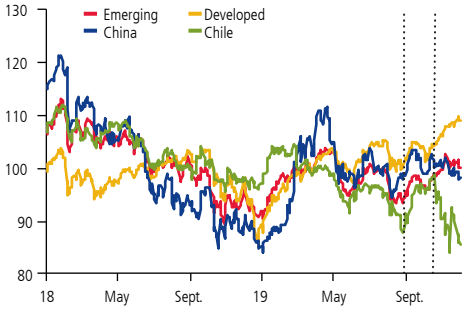
This chapter reviews the evolution of local and international financial conditions.

The national financial market has been affected by the significant change in the economic scenario due to the ongoing social crisis that erupted in Chile on 18 October. In particular, the increase in uncertainty regarding the country's short- and medium-term evolution has caused a deterioration in a set of financial indicators: the stock market fell, the peso depreciated significantly, and fixed-income rates generally increased, as did money market interest rates, in both pesos and dollars. These movements have been highly volatile, and in some cases they have exceeded what would be expected from the increase in country risk perception—the EMBI and the CDS spread have risen, but mildly. The domestic credit market, has also been affected by the heightened local uncertainty. While credit interest rates remain low from a historical perspective, several qualitative information sources show a tightening of financial conditions. Moreover, debt placements have been less dynamic since October, especially in the consumer segment.

Between late August—the cutoff date for the September Monetary Policy Report—and 18 October, local financial markets had been influenced by the more expansionary domestic monetary policy and external developments. Local stock market returns—reflected in the IPSA stock index—had risen more than 8% (figure II.1). The value of the peso vis-à-vis other currencies fluctuated somewhat, but it did not change significantly in the period: the nominal exchange rate (NER) moved about 0.5% and multilateral measures were practically unchanged (figure II.2). The real exchange rate (RER, index: 1986=100) was also stable, at around 95.

In the same period, the rates on Central Bank fixed-income securities had begun to see an easing of the decline recorded throughout 2019, although they continued to be influenced by the effects of the more expansionary domestic monetary policy. This was in line with the international scenario, where the markets displayed somewhat greater optimism with regard to the evolution of the trade war. Locally, these movements were reinforced by shifts in the pension funds, such as the transfer of affiliates toward funds with a larger share of overseas assets, motivated in part by recommendations from unregulated financial advisors. Thus, on 18 October, two- and five-year BCU rates had decreased 45 basis points (bp), on average, compared with the cutoff date of the previous Report, while ten-year BCU rates had increased 10 bp. Nominal rates at two, five, and ten years had all risen 5 bp, on average.

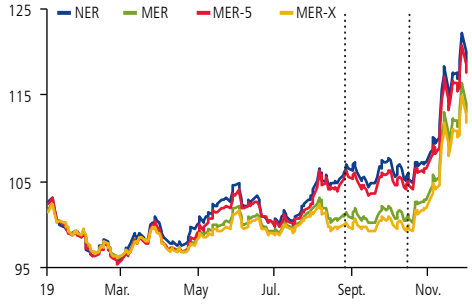
FIGURE II.1
Stock markets (1) (2)
(index: 2018–2019 = 100)



(1) Regional stock indexes measured in local currency, from Morgan Stanley Capital International. For Chile and China, the IPSA and the Shanghai Composite Index, respectively.
(2) The left vertical dotted line marks the cutoff date of the September 2019 Report; the right vertical dotted line marks the start of the social crisis.

Source: Bloomberg.

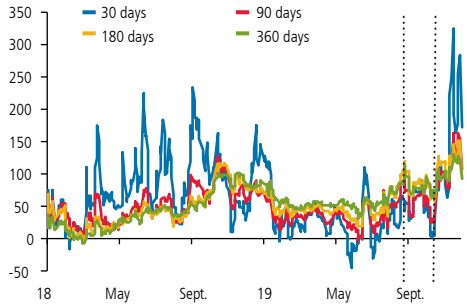
FIGURE II.2
Nominal exchange rate and multilateral measures (*)
(index: January 2019 = 100)



(*) The left vertical dotted line marks the cutoff date of the September 2019 Report; the right vertical dotted line marks the start of the social crisis.

Source: Central Bank of Chile.

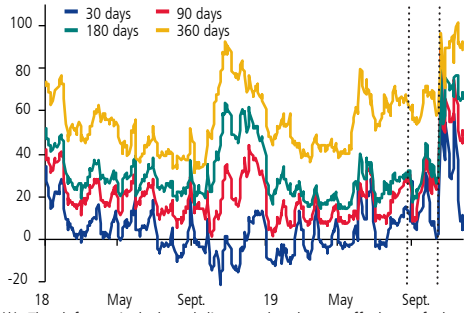
FIGURE II.3
Onshore spread (*)
(basis points)



(*) The left vertical dotted line marks the cutoff date of the September 2019 Report; the right vertical dotted line marks the start of the social crisis.

Source: Central Bank of Chile.

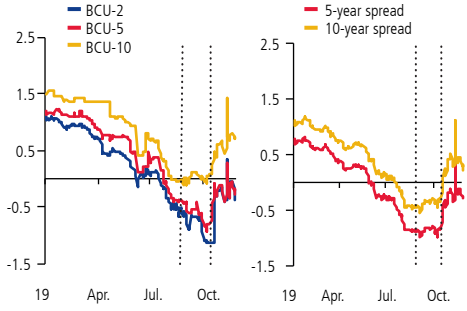
FIGURE II.4
Time deposit-swap spread (*)
(basis points)



(*) The left vertical dotted line marks the cutoff date of the September 2019 Report; the right vertical dotted line marks the start of the social crisis.

Source: Central Bank of Chile.

FIGURE II.5
Central Bank of Chile bond rates and term spreads (1) (2)
(percent)



(1) The left vertical dotted line marks the cutoff date of the September 2019 Report; the right vertical dotted line marks the start of the social crisis.
(2) Term spreads for Chile calculated using the methodology in Beyzaga and Ceballos (2017).

Source: Bloomberg and Central Bank of Chile.

During the first days of the crisis, the financial markets did not experience any major changes, as the effects of the pension fund movements dominated. Thus, the implications for the exchange rate, fixed-income interest rates, and money market liquidity were limited, although the impact on the stock market was somewhat greater. However, from the second week of November on, the heightened uncertainty resulted in an increase in preferences for liquidity and foreign assets, causing a deterioration in liquidity conditions in dollars and in pesos, reflected in an increase in the onshore spread[1]/ and the deposit-swap rate spread[2]/, respectively (figures II.3 and II.4). This was mainly driven by an intensification of portfolio movements that were already occurring before the crisis: namely, a reduction of positions in local-currency instruments—especially fixed-income—by the institutional investors in favor of foreign assets. An additional effect was the increase in fixed-income rates, which was strongly related to an increase in the term spread (figure II.5). Corporate rates also rose, in line with the growth of the credit risk spread component (figure II.6). Specifically, the evolution of sovereign and corporate rates is largely explained by the change in local fixed-income positions by the pension funds and mutual funds, respectively (figure II.7).

To provide adequate liquidity to the financial system, on 13 November the Central Bank implemented a program of currency swap auctions[3]/ and repo operations[4]/. On 14 November, the Bank announced complementary measures, with the suspension of the issue of PDBCs, an increase in the frequency and length of repo operations, the incorporation of bank bonds and deposits as guarantees for the latter operations, an increase in the frequency of swap auctions, and the offer of a Central Bank security repurchase program. Over the following days, money market and fixed-income rates came down substantially, in response both to these measures and to the signing of political agreements. The cost of financing in dollars has fallen more slowly, mainly due to the continuous outflow of institutional investors to riskier foreign-currency assets[5]/. On 19 November, the Central Bank introduced an operational adjustment to provide more flexibility to the auction calendar. This set of measures has contributed to facilitating the adjustments in the money market, thereby avoiding major stress (box II.1).

[1]/ Spread over the LIBOR implied in forward prices, based on the marginal prime deposit rate and the secondary market deposit rate. It reflects the banks' funding cost in dollars.
[2]/ Spread between time deposit rates in the secondary market and the average interbank swap rate. It reflects the banks' funding cost in pesos, free of MPR expectations.
[3]/ The swap purchase is equivalent to a dollar loan to the financial system for a given period, where the Central Bank carries out a spot sale and a forward purchase with physical delivery at the same time. The net foreign currency position does not change, because the reduction in international reserves is offset by an asset with the banking system in the same currency. These operations are implemented through an auction with a minimum rate of the LIBOR + 200 bp.
[4]/ This repo consists in a loan backed by Chilean Treasury and Central Bank securities, where the Bank charges a floating MPR (the current MPR during the period of the operation). It is operated as a window, that is, however much the system requests at a given rate. The next day, financial system securities were incorporated.
[5]/ The outflow of institutional investors to riskier funds can affect the funding cost in dollars through two channels. First, the outflow of spot dollars directly reduces the system's liquidity; second, these investors partially hedge, which means that the banking system has to obtain a dollar liability to match their balance sheets. Since the start of the social crisis, the rate has trended upward essentially due to the first of these two mechanisms. The swap program aims to mitigate this effect. In the most recent period, there has been a reduction in this rate in dollars.

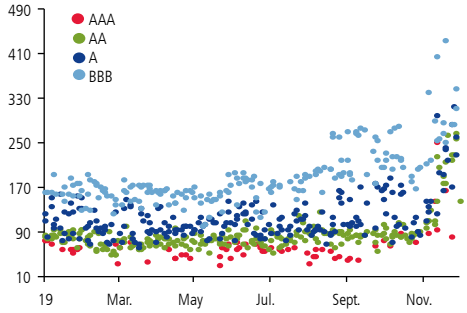
In the fixed-income market, these measures have provided a counterweight in the movement of long rates in the period, but they have not changed the general upward trend. Thus, the rates on two-, five-, and ten-year inflation-indexed Central Bank securities increased 75 bp, on average, since the start of the social crisis. Five- and ten-year BCP rates also increased (40 bp on average). The sovereign spread, measured as the CDS spread, has risen (+20 bp since 18 October), but it is still fairly low (around 55 bp). At the same time, these spreads have fallen in many economies worldwide.

The stock and currency markets have mainly been dominated by the effects of the social crisis. Since 18 October, the IPSA stock index has fallen 9%. This contrasts with emerging, developed, and Latin American indexes—the MSCI in local currency—which have risen between 2 and 5% (figure II.1), indicating that the movements in the local stock exchange reflect domestic factors (box II.1). In the case of the peso, the uncertainty associated with the social crisis has been complemented with a significant shift in the pension and mutual funds toward portfolios with a larger share of overseas instruments. Thus, the nominal exchange rate hit historical peaks of around $830 to the dollar. Comparing the average of the ten business days prior to the cutoff date of this and the September Report, the NER increased significantly, in contrast to the currencies of comparable countries. Almost all of this increase occurred after 18 October, a clear signal that the movements in the peso were essentially idiosyncratic (table II.1; figure II.2). Similarly, the real exchange rate (RER, index: 1986=100) also increased substantially: from 95 in August to 105 in the days leading up to the cutoff of this Report[6]/; a value not recorded since October 2008. This is above the averages of the last fifteen and twenty years, consistent with the increased uncertainty of the last several weeks.

The exchange rate has been quite volatile, both daily and intradaily, a trend that intensified in the last weeks of November. Thus, to avoid excessive volatility or sudden movements in the exchange rate, which could affect the healthy adjustment of the economy and trigger market turmoil and personal anxiety, the Central Bank announced a sterilized intervention in the foreign exchange market on 28 November, involving spot dollar sales for a total of up to US$10.0 billion and the sale of currency hedging instruments also totaling up to U$10.0 billion, from 2 December through 29 May 2020. Following this announcement, volatility declined, although the full effects will only become evident as the weeks pass (box II.1).

The domestic credit market has been affected by the local uncertainty. While the cost of bank debt remains low from a historical perspective, various sources of qualitative information reveal a tightening of financial conditions. Until the third week of November, lending rates were still around their historical lows, reflecting the expansionary monetary policy, although they had increased somewhat in certain segments (figure II.8). Measured in real terms—taking

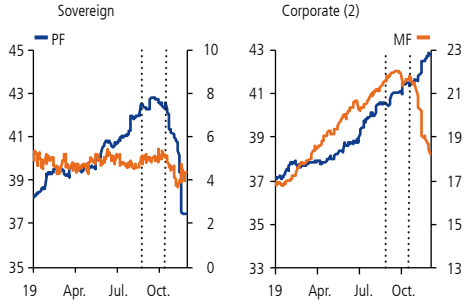
FIGURE II.6
Nonbank corporate spread by risk level (*)
(basis points)



(*) The spread over the UF sovereign bond rate. Each dot is the daily average weighted by the amount of each instrument in the category. The last datum is preliminary.

Source: Santiago Stock Exchange and Central Bank of Chile.

FIGURE II.7
Stock of fixed-income securities held by pension funds (PF) and mutual funds (MF) (1)
(billions of dollars)

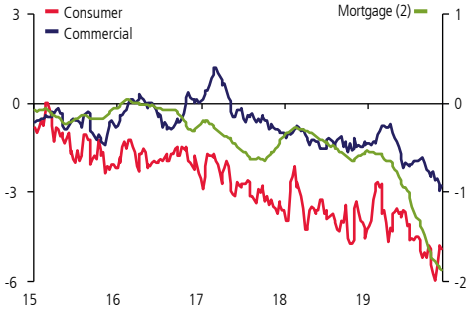


(1) The left vertical dotted line marks the cutoff date of the September 2019 Report; the right vertical dotted line marks the start of the social crisis.
(2) Includes bonds from financial and nonfinancial entities.

Source: Central Bank of Chile.

[6]/ Average estimate of the real exchange rate in the last ten business days prior to the cutoff date.

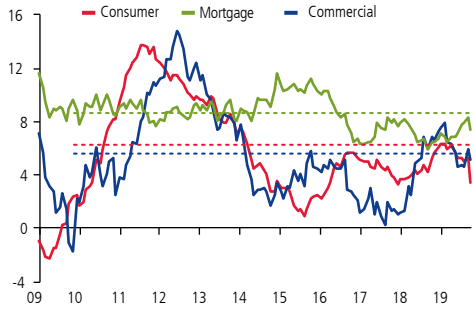
FIGURE II.8
Interest rate by type of loan (1)
(deviation from the 2010–2019 average, percent)



(1) Weighted average rates of all operations in a given week. Considers the four-week moving average.
(2) UF-denominated loans.

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

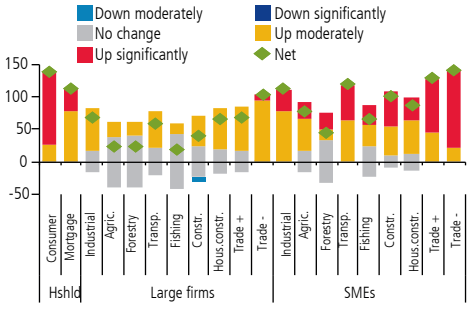
FIGURE II.9
Real loans (1) (2)
(annual change, percent)



(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.

FIGURE II.10
Default expectations for the next three months (*)
(index)



(*) Responses weighted by share of loans. Extreme changes have a weight of 1.5 relative to average changes.

Source: Central Bank of Chile.

into account expected inflation in one year—the MPR is at negative levels, the lowest since 2010 (figure V.8). The annual growth rate in the stock of loans—available through October—declined across the board, especially in the consumer segment (figure II.9). With regard to qualitative information, a survey of the boards of companies that participate in the BPR reveals that the majority of the respondents have not perceived changes in financial conditions since the start of the social crisis, while companies that have been affected cite higher interest rates and a longer loan approval period. On the banking side, a survey of regional bank offices indicates that there has been a drop in commercial and consumer loans, as well as in some leasing operations. Furthermore, a special round of the Bank Lending Survey (BLS) shows a perception of lower demand for mortgages for the next three months. For the same period, the BLS reports a greater tightening of lending conditions for all types of credit, especially mortgages and consumer loans (box III.1). With regard to loan arrears, data from the Financial Market Commission (FMC) indicate that the nonperforming loan portfolio, with delinquency of 90 days or more, grew over 3% between September and October, a slightly higher rate than in the previous month. However, default expectations—captured in the special round of the BLS—have been strongly affected by the recent national events, especially in the consumer and commercial portfolios (figure II.10). Finally, a survey of regional bank offices found that many reported a slight or significant increase in requests to renegotiate payments, as well as an increase in delinquency.

TABLA II.2
U.S. dollar exchange rates (1)
(percent)

	Change in NER, December 2019 Report			
	18-Oct-19	Sep.19 Report	Jun.19 Report	Mar.19 Report
Latin America (excl. Chile) (2)	**1.4**	**1.1**	**3.5**	**6.9**
Brazil	2.2	3.4	5.5	10.3
Chile	11.6	12.3	14.2	19.6
Colombia	0.8	1.3	3.3	11.4
Mexico	0.7	-1.8	1.5	2.1
Peru	0.7	0.1	1.0	2.7
Commodity exporters (2)	**-0.3**	**-0.9**	**0.3**	**2.0**
Australia	-0.3	-0.4	1.9	4.5
Canada	0.4	0.0	-1.3	-0.4
New Zealand	-1.9	-0.6	1.5	6.7
South Africa	-1.8	-3.9	1.3	2.1
Developed economies (2)	**-0.1**	**0.2**	**0.4**	**1.6**
Eurozone	0.0	0.5	1.3	2.7
Japan	0.8	2.7	-0.4	-1.7
United Kingdom	-2.5	-5.6	-2.0	2.5
Other emerging economies				
China	-0.9	-0.8	1.9	4.9
Rep. Korea	-0.9	-2.6	-0.9	4.1
India	0.7	0.1	2.8	3.9
Indonesia	-0.4	-1.0	-2.1	-0.8
Poland	0.0	-0.9	1.4	2.9

(1) The values in the first column reflect the percent change from the start of the social crisis through the cutoff date of this Monetary Policy Report. The rest of the columns reflect the percent change between the cutoff date of the corresponding Report and the cutoff of this Report. The NER of each series is calculated as the average of the last ten business days. 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.

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

BOX II.1
RECENT EVOLUTION OF CHILEAN FINANCIAL ASSET PRICES

The effects of the social crisis that began on 18 October are already evident in several early indicators. The October IMACEC fell 3.4% in annual terms—and the nonmining component fell 4%—while the latest measures of consumer and business confidence reveal a decline month-on-month. However, the speed of the events implies that some indicators with a longer lag—such as employment, corporate profits, and investment plans—have not yet incorporated these effects. Furthermore, these data reflect both the major short-term disruptions and the medium-term uncertainty. Consequently, it is difficult to extract clear signals for predicting the duration and magnitude of the impact on the economy. In this context, the financial markets are a very useful source of complementary information, since the high frequency of the data allows a constant evaluation of the events—for example, the positive impact on the exchange rate and the stock market on the day the agreement on a new Constitution was announced—and reflect, in part, economic expectations at longer terms. This box documents the recent evolution of Chilean financial prices, putting their magnitude and characteristics into historical perspective, as well as the measures taken by the Central Bank to mitigate the financial frictions deriving from the high volatility. The analysis concludes that the movements are obviously idiosyncratic and fundamentally associated with the recent local events. The evidence available to date also shows that the liquidity provision measures have managed to partially mitigate the high volatility in some prices and interest rates in the financial market.

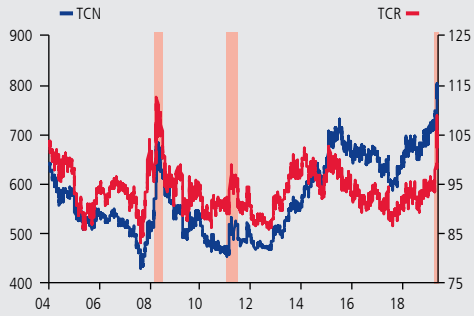
Recent evolution of Chilean asset prices in perspective

Since 18 October, there has been a marked deterioration in the most important financial indicators for the Chilean economy. The Chilean peso depreciated nearly 13% against the dollar in both nominal and real terms. The IPSA stock index fell almost 9%, while UF long rates increased by 45 basis points (bp), sovereign spreads (CDS spreads) by over 20 bp, and corporate spreads (AA at 5 and 7 years) by almost 110 bp[1]/.

In the last twenty years, there have only been two occasions when the peso depreciation, accumulated in thirty days, was comparable to the current trend: the eruption of the global financial crisis (in late October 2008) and the euro crisis (early October 2011) (figure II.11, panel a). With regard to the stock market, the accumulated decrease in the IPSA is among the four largest drops recorded since mid-2004, while the increase in long-term interest rates is in the top three for the same period (figure II.11, panels b and c).

FIGURE II.11
Financial price movements in historical perspective

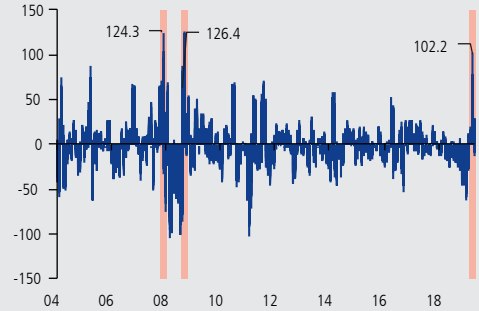
(a) Nominal and real exchange rate (*)
(chilean pesos; index: 2018 = 100)



(*) Left vertical bar indicates the global financial crisis; central vertical bar, the euro crisis; right vertical bar, the current social crisis.

Source: Central Bank of Chile and Bloomberg.

(b) Change in the BCP-10 (*)
(accumulated in 30 days, basis points)

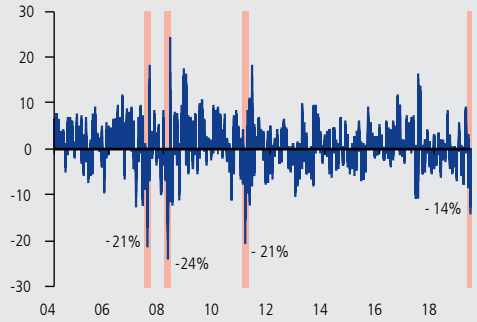


(*) Left vertical bar indicates the global financial crisis; right vertical bar, the current social crisis. The numbers indicate the peaks recorded in the different episodes.

Source: Central Bank of Chile.

[1]/ These changes are calculated using the daily value of the series on 18 October and on the cutoff date of this Report, so they differ from the values presented in chapter II, which use the average of the last ten business days.

(c) Change in the IPSA (*)
(accumulated in 30 days, percent)



(*) Left vertical bars indicate the global financial crisis; central vertical bar, the euro crisis; right vertical bar, the current social crisis. The numbers indicate the troughs recorded in the different episodes.

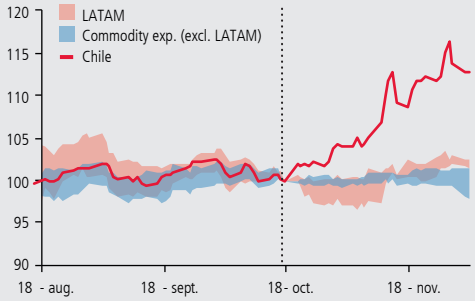
Source: Bloomberg.

Unlike past episodes, the recent movements are not related to an external crisis, but are instead explained by essentially domestic factors. Until mid-October, the fluctuations in the peso-dollar exchange rate were relatively aligned with other Latin American economies and commodity exporters (figure II.12, panel a). In contrast, since 18 October the path of the Chilean peso has diverged significantly from other currencies. The application of an empirical model that estimates the exchange rate level based on its usual fundamentals confirms this conclusion, showing a substantial decoupling since the start of the crisis (figure II.12, panel b)[2]/. This decoupling is not explained, in principle, by changes in the usual determinants—namely, copper and oil prices, the interest rate differential between Chile and the United States, etc.—but rather could reflect changes in the country risk perception or in future expectations that imply a depreciation of the real exchange rate (RER).

[2]/ For more details, see Cowan, Rappoport, and Selaive (2007).

FIGURE II.12
Nominal exchange rate and its determinants

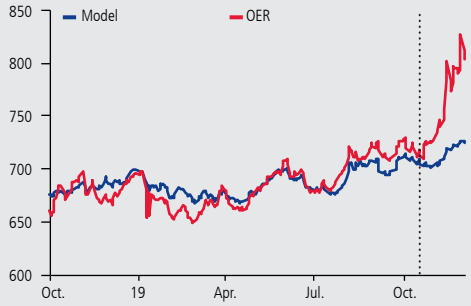
(a) Nominal exchange rate (1) (2) (3) (4)
(index: 18-Oct-19 = 100)



(1) Vertical dotted line marks 18 October 2019.
(2) Nominal exchange rate at the end of the day. Each strip shows the range of the normalized series for a group of countries.
(3) LATAM includes Brazil, Colombia, Mexico, and Peru.
(4) Commodity exp. (excl. LATAM) include Canada, Australia, New Zealand, and Norway.

Source: Bloomberg.

(b) NER versus an econometric model based on fundamental determinants (1) (2)
(Chilean pesos)



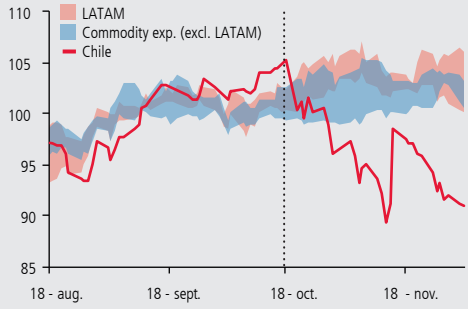
(1) OER: Observed exchange rate. The model uses a daily frequency and is estimated for the period between 15 July 2019 and 3 December 2019. The estimation considers the long-term equilibrium relation between the nominal exchange rate, the copper price, the oil price, the domestic price level, the U.S. price level, the CDS spread on Chilean sovereign bonds, and the one-year interest rate differential between Chile and the United States. For more details, see Cowan, Rappoport, and Selaive (2007).
(2) Vertical dotted line marks the start of the social crisis.

Source: Central Bank of Chile and Bloomberg.

The trends in other financial asset prices also reflect idiosyncratic factors. For example, starting on 18 October, the IPSA has diverged significantly from stock exchanges in other Latin American countries and other commodity exporters (figure II.13, panel a). As in the case of the exchange rate, a model that estimates IPSA returns as a function of long-term fundamentals—growth, commodity prices, interest rates, etc.—shows that since 18 October, the trend has deviated considerably from the predicted value based on these variables (figure II.13, panel b).

FIGURE II.13
Recent stock market movements (IPSA)

(a) Stock indexes (1) (2) (3) (4)
(index: 19-Aug-19 – 18-Oct-19 = 100)



(1) Vertical dotted line marks 18 October 2019.
(2) Stock index value at the end of the day. Each strip shows the range of the normalized series for a group of countries.
(3) LATAM includes Brazil, Colombia, Mexico, and Peru.
(4) Commodity exp. (excl. LATAM) include Canada, Australia, New Zealand, and Norway.

Source: Bloomberg.

(b) Surprises in IPSA returns since 1 Oct. 2019 (1) (2)
(percent)

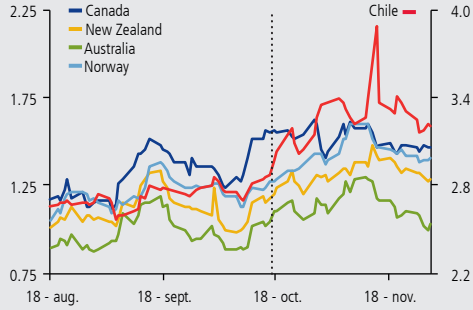
(1) Calculations based on a daily-frequency model of IPSA returns in the period between 2-Jan-2011 and 3-Dec-2019. The estimation considers the long-term equilibrium relation between the IPSA, the future financial situation component of the IMACEC, the UF, the copper price, the oil price, and the interest rate on 10-year UF bonds issued by the Central Bank. Explanatory variables also include the change in the copper price and the aforementioned interest rate, as well as moving average components. The surprises are defined as the model residuals.
(2) Vertical dotted line marks the start of the social crisis.

Source: Central Bank of Chile.

With regard to long-term interest rates, there has been a global increase since the end of September. However, the hike recorded in Chile again diverges significantly from the rest of the world (figure II.14, panel a). A decomposition of the Chilean ten-year rate into its risk-free component (future monetary policy expectations) and the term spread shows that the rise is fundamentally due to a significant increase in the spread, while the rate expectations underlying this calculation have actually declined slightly (figure II.14, panel b).

FIGURE II.14
Recent interest rate movements

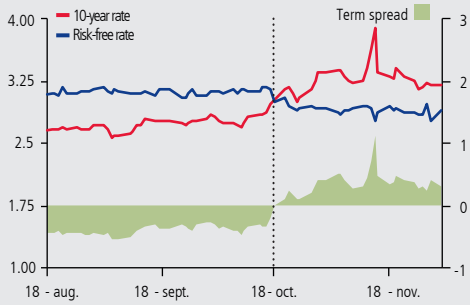
(a) Interest rates on 10-year sovereign bonds in local currency (*)
(percent)



(*) Vertical dotted line marks 18 October del 2019.

Source: Central Bank of Chile and Bloomberg.

(b) Decomposition of 10-year rate (1) (2)
(percent)



(1) The risk-free rate is calculated based on 10-year nominal zero-coupon bond yields. Spreads are calculated following Beyzaga and Ceballos (2017).
(2) Vertical dotted line marks the start of the social crisis.

Source: Central Bank of Chile and Bloomberg.

Rationale and impacts of the measures implemented by Central Bank of Chile

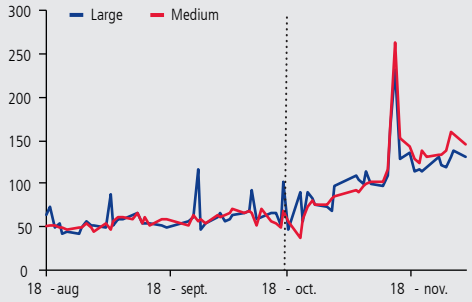
The movements in various asset prices in recent weeks, in excess of their traditional fundamentals, suggest a more negative risk perception of the Chilean economy. However, it is possible that the changes in level and, especially, the increased volatility of asset prices have also been influenced by major portfolio movements—in part in response to recommendations from unregulated agents—in a context of lower-than-usual liquidity due to the heightened uncertainty and the speed with which the perception of the economic scenario has changed.

In the last few weeks, the Central Bank has adopted several measures to provide an adequate degree of liquidity to the markets and to mitigate volatility in key financial markets. These measures do not aim to set prices at certain "levels," as could be the case with the exchange rate, but rather aim to avoid excessive volatility or sudden movements that could affect the healthy adjustment of the economy and cause market turmoil and personal anxiety.

On 13 and 14 November, the Bank announced measures to provide liquidity in dollars and pesos to the financial system. These measures included a 30- and 90-day currency swap program with a minimum rate equivalent to the LIBOR plus 200 bp (in order to limit the increase in the spread in dollars); a repo program in pesos, through a collateralized window with a rate defined as a floating MPR (traditionally the MPR plus 25 bp) and with fairly long maturities; the authorization of repo operations backed by securities that have not traditionally been accepted; the suspension of the issue of discount promissory notes (PDBC); and the initiation of a buyback program for UF-denominated Central Bank securities. These measures had a significant effect on long-term rates and bank and corporate bond spreads (figure II.15, panel a). In the case of the onshore spread, the program managed to reduce the spread from the recorded peaks to around 200 bp (figure II.15, panel b).

FIGURE II.15
Spreads

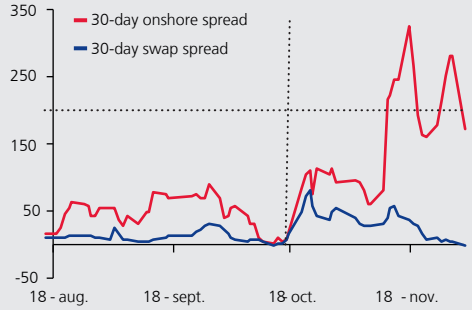
(a) Bank spreads by size (1) (2)
(basis points)



(1) Spread of total UF-denominated senior bank bonds over BCUs.
(2) Vertical dotted line marks the start of the social crisis.

Source: Bolsa de Comercio de Santiago and Central Bank of Chile.

(b) Onshore spread on shore and time deposit-swap spread (1)(2)
(basis points)

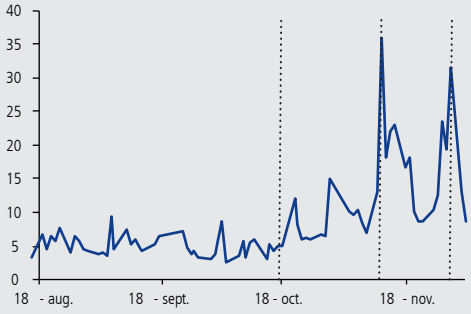


(1) Horizontal dotted line indicates the minimum swap auction rate.
(2) Vertical dotted line marks the start of the social crisis.

Source: Central Bank of Chile.

On Thursday, 28 November, the Bank announced an intervention program for the foreign exchange market to reduce the volatility of the exchange rate (figure II.16). This program considers spot dollar sales (via auctions) and forwards (currency hedging), each for up to US$10.0 billion between December 2019 and May 2020. As in 2008 and 2011, the monetary effects of these measures will be sterilized, to keep the liquidity provision in pesos consistent with the monetary policy rate. Since the intervention has only recently been implemented, it is too soon to evaluate the definitive results. However, exchange rate volatility has fallen significantly since the start of the program in the first days of December.

FIGURE II.16
Daily volatility of the NER (1) (2)
(Chilean pesos)



(1) Calculated as the difference between the maximum and minimum daily rate.
(2) Left vertical dotted line marks the start of the social crisis; central vertical dotted line, the first announcement of liquidity measures by the Central Bank (13 November); right vertical dotted line, the start of foreign exchange intervention by the Central Bank (02 December).

Source: Bloomberg.

Conclusions

In recent weeks, several financial prices have changed significantly in response to the uncertainty deriving from the social crisis. This has not only triggered changes in price levels, but also implied a significant increase in volatility, which is considered detrimental to the normal functioning of the markets. Consequently, the Board has adopted several measures to facilitate liquidity management in the financial system and to mitigate volatility. The liquidity injection, in both pesos and dollars, was particularly important when asset prices pointed to liquidity problems. However, over and above the tension in the financial markets, the persistence of higher rates and spreads suggests a more permanent change in economic expectations. The Board reiterates that it will continue to use all the tools at its disposal to achieve its legally mandated objectives, in particular the maintenance of the normal functioning of the internal and external payments systems, and to bring inflation to the 3% target within the two-year policy horizon.

III. OUTPUT AND DEMAND

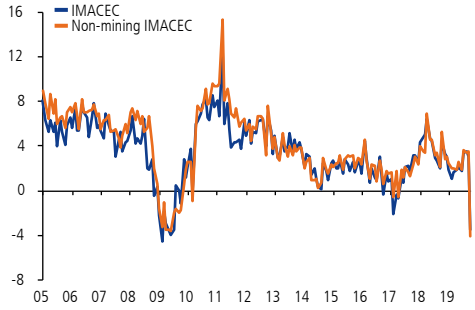
This chapter reviews the recent evolution of output and demand and their short-term outlook, in order to examine possible inflationary pressures.

In the third quarter, the economy grew more than in the first half of the year, in line with the forecast in the September Report. On the spending side, both gross fixed capital formation (GFCF) and private consumption grew more than expected. Investment in construction and other works was the most dynamic part of demand, especially in relation to mining projects. This favored output in other sectors, such as business services and construction. In the case of private consumption, the main driver was routine consumption, while the durables component remained fairly weak. With regard to foreign trade, goods exports recorded positive annual growth, while goods imports were below the levels of the previous year, in particular consumer goods.

The social crisis that began on 18 October caused significant changes in the macroeconomic scenario, generating a negative impact on short-term output and increasing uncertainty regarding the economy's performance in the medium term. In the immediate term, the IMACEC (Monthly Economic Activity Indicator) recorded an annualized drop of 3.4% in October, which breaks down into a 2% increase in the mining sector and a 4% decrease in non-mining sectors. The sectors that make up the latter component recorded a generalized negative effect due to various disruptions, including property damage and destruction, transportation problems for employees, and the shortening of working hours. The biggest contractions were recorded in services, trade, and manufacturing. In services, the hardest-hit sectors included education, transport, business services, and restaurants and hotels. This was partially offset by the increase in construction activity. Thus, in seasonally adjusted terms and relative to the previous month, the mining IMACEC grew 0.9%, and the non-mining IMACEC decreased 6.1% (figures III.1, III.2, and III.3).

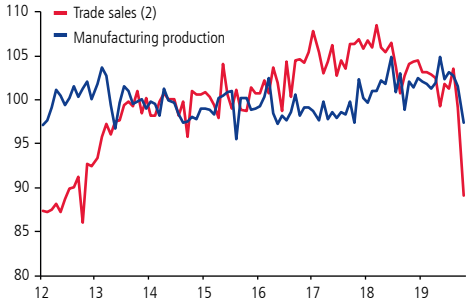
In the baseline scenario, economic activity is expected to record an annual contraction of 2.5% in the fourth quarter of the year, concentrated in October and November. The last month of the year should have a somewhat better performance, but this forecast is subject to a high degree of uncertainty. Thus, in 2019 total GDP will grow around 1%, well below the September forecast.

FIGURE III.1
IMACEC
(annual change, percent)



Source: Central Bank of Chile.

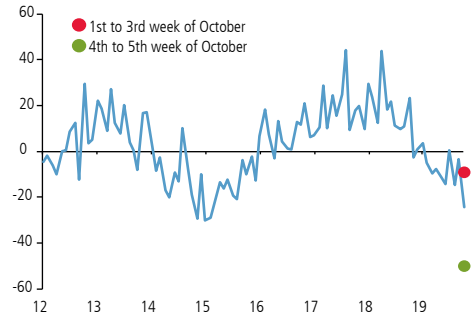
FIGURE III.2
Sectoral activity (1)
(fixed-base index: 2012–2019=100)



(1) Seasonally adjusted series.
(2) Includes data for October 2019, published after the cutoff date of the Report.

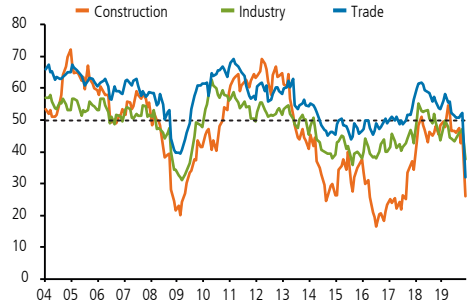
Source: National Statistics Institute (INE).

FIGURE III.3
ANAC: New vehicle sales
(annual change, percent)



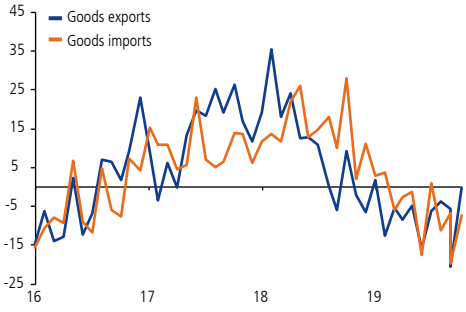
Source: Chilean Automobile Association (ANAC).

FIGURE III.4
IMCE (*)
(index)



(*) A value under (over) 50 indicates pessimism (optimism).
Source: Icare/Universidad Adolfo Ibáñez.

FIGURE III.5
Foreign trade (*)
(annual change, percent)



(*) Data through 23 November.
Source: Central Bank of Chile.

For November, the available information—both qualitative and quantitative—indicates that the economy's performance will continue to be negatively affected, due especially to the persistence of problems for normal operations and to more cautious spending by households and firms. Work hours have been reduced due to transportation difficulties and shorter business hours in a wide range of companies; while sectors such as tourism and hotels have been affected by the cancellation of a large number of events, including the APEC Forum and the COP25 Conference. Business confidence (IMCE) declined significantly in November, reaching the lowest levels since the measure was introduced (2003). This downturn was seen across all sectors, with the steepest drop in industry, trade, and construction. Moreover, in these sectors the perception of current demand is extremely low, around the levels reached in 2009. In industry, the use of installed capacity has approached levels not seen since the 2010 earthquake and tsunami. With regard to foreign trade, both exports and imports—based on weekly records—rebounded somewhat in November, after falling sharply in the last two weeks of October (figures III.4 and III.5).

In the second half of November, the Central Bank surveyed companies throughout the country. The results show that the vast majority of companies saw an impact—whether large or small—on their business performance in October and November. Furthermore, a significant number anticipate that December will also be affected (box III.1). A key factor in the future evolution of the economy will be the confidence of households and companies, and its relationship with the performance of the labor market, consumption, and investment.

For now, consumer confidence, measured by the IPEC, has declined significantly. The portion of the survey implemented in the last two weeks of October (approximately 40%) showed a drop on the order of four standard deviations, approaching the levels recorded after the earthquake and tsunami in February 2010. By component, the IPEC revealed a poor assessment of the current situation of the country and consumers' plans to buy durable goods (figures III.6 and III.7). These components continued to deteriorate in November, reaching historical lows. Other opinion polls that include questions on economic perceptions had similar findings.

In the labor market, the wage bill was growing through the third quarter, driven by an increase in wage job creation, which more than offset a somewhat smaller increase in real wages. For the fourth quarter, several sources indicate that the labor market has already deteriorated. In November, data from the Labor Office show an increase in job terminations of almost 13% annually, which are almost entirely explained by company layoffs. The results of the Bank's survey show that only a small fraction of businesses had adjusted their workforce in October and November, while over half of the companies surveyed believe that they will have to let people go in 2020. In the Monthly Business Confidence

Index (IMCE), employment expectations three months ahead went from positive to negative in the trade and construction sectors between October and November. In this context, if the historical relationship between labor demand and output holds, and if there are no significant changes on the supply side, the unemployment rate could exceed 10% in early 2020. To the extent that economic activity improves over the next year, this figure could decrease, a trend that will be supported by the expansionary fiscal and monetary policy. On the cutoff date of this Report, wage data were not available for October. However, there is likely to be a reduction in household income deriving from a reduction in sales commissions and overtime, together with missed shifts and self-employed workers who could not perform their usual work.

The possible closure of companies will also affect employment. Data from the Superintendence of Insolvency and Entrepreneurship show that the number of bankruptcy proceedings involving asset liquidation of firms with debt grew nearly 30% in annual terms between January and October 2019—and 5.2% annually in October alone.

Investment, in turn, will be affected by the increased uncertainty, higher costs (due partly to the peso depreciation), the stock market drop, and the tightening of financial conditions. These factors are especially important for investment in machinery and equipment (figure III.8). In construction and other works, there are indications that the main investment projects in the mining and industrial sectors have not been adjusted or rescheduled. In other sectors, however, previously committed investment timelines and amounts are being reevaluated. The Bank's survey shows that more than half of the companies surveyed are reassessing their investment plans for 2020, and a small share has decided to cancel investment. Business expectations (IMCE) show a drop in the expected evolution of investment in trade and industry over the next six months. In the real estate sector, the Chilean Chamber of Construction (CChC) indicates that more advanced projects have not been suspended, but the start of new projects has been put on hold. At the same time, home sales have plummeted since mid-October. The CChC also reports a withdrawal of large investors from the market, due to the greater risk perception[1]/.

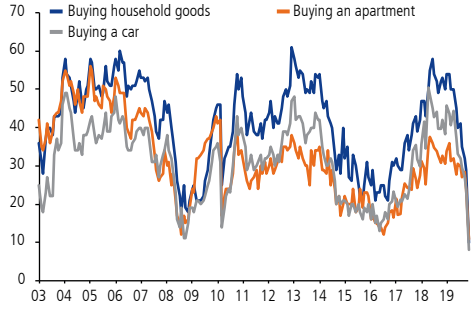
With regard to the damage to public and private infrastructure, the first registries began to be collected between late October and early November. At that time, the government indicated that 30% of businesses reported incidents involving significant damage to their facilities, merchandise, and equipment. Of these, 74% were SMEs. The Central Bank's survey, in turn, shows that only a small percentage of these firms believe that they will not replace or rebuild the damaged facilities. The existence of insurance covering the affected merchandise and facilities should help companies repair the damage. However, the speed with which these mechanisms will be activated is not clear.

FIGURE III.6
IPEC: Consumer expectations (1)(2)(3)
(index)

(1) A value under (over) 50 indicates pessimism (optimism).
(2) The blue dot shows the average value of the index for October, based on information collected through 18th of that month. The red dot includes information collected after 18 October.
(3) Includes data for November 2019, published after the cutoff date of the Report.

Source: Adimark

FIGURE III.7
IPEC: Durable goods purchases (1)(2)
(index)

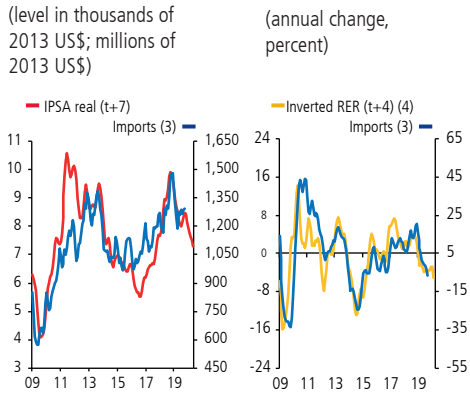


(1) A value under (over) 50 indicates pessimism (optimism).
(3) Includes data for November 2019, published after the cutoff date of the Report.

Source: Adimark.

[1]/ Hurtado, J. (2019).

FIGURE III.8
Capital goods imports, IPSA, and real exchange rate (1)(2)



(1) Quarterly moving averages.
(2) Series deflated by the capital goods import price index, with base year 2013=100. Spliced with the base year 2008=100 series using annual changes. For October 2019, the level of the third quarter of 2019 is used.
(3) Excludes other transport vehicles.
(4) RER is estimated for November 2019.

Sources: Central Bank of Chile and Bloomberg.

In the credit market, interest rates remain low from a historical perspective, but several qualitative information sources reveal a tightening of financial conditions. In particular, a special round of the Bank Lending Survey (BLS) shows a perception of substantially lower demand for credit in some sectors, rising delinquency, and a tightening of lending conditions for both consumers and firms. The government has implemented plans to help firms with their financing. Measures include the extension of deadlines for paying the VAT, the expansion of eligible collateral for loans, and the expedition of invoice payments. The Central Bank, to ensure the normal functioning of internal and external payments and to facilitate credit, has injected liquidity into the market in both pesos and dollars (for more details, see chapter II). The Bank has also taken measures to mitigate volatility in key financial prices.

The increase in fiscal spending will provide a significant boost to the Chilean economy in 2020. The Finance Ministry announced in early December additional resources of US$5.5 billion for next year. Of these funds, nearly US$3.0 billion have a high component of public investment and transfers. Thus, relative to the 2019 Budget Law, public expenditures will grow 9.8% in real terms in 2020.

With regard to the external sector, the current account accumulated a deficit of 3.5% of GDP in the rolling year ending in the third quarter of 2019. This reflects an increase relative to a year ago, which is largely explained by the strong need for external financing associated with investment by nonresident mining companies. Going forward, the strong adjustment in domestic spending, as well as the depreciation of the real exchange rate, will bring the deficit to close to zero in 2020 (box V.2).

BOX III.1
IMPACT OF THE SOCIAL CRISIS ON BUSINESSES

The social crisis that erupted in Chile on 18 October is affecting many aspects of society. In the economy, there are both short- and medium-term impacts deriving from the disruptions in activity and the increased uncertainty regarding the country's future evolution. The ability to predict the magnitude and duration of these effects is limited by the absence of comparable episodes in the past. While the country has suffered sharp economic adjustments and sudden disruptions—such as an earthquake—in the past, the series of events unfolding today is quite different, even considering past episodes of protests or strikes. The international evidence on episodes of social turmoil shows that the economic implications can be limited if the duration is brief. However, the costs increase considerably when the events are more violent or longer-lasting (box V.1).

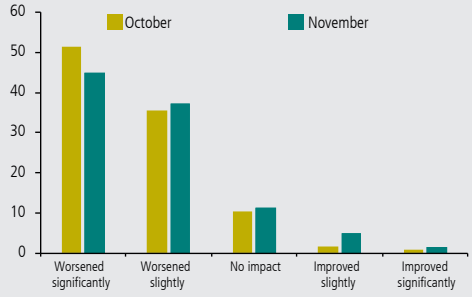
To support the evaluation of the state of the economy, the Central Bank carried out a special economic-financial data collection exercise. First, a survey was sent to the group of companies that are interviewed for the Business Perceptions Report (BPR). This sample includes nearly 1,400 firms and covers all regions and economic sectors in the country, as well as different size categories (small, medium, and large) in terms of sales volume and number of employees. The survey was carried out between 19 and 26 November, generating a total of 343 responses. The sector with the highest participation rate was wholesale and retail trade (21% of responses), while the Metropolitan region had the largest number of responses (24% of the total). The survey was complemented with telephone interviews of nearly 40 firms with a strong national and regional presence, to provide qualitative information for better interpreting the data obtained from the survey. Second, surveys were also sent to the financial institutions that participate in the BPR—mostly regional offices of banks—and the Bank Lending Survey (ECB). This box presents the main results of these surveys[1]/.

[1]/ Because the survey results were obtained from the sample of firms used for the BPR, they are not necessarily representative of the universe of firms in the country. Therefore, the results should be taken as a gauge and cannot be used for statistical inference, but rather provide a basis for analyzing general trends rather than point data.

Short-term effects on output and prices

The collected information confirms that the disruptions produced after 18 October had a negative impact on a large number of firms in October, and the effects lasted into November (figure III.9). Several of the firms contacted—in particular in trade and services—consider that the negative consequences will be worse in November than in October, given that in November performance was low throughout the month. To explain the drop in sales, the people surveyed emphasized factors such as the reduced flow of people, shorter business hours, and a perception that customers have become more cautious, especially in the services and consumer durables sectors. Respondents in other sectors, such as mining, industry, construction, and transport, indicated that the impact of the disruptions on production had eased in November, although they had had to take actions that were raising costs. These included a greater investment in security, the elimination of some work shifts, and the need to provide private transportation for their workers. They also emphasized that the more violent events had had a major impact, especially in terms of the stress it caused among workers. Respondents in construction-related sectors cited the drastic drop in sales in November and the scarce requests for job quotes, whether in person or via the web.

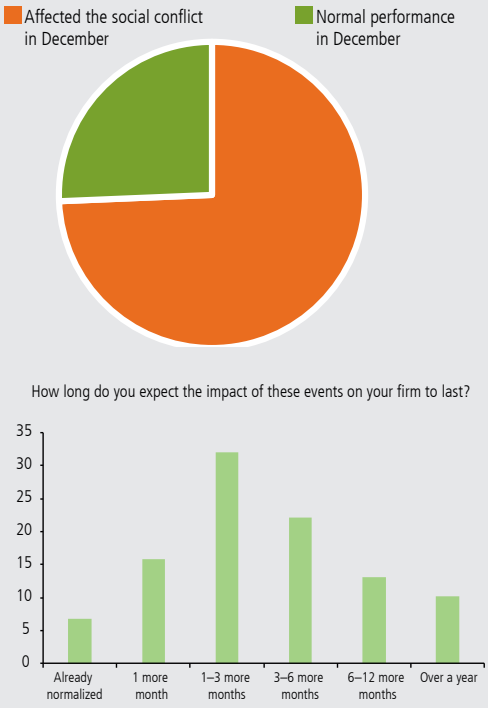
FIGURE III.9
Impact of the social crisis on business performance
(percent)



Source: Central Bank of Chile, business survey.

With regard to the longer-term effects, a large share of the people surveyed signaled that their business performance would be affected in December, while a little over half believe that the effects will continue for one to six months (figure III.10). Several companies in the trade sector emphasized the importance of Christmas sales and their concern that as of mid-November there were no signs of the seasonal bump in sales—which was the pattern in previous years. In several services—restaurants, hotels, and tourism—the scenario was described as dismal, with low sales and a poor outlook for the high season.

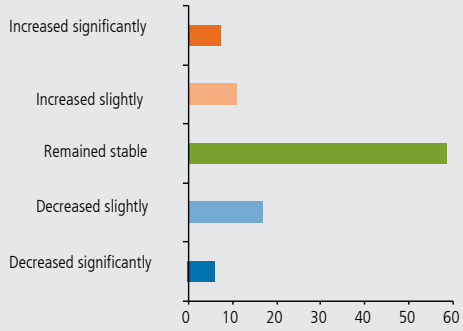
FIGURE III.10
Outlook for business performance
(percent)



Source: Central Bank of Chile, business survey.

In terms of prices, the majority of the respondents stated that their prices had not changed since the start of the social crisis. Among those who indicated that prices had, in fact, been adjusted, the share of increases was very similar to the share of decreases (figure III.11). All the companies interviewed agreed that their prices had not changed significantly, although in some cases—especially services—they mentioned discounts to boost demand. No one described price increases deriving from scarcity or disruptions in the distribution chain.

FIGURE III.11
Evolution of sales prices since the start of the social crisis
(percent)

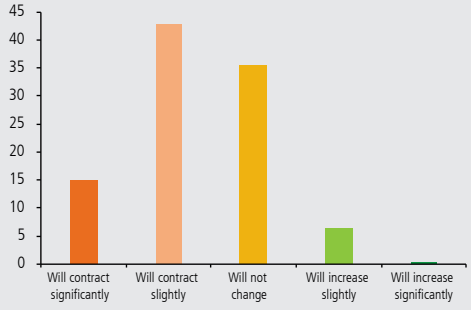


Source: Central Bank of Chile, business survey.

Labor market and investment

The companies interviewed expressed deep concern for the evolution of employment and investment. Several respondents signaled that they had had to laid off employees, that they were evaluating the need to adjust the size of their workforce, and/or that they knew of companies in their sector that have implemented or are going to implement such adjustments. Here again, those contacted in the trade and services sectors presented a particularly negative perspective. The survey results show that more than half of the respondents believe that their staff will be downsized in 2020, although most predict that the adjustment will be small. When asked about the reasons for the workforce adjustment, a large majority cited changes following 18 October (figure III.12).

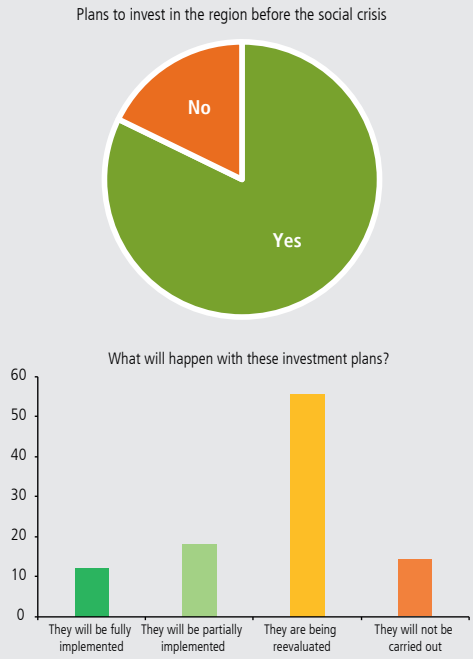
FIGURE III.12
Evolution of the workforce in 2020
(percent)



Source: Central Bank of Chile, business survey.

With regard to investment, all the people surveyed mentioned their concern for the current degree of uncertainty and its effect on investment. Several mentioned that investment projects that were already underway would be finished as planned, but there were doubts about projects that had not yet been started or were in the assessment stage. Respondents with a direct or indirect connection to large mining and industrial projects reported that these continued to be implemented without problems, beyond a disruption in operations in the days immediately following 18 October. In the real estate sector, a large set of projects are being reevaluated—mainly related to unsubsidized housing. Respondents also expressed concern about unemployment and a possible deterioration in debt conditions. Several emphasized the impact of the higher exchange rate on the value of imported machinery in pesos. Thus, a majority of those surveyed indicated that their 2020 investment plans were being revised (figure III.13). With regard to the repair or replacement of damages, the majority of those affected indicated that they would fully replace their damaged property and that it would happen this year.

FIGURE III.13
Investment expectations in 2020
(percent)



Source: Central Bank of Chile, business survey.

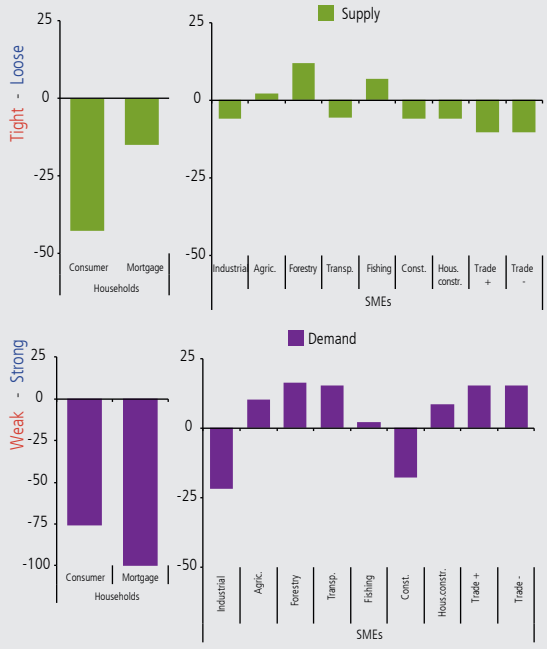
Financial conditions

With regard to financial conditions, the bank surveys indicated that credit demand has been significantly less dynamic since the start of the social crisis. The survey of regional offices showed a considerable deterioration in consumer and commercial loans and in leasing, in all cases with a majority of the responses indicating minor or major reductions in demand. The special survey of the institutions that participate in the Bank Lending Survey (BLS) revealed a perception of lower demand for mortgage loans. This is in line with interviews of companies in the housing sector, which reported a strong drop in sales and job quotes since mid-October.

In terms of payment conditions, a large share of the regional offices indicated that requests for renegotiation had increased either a little or a lot and that default had also risen. Those that participate in the BLS are expecting default to increase on consumer loans and on loans to smaller firms in the trade sector.

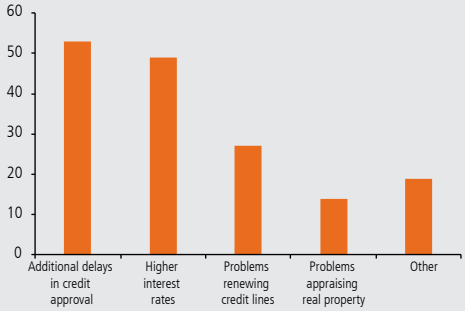
With regard to lending conditions, the special survey of the BLS sample pointed to tighter conditions for all types of credit, especially consumer and mortgage loans (figure III.14). By economic sector, the credit supply has tightened across the board, in particular in industry, construction, and trade. In the business survey, however, less than half of respondents reported less favorable financial conditions, citing delays in credit approval and an increase in interest rates as the main factors underlying this assessment (figure III.15).

FIGURE III.14
Perceptions of the credit market for the next 3 months
(percent)



Source: Central Bank of Chile, special round of the Bank Lending Survey.

FIGURE III.15
Reasons that financial conditions have become less favorable
(percent)



Source: Central Bank of Chile, business survey.

Conclusions

The information collected indicates that the effect of the social crisis on economic activity could be substantial in November—in some sectors greater than in October. Going forward, it is relatively certain that the crisis will also affect unemployment in December, and a large share of firms believe that the effects will last for six months or more. The surveys revealed immediate effects on employment, and a majority of firms project that the workforce will be reduced in 2020. There is also a large degree of uncertainty regarding investment plans for next year. With regard to financial conditions, respondents report a decline in the demand for credit, in particular for consumer, mortgage, and commercial loans. On the supply side, the adjustments are smaller in magnitude, including a longer credit approval process and higher interest rates. In any case, the lack of precedents for this phenomenon makes it difficult to predict the direction and magnitude of the effects on the economy's performance. The information that becomes known over the coming weeks will be especially important for determining the significance of the changes in the macroeconomic scenario and their effects on the evolution of inflation in the medium term.

IV. PRICES AND COSTS

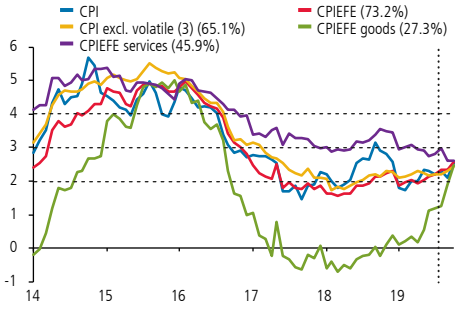
This chapter analyzes the recent evolution of the main components of inflation and costs, identifying the current sources of inflationary pressure and their likely evolution in the future.

INFLATION[1/][2/]

Annual CPI inflation rose from around 2.0% in July—the cutoff date of the last Report—to 2.5% in October (figure IV.1). This trend was influenced by an increase in some food prices, a rise in CPIEFE goods inflation, and transitory factors like the hike in electricity rates and public transportation fares. As in past Reports, annual CPIEFE services inflation remains low, while the CPIEFE goods component rose, largely due to tourism packages. Thus, in October, annual CPIEFE inflation increased to 2.6%, while the CPI excluding volatile components—a new measure that the Central Bank has recently incorporated into its set of regularly monitored core indicators—rose 2.5%. As indicated in box IV.1, a comparative analysis of the CPIEFE and CPI excluding volatile items shows that the latter measure delivers better results on the five dimensions considered. In the baseline scenario, inflation in the next two years will be determined by two factors: (i) the lower inflationary pressures deriving from the larger output gap; and (ii) greater cost pressures than in the past, in particular due to idiosyncratic nature of the recent peso depreciation (see chapter V). In this context, the different measures of market expectations fluctuated significantly in the period and have gradually incorporated a higher inflation outlook than on the cutoff date of the September Report, probably due to the recent peso depreciation.

The inflation records after the last cutoff date—August, September, and October—were marked by the monthly inflation rate in the latter month (0.8%), which surprised market consensus to the upside (0.5% in the October EES and 0.6% in the Bloomberg survey and in the FBS prior to the October Monetary

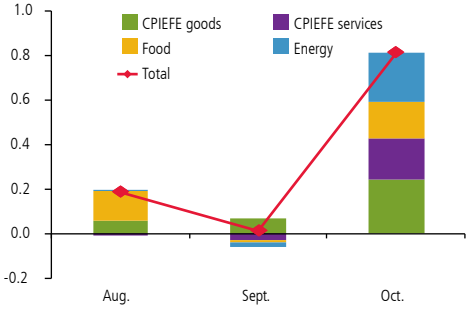
FIGURE IV.1
Inflation indicators (1) (2)
(annual change, percent)



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

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

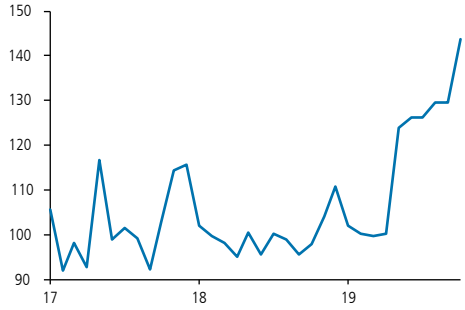
FIGURE IV.2
Contribution to total monthly inflation in the last three months
(percentage points)



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

[1/] Unless indicated otherwise, the inflation series and components presented in this Report, starting in January 2019, use the new indexes with base year 2018=100, so they are not strictly comparable with earlier data.
[2/] Includes the FBS before the December Monetary Policy Meeting and the November IPEC, published after the cutoff date.

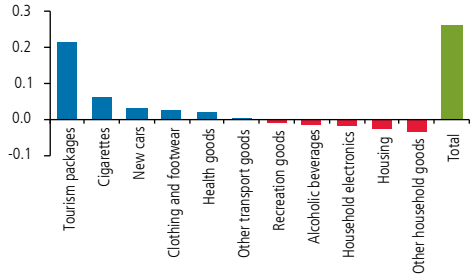
FIGURE IV.3
CPI tourism packages (*)
(levels, base year 2018=100)



(*) Starting in February 2018, the series is obtained by splicing the base year 2013=100 basket series with the monthly changes in the base year 2018=100 basket.

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

FIGURE IV.4
CPIEFE goods: Surprises accumulated since the September Report (*)
(accumulated monthly contribution, percentage points)



(*) See the glossary for details on the components included in each category mayor.

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

Policy Meeting). This figure is explained by an increase in the contribution of all the aggregates, especially the CPIEFE goods component (+0.24 pp), following a new increase in the price of tourism packages. The contribution of energy prices also rose (+0.22 pp), in both fuels and electricity. This latter component was affected by the rate increase that entered into effect in October and was revoked later the same month, which, given the CPI calculation methodology, was included in the October measure (figure IV.2). In the weeks following the start of the social crisis, the authority also announced a series of measures and agreements aimed at reducing inflation in some items.

Annual CPIEFE inflation rose to 2.6% in October (2.2% in July).The increase in core inflation is largely explained by the evolution of CPIEFE goods. Once again, the hike in tourism packages, with a price increase on the order of 40% since the beginning of the year, was the main source of surprises in this component of inflation relative to the September forecast (figures IV.3 and IV.4). Cigarettes and clothing and footwear prices also increased. Thus, CPIEFE goods inflation went from slightly positive annual rates at the start of the year to 2.5% in October. The travel agencies interviewed for the November Business Perceptions Report (BPR) attributed some of this unusual increase in tourism package prices to the effect of the higher value of the dollar on the sales price of international destinations[3]/.

In contrast, annual CPIEFE services inflation remained low from a historical perspective, in particular in segments that are more sensitive to the state of the output gap and the labor market. Through October, the annual inflation rates of interurban bus transportation services and telecommunications packages were particularly low (figure IV.5). The latter, which underwent methodological changes at the beginning of the year[4]/, was the main factor behind the negative surprise in CPIEFE services relative to the forecast in the September Report (figure IV.6).

Through October, the more volatile prices in the CPI basket—energy and foods—maintained their contribution to annual CPI growth. The former was dominated by the hike in electricity rates that prevailed for a good part of October (+4.4% monthly). While fuel prices increased in recent months, the higher basis for comparison in the second half of 2018 explained the annual decline in this component. In foods, annual inflation mostly reflected the price of some products such as turkey and pork.

[3]/ The interviews were held between 5 September and 18 October, before the start of the social crisis.
[4]/ See the Monetary Policy Report, March 2019, box IV.1.

COSTS

The available data show that the majority of indicators of cost and wage pressures remain low. Through September, the annual growth rate of nominal wages—measured by the INE wage index (WI) and labor cost index (LCI)—had fallen to 4.4% in both cases, in part due to the effect of the higher baseline deriving from the minimum wage adjustment implemented in the same month of 2018. Administrative sources (pension fund managers and the unemployment fund manager), available through August, registered somewhat higher annual growth rates than the INE: 5.4 and 5.7%, respectively.

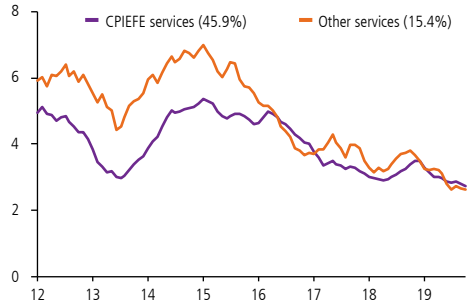
Qualitative information prior to the October social crisis, collected for the November BPR, again pointed to minimal wage and cost pressures, although several respondents mentioned the increase in fuel prices and electricity rates. For the majority, the pass-through of the exchange rate to final sales prices had been fairly limited. Expectations for future cost and wage trends, captured by the IMCE (business confidence), remained below their historical averages through October. However, in November the cost outlook increased in all sectors (figure IV.7). Additional information collected by the Central Bank in the second half of November also point to an increase in costs in sectors such as mining, industry, construction, and transport, and the respondents report that they have adopted various measures to reduce the impact of the disruptions on production (box III.1).

With regard to external costs, imported consumer goods prices (IVUM) continued to fall in the third quarter (–1.6% annually), due to a generalized contraction of the external prices of durables, especially automobiles and electronics, as well as nondurables. The external price index (EPI) in dollars continued contracting in annual terms through October, mainly due to the greater exchange rate depreciation against the dollar.

PRIVATE INFLATION EXPECTATIONS

According to qualitative information, consumer price expectations (IPEC) in November recorded another increase in the number of people who think that goods prices will rise a lot over the next twelve months. Business expectations (IMCE) in November put sales prices in three months below their historical averages, with the largest reduction in construction and trade. In contrast, the industrial sector reported increases. With regard to annual inflation expectations one year ahead, the IMCE rose to 3.2 and 3.1% for trade and industry, respectively, after hovering around 2.8% for several months. As discussed in box III.1, just over half of the companies surveyed by the Central Bank have not adjusted their sales prices since the start of the social crisis, while among those who have made adjustments, the share reporting sales price increases was about the same as the share reporting decreases.

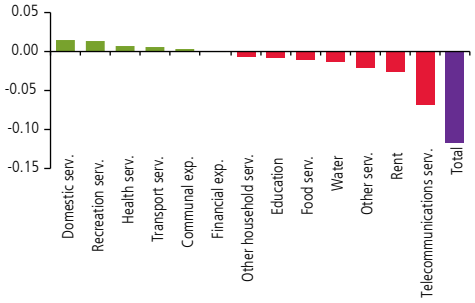
FIGURE IV.5
CPIEFE services (1) (2)
(three-month moving average of the annual change, percent)



(1) In parentheses: the share in the total CPI basket
(2) For more details, see the Monetary Policy Report, March 2017, box IV.1.

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

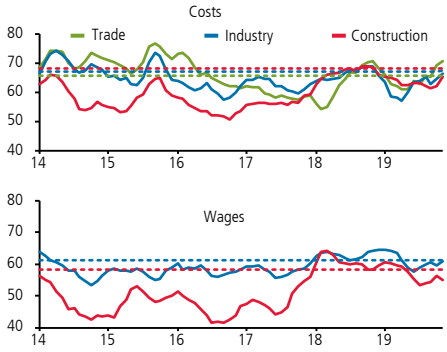
FIGURE IV.6
CPIEFE services: Surprises accumulated since the September Report (*)
(accumulated monthly contribution, percentage points)



(*) See the glossary for details on the components included in each category mayor.

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

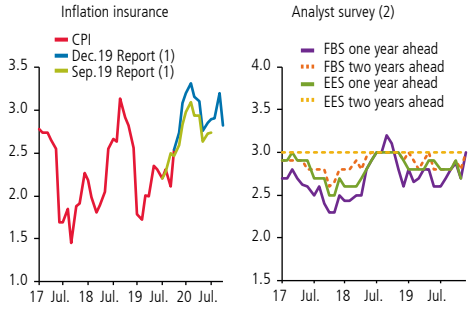
FIGURE IV.7
IMCE: Cost and wage expectations (1) (2)
(three-month moving average of the diffusion index)



(1) A value over (under) 50 indicates expectations of growth (contraction).
(2) Horizontal dotted lines indicate historical averages from January 2004 to November 2019 for each series.

Source: Icare/Universidad Adolfo Ibáñez

FIGURE IV.8
Inflation expectations
(annual change, percent)



(1) The September and December 2019 Monetary Policy Reports use the average of the last ten business days through 28-Aug-2019 and 02-Dec-2019, 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 03-Dec-2019. In months when the survey is not published, the last available survey is used.

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

The exchange rate, in turn, stayed around the level reported in the September Report through 18 October. Thereafter, idiosyncratic factors caused a significant depreciation of the Chilean peso both against the U.S. dollar and in multilateral terms (MER and MER-5). This reflects both the uncertainty deriving from the social crisis and the significant pension and mutual fund movements toward portfolios with a larger share of overseas instruments. As indicated in past Reports, the inflationary effects of exchange rate fluctuations depend on their origin. Thus, the pass-through coefficient from the exchange rate to inflation in one year is lower when the fluctuation originates in a global shift in the value of the dollar, since in that case there are counteracting effects that reduce costs, such as a reduction in prices in dollars of goods imported from trading partners whose currencies have also depreciated. In contrast, in the case of an idiosyncratic depreciation of the peso, as in recent weeks, the countervailing factors do not materialize, implying a higher pass-through coefficient[5]/. Consequently, higher inflation is projected for tradable goods in the coming year. At the same time, the output contraction in the fourth quarter has led to a significant widening of the gap—even considering the impact of production disruptions on potential growth—and its future evolution suggests that the closure will be slow. Thus, the baseline scenario projects that weak demand will be partially offset by the higher pass-through of the peso depreciation to prices (see chapter V).

Market inflation expectations have fluctuated in response to the positive inflation surprise in October, the peso depreciation, the announcement of rate changes, and the policies adopted by the government and the Bank. At different horizons, the measures have gradually incorporated a higher inflation outlook relative to the cutoff date of the last Report. Thus, annual inflation is expected to close the year at around or slightly over 3%, which probably reflects the strong peso depreciation. Twelve months ahead, the November EES and inflation insurance have annual inflation back down to 2.7 and 2.8%, respectively. After the cutoff date, the FBS prior to the December Meeting and spot inflation insurance incorporated an increase, putting annual inflation around 3%. Two years ahead, the median of the EES and the FBS before the December Meeting is 3% annually. In the latter survey, this represents an increase of 20 bp relative to the level published in the Minutes of the October Meeting and available on the cutoff date of the September Report (figure IV.8).

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

BOX IV.1
CORE INFLATION MEASURES

The Central Bank of Chile's monetary policy is oriented toward ensuring that the annual CPI inflation forecast is around 3% in a two-year horizon. In the short term, changes in CPI inflation tend to be noisy. After seasonal factors are taken into account, sharp fluctuations month to month might not be associated not with the economic cycle, but rather with other types of factors, such as transitory supply shocks in specific sectors (unforeseen weather events, short-term production disruptions, geopolitical events that temporarily affect the oil price, etc.) and measurement errors.

In this context, to evaluate the current and future inflation path, central banks usually consider the evolution of so-called core inflation indicators[1]/.These measures seek to identify medium-term inflation trends—after correcting for short-term "noise"—which are associated with the economic cycle and which can be more successfully influenced by monetary policy. Given that it is not possible to identify the noise component with absolute certainty, central banks use a set of indicators based on different methodologies to try to eliminate it. This box describes a new measure that the Central Bank of Chile has recently incorporated into its set of core indicators that are regularly monitored[2]/.

The literature identifies two alternative methodologies for separating the stable signal from the noise. The first consists in re-weighting the CPI components as a function of the "noise quantity" contained in their variations, assigning lower (higher) weights to components that are more (less) noisy. The second uses statistical methods to smooth the time series in order to extract the stable inflation signal.

The most common practice for central banks is to use the first alternative, because it provides measures that are easier to communicate and that are thus easier for the market to use to form their expectations. A specific example of this alternative is an exclusion measure, in which the noisiest components are directly removed from the calculation; that is, they are given a weight of zero. The excluded components can always be the same (fixed exclusion) or they can change every month (variable exclusion).

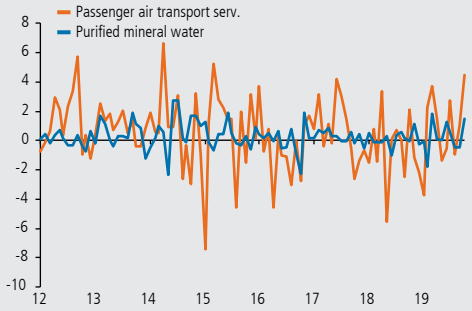
The main core indicator currently used by the Central Bank of Chile is based on fixed exclusion, and it excludes all food and energy items (CPIEFE)[3]/. This measure has two key advantages: simple calculation and easy communication to the general public. However, like other fixed-exclusion measures, it also has two limitations. First, although the transitory shocks that motivate the construction of core measures do not always affect the same components, the set of components excluded from the CPIEFE is always the same. Thus, this measure could potentially include prices affected by transitory shocks and leave out other unaffected prices. This limitation is common to all fixed-exclusion indicators.

Second, even among fixed-exclusion indicators, the criterion of excluding all food and energy prices and no other component of the basket is not necessarily optimal. For example, the CPIEFE excludes the price of mineral water, which is fairly stable, and includes passenger air transport, which is very noisy (figure IV.9). These limitations are not merely conceptual, but rather are reflected in the statistical properties of the CPIEFE discussed below.

[1]/ Clark (2001) provides a general description of core measures. Hogan et al. (2001), Roger (1997), Shiratsuka (1997), Cutler (2001) argue that core inflation is relevant for monetary policy decisionmaking.
[2]/ Analysis of a broader set of core measures can be found in the Monetary Policy Report, March 2015, box V.1; and in Córdova (2008).

[3]/ For the full details on the calculation of the CPIEFE, see INE (2019, appendix 6).

FIGURE IV.9
CPI: Mineral water and passenger air transport
(seasonally adjusted monthly change, percent)



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

As indicated by Carlomagno and Sansone (2019), an alternative method for choosing the items to exclude consists in determining the desired statistical properties of a core indicator and then choosing the exclusions that produce the indicator with the best possible properties. The literature identifies five desirable properties:

- ***Bias:*** Given that the Central Bank's objective is for headline inflation and not core inflation, the average value of the latter should be as close as possible to the former.

- ***Persistence:*** If the core indicator adequately filters transitory shocks that are not associated with monetary policy, then the fluctuations around the mean level should be "soft." That is, convergence to the mean should be relatively slow.

- ***Volatility:*** in addition, the convergence path must be as stable as possible, which implies that the fluctuations of the core indicator should be characterized by low volatility.

- ***Relation to the output gap:*** If the core measure accurately reflects the fundamental movements of headline inflation, it should be closely related the output gap.

- ***Forecasting:*** Finally, a core indicator should contain relevant information for predicting future inflation trends.

Carlomagno and Sansone (2019) propose a strategy for summarizing these five properties in a single indicator, as well as a procedure for choosing the components to be excluded so as to construct an optimal indicator. The procedure allows for either fixed or variable exclusion. Going forward, the fixed-exclusion measure constructed using this procedure is called the CPI excluding volatile items (figure IV.10). Table IV.1 shows that the CPI excluding volatile items surpasses the CPIEFE on the five dimensions considered.

FIGURE IV.10
CPI, CPIEFE, and CPI excluding volatile items
(annual change, percent)

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

TABLE IV.1
Evaluation of properties (*)

	CPI excl. volatile items	CPIEFE	CPI
Bias			
Persistence			
Volatility			
Output gap			
Forecasting			

(*) Green, yellow, and red indicate best, intermediate, and worst, respectively.

Source: Carlomagno and Sansone (2019).

In sum, the CPI excluding volatile items is less biased, more persistent, less volatile, more closely related to the output gap, and a better predictor than the CPIEFE. However, while these core inflation measures are useful analytical tools for forecasting, empirical evidence shows that no analytical instrument always delivers the correct signals. Consequently, these measures should be used with a degree caution and in conjunction with other tools. Furthermore, given the limitation of all fixed-exclusion measures described above, the excluded components should be revised periodically.

V. FUTURE EVOLUTION OF MONETARY POLICY

This chapter presents the considerations behind the strategy for the monetary policy over the next two years. These based on the Board's assessment of the dynamics projected for inflation in the policy horizon, with the information at hand at the close of this Report. It also describes how the monetary policy response could change if some elements of the baseline scenario are modified.

ACTIVITY IN THE BASELINE SCENARIO

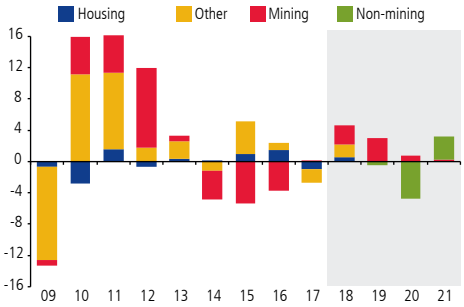
In the baseline scenario of this Report, the activity forecast is significantly changed from September, mainly because of the social crisis that began on 18 October. Most recently, the October Imacec showed a sharp contraction, while the drop in activity in the fourth quarter this year will leave a lower starting point for future comparisons. In the medium term, the evolution of activity is subject to more uncertainty than usual. Factors such as the control of public order, the discussion of various legal reforms —including the possibility of a new Constitution— and their interaction with confidence and decisions to consume and invest will be key in the evolution of GDP.

Thus, the baseline scenario of this Report foresees GDP contracting by 2.5% in the fourth quarter this year. November will continue to show poor performance, especially given the extent of the violent outbreaks and various impediments to the normal functioning of the economy. The last month of the year should pick up somewhat, but there is a high uncertainty around that projection. With this, 2019 will close with growth around 1.0%. Looking forward, the key assumption of the baseline scenario is that the disruptions affecting the economy will be gradually reduced and uncertainty will dissipate, so that the economy will begin to gradually recover at the turn of 2020. However, the lower starting point and basis for comparison will mean that in the first quarter of 2020, GDP's annual change will remain negative. With this, in 2020 the economy will grow between 0.5% and 1.5%, well below what was considered in September. By 2021, the comparison base effects, disruptions and uncertainty will no longer be present in the baseline scenario, so the economy will grow between 2.5% and 3.5%.

In the baseline scenario, both consumption and investment are adjusted importantly, especially in their tradable components. As mentioned above, the worsening of expectations and the increase in uncertainty are key in explaining

the trajectory of medium-term expenditure. Economic perception surveys show significant deterioration in their latest records. For example, in November business confidence fell sharply, bringing the indicator to its lowest level on record (2003). Likewise, consumer expectations (IPEC) fell sharply, placing it even below its 2009 levels.

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

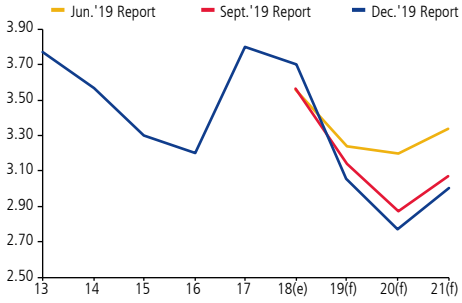


(*) 2018 mining investment is estimated using available FECU information. Housing investment uses household investment data from National Accounts by Institutional Sector. The Other GFCF component is treated as a residue. Forecasts for the years 2019, 2020 and 2021 are made using forecasting models of the Central Bank of Chile and sectoral sources, such as investment plans and the CBC survey.

Source: Central Bank of Chile.

The fall in confidence indicators plays an important role in the downward correction of investment expected for 2020. Thus, after growing by 2.5% in 2019 —due mainly to its performance over the first three quarters of the year—, estimates are that gross fixed capital formation (GFCF) will contract by 4% in 2020. By sectors, the fall in investment will concentrate in non-mining sectors, as mining is expected to have no major changes in its investment plans (figure V.1). The latter is based on qualitative information gathered by the Bank in recent weeks. Important adjustments are expected in the execution of projects in the real estate sector. In fact, the Bank's survey showed that more than half of the respondents were rethinking their investment plans for 2020, while a minor portion had already decided to cancel them. Regarding its composition, the projected fall in GFCF will be particularly visible in its machinery and equipment component, reflecting the decline already observed in the imports of these goods, the higher costs resulting from the currency depreciation, the increases in corporate interest rates and spreads and the fall in the stock market, variable that strongly correlates with the behavior of investment. The tighter supply conditions derived from the special poll to respondents to the Bank Credit Survey also supports the idea of a major adjustment in this component of expenditure. In any case, the expansionary nature of monetary policy and the announced increase in public investment partly offset the deterioration of this component of spending (box III.1). All considered, in 2019 GFCF would reach 22.0% and 21.5% of GDP in nominal and real terms, respectively. In the next two years the GFCF to GDP ratio will come down to values around 21% in nominal terms and close to 20.5% in real terms.

FIGURE V.2
Trading partners' growth
(percent)



(e) Estimation.
(f) Forecast.

Source: Central Bank of Chile.

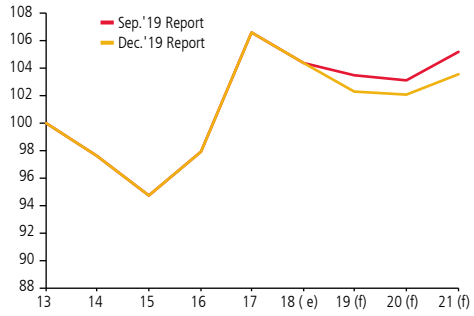
The downward correction in the forecast for consumption (of almost 4 percentage points in the cumulative 2019-2021), considers that the adjustment of its durable side will be deeper than projected in September. Spot information suggests that in recent weeks the fall in new car sales exceeded expectations. Actually, industry sources (ANAC) forecast that sales will fall near 25% annually in the last quarter this year. The already mentioned deterioration of consumer expectations is widespread, but especially marked in the purchase of cars and household goods (IPEC) —where November indexes are practically a third of what they were in October—, and also support the vision of the poor performance expected for this component of expenditure. Along the same lines, banks are more restrictive when it comes to offering credit to individuals, together with a demand for loans that is also perceived to have tightened, both evidenced in the special poll within the Bank Credit Survey. All this, coupled with the effect of exchange rate depreciation on the cost of imported goods, will lead to a double-digit annual contraction of durable consumption in 2020.

One key element in the evolution of consumption will be the performance of different labor market variables. The available information points to terminations that have occurred already or may occur in the near future. November figures from the Labor Department show that, with respect to the same month in 2018, the number of layoffs increased by almost 13%, justified almost entirely by company needs. In the baseline scenario, if the historical ratio between labor demand and activity is maintained and absent any significant changes on the supply side, the unemployment rate could exceed 10% by early 2020. On the labor income side, qualitative information shows a reduction, particularly for sellers working on commission, missed shifts and SMEs being unable to function. All this will result in consumers being more cautious in their spending decisions. Thus, the component of non-durables consumption —goods and services— will also slow down. Thus, consumption will expand by 1.1% in both 2019 and 2020. Only once the uncertainties are cleared will it resume higher growth rates, so it should expand by 3.1% in 2021.

The international scenario will not be a significant source of impulse for the Chilean economy in the projection horizon. This is mainly due to our trading partners' slower expansion in the coming years. The trends of recent months have confirmed the major adjustments to the global growth outlook depicted in the September Report, which has also been observed in market projections (figure V. 2). Although on aggregate the changes are marginal, for Latin America and other emerging economies the projections are again corrected downwards. For Latin America a string of idiosyncratic factors has affected actual performance and growth expectations, which is reflected in a downward revision of 0.9 percentage points to Latin America's projected expansion for the 2019-2021 period. The recession in Argentina is worth mentioning, and estimates are that it will continue into 2020. In emerging Asia, adjustments to the projections mainly reflect the impact that the trade war is having on China's main trading partners, to the extent that the trade conflict results in falls in exports, strongly affecting the manufacturing sector. Added to this are the impacts that the Hong Kong protests are having on its economic performance and expectations. While the adjustments to the growth projections of the developed world are marginal, the synchronicity of its slowdown continues to draw attention. By 2020, it is estimated that the bloc will expand by only 1.3%.

Regarding the terms of trade, throughout the entire projection horizon, the baseline scenario foresees a drop compared to September (figure V.3). This is basically due to a lower starting point in 2019, because in the third quarter the effective prices of exports (i.e. mining, agricultural and manufacturing) fell short of projections. Towards 2020, the terms of trade are expected to contract again, with higher copper prices offset by higher import prices, affected both by the adjustment of the oil price forecast and a higher external price index. In fact,

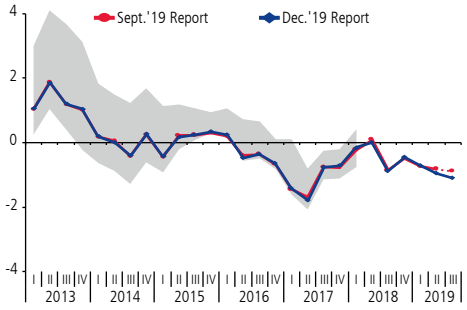
FIGURE V.3
Terms of trade
(index, 2013=100)



(e) Estimation.
(f) Forecast.

Source: Central Bank of Chile.

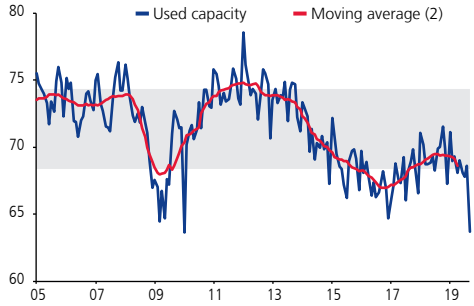
FIGURE V.4
Activity gap (1) (2)
(percentage points)



(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.

Source: Central Bank of Chile.

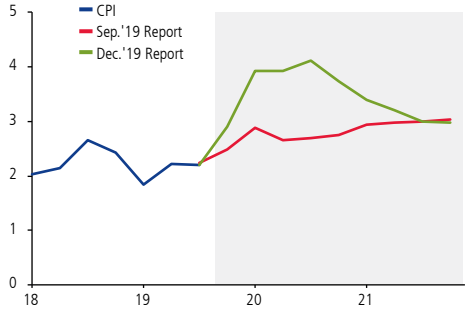
FIGURE V.5
IMCE manufacturing: Capacity utilization (1)
(percentage use of installed capacity)



(1) Gray are shows mean (71.4) +/- one standard deviation.
(2) Moving average centered on +/- six months.

Sources: Central Bank of Chile and Icare/ Universidad Adolfo Ibáñez.

FIGURE V.6
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 third quarter 2019, shows forecast.

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

the baseline scenario of this Report foresees that the copper price will average US$2.7 per pound in 2019 and 2020, before rising to an average of US$2.75 in 2021. For oil, meanwhile, the baseline scenario assumes that the Brent-WTI price average will be between US$60 and US$55 a barrel, with a downward path over the projection horizon.

Although the external outlook will not be particularly favorable, the multilateral depreciation of the peso will have an impact on the contribution of net exports to GDP, which will be particularly visible in 2020. Thus, exports of goods and services are corrected upwards, with an estimated growth of 2.2% that year, 0.6 points higher than the previous estimate. In the case of imports, the exchange rate effect will be compounded by weak domestic demand, with the result that by 2020, especially in the imports of goods, there will be a significant contraction. This factor will be decisive in the adjustment of the current account, which will go from -2.9% of GDP in 2019 to -0.2% in 2020, and to a deficit of only 0.8% of GDP in 2021. It is important to note that the weight of the adjustment of the current account will affect mainly private expenditure, considering the larger fiscal deficit (box V.2). The change in the current account will also be observed as measured at trend prices[1]/, reflecting that it responds mainly to volumes and not to changes in prices. Thus, measured at trend prices, the current account deficit will go from close to 4% of GDP in the 2017-2019 period to an average somewhat below 2% in 2020-2021.

The increase in fiscal spending will provide a significant boost to the Chilean economy in 2020. The announcements of early December include additional resources of US$5.5 billion in 2020. Of these funds, nearly US$3.0 billion have a high component of public investment and transfers. Thus, public spending will increase 9.8% in real terms in 2020 with respect to the Budget of 2019. Meanwhile, the actual deficit will rise to 4.4% of GDP next year, close to the deficit of 2009 (4,3% of GDP). This increase in fiscal spending will be funded via debt issuance and repatriation of foreign-currency-denominated assets. The numbers delivered by the Administration also consider a new convergence commitment of the structural balance: the new target will be a structural deficit of 3% of GDP in 2020, to be diminished by 0.5 percentage points of GDP each year, to 2% of GDP in 2022.

[1]/ 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 THE ACTIVITY GAP

Third-quarter figures this year showed a marginally opening activity gap in line with expectations. However, the October 18th social outburst suggest that it opened up significantly later in the year, consistent with the sharp contraction of activity, as reflected by October's Imacec downfall and the poor outlook for the fourth-quarter results overall. This phenomenon is partly offset by the negative effects on potential growth during this period. This owes mainly to the fall in productivity derived from, among other things, less working worked, the difficulties in commuting, the reduced creation of companies, the credit restrictions and/or various inefficiencies associated with this situation. As announced by the Board, the comprehensive revision to the structural parameters appear in the Monetary Policy Report of June next year (figure V.4)

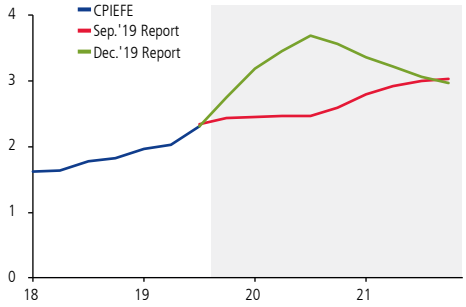
As has been said before, the measurement of the activity gap (i.e. the difference between the effective and potential levels of non-mining GDP) is subject to a high degree of uncertainty. Therefore, in order to evaluate its implications on the inflation trajectory, this information is usually complemented with indicators of gaps in the goods or factor markets. At the close of this Report, the only source accounting for the effects of the social crisis was used the capacity in the manufacturing sector included in the November IMCE. It showed a very significant drop, which placed it near the level of March 2010, the aftermath of a massive earthquake (figure V.5).

CONVERGENCE OF INFLATION

The inflation path for the next two years will be determined by two critical factors. On the one hand, lower inflationary pressures stemming from capacity gaps. The contraction of activity in the fourth quarter causes a significant widening of the gap —even considering the impact of productive disruptions on potential growth—, and its future evolution points at them closing at a slow pace. On the other hand, cost-push pressures are now stronger than in the past. In particular, it is necessary to note that the recent depreciation of the peso has responded to mostly idiosyncratic factors, episodes in which the evidence suggests that its pass-through to local prices is greater, since the buffering factor of falling dollar prices, which would operate in the face of a global appreciation of the dollar, is not present[2]/.

The baseline scenario projects that the weak demand will partially offset the effects of the greater pass-through from the peso depreciation to prices. Also, the baseline scenario assumes that, in the projection horizon, the real exchange rate will be lower than the spikes registered during the last few weeks, but higher than contemplated in the Report of September. Thus, after closing 2019 with an annual variation of 3.4% (2.7% in September), CPI inflation will hover around 4% for much of 2020, before converging to the target towards the middle of the following year. Core inflation, as measured by the CPIEFE, will be

FIGURE V.7
CPIEFE inflation forecast (1) (2)
(annual change, percent)



(1) For 2018, the annual variation of CPIEFE 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 third quarter 2019, shows forecast.

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

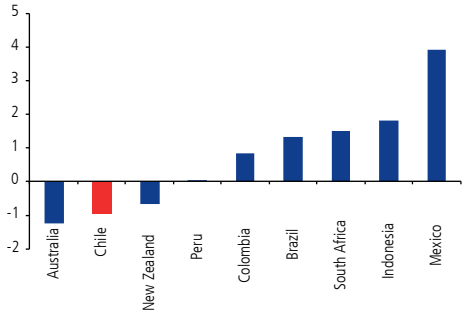
FIGURE V.8
Real MPR in Chile (*)
(percent)

(*) Calculated as nominal MPR minus inflation expectations one year ahead from the Economic Expectations Survey.

Source: Central Bank of Chile

[2]/ See Box IV.1, March 2018 Report.

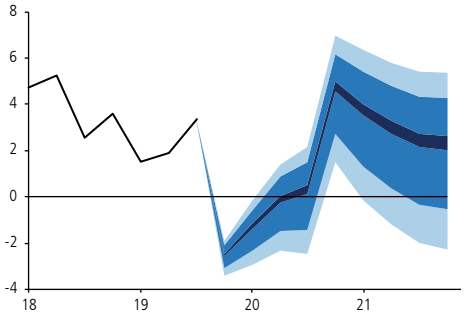
FIGURE V.9
Real MPR in selected economies
(percent)



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

Sources: Central banks of each country.

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 MAS-MEP models from 2009 to 2017. Also, the intervals contain the risk evaluation on growth 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.

Source: Central Bank of Chile.

lower, but its return to 3% will be slower, reaching the target by the end of the projection horizon, this time the fourth quarter of 2021 (figures V.6 and V.7).

Monetary policy is now in a highly expansionary position, with the nominal MPR below its neutral levels and the real MPR at negative levels, the lowest from 2010 to date (figure V.8). The expansionary stance of monetary policy has increased steadily throughout the year, with a 125 basis point (bp) cut between June and October. During this period, there was a combination of, first, a re-estimation of the structural parameters of the economy, which led to a recalibration of the MPR in June, which lowered it by 50bp. Second, in September, the Monetary Policy Report analysis indicated that the widening of the activity gap and its longer delay in resuming the closing process jeopardized the timely convergence of inflation. Therefore, in its September and October Meetings, the Board reduced the MPR by an additional 50 and 25bp, completing the aforementioned decrease of 125 bp. With this, monetary policy in Chile is also among the most expansionary within a sample of comparable countries. (figure V.9).

The Board anticipates that, in the next few months, the monetary policy rate will be at its current level, which is consistent with the inflation target being met, in a context of increased fiscal impulse and foreign exchange intervention. Accordingly, at the Meeting of 4 December, the Board decided to keep the MPR at 1.75%.

Calibrating the monetary stimulus will pose a particularly big challenge going forward, and it will depend, among other factors, on the evolution of activity, the labor market, the exchange rate and inflation expectations. In fact, the Board estimates that there are scenarios in which growth can lie within the forecast ranges, but require a different MPR trajectory to ensure the convergence of inflation to the target.

On one hand, it is possible that the economy will perform below expectations. This could happen if investment is hurt beyond projections, for example if the large-scale mining projects and/or housing investments suffer a more pronounced adjustment. In a scenario like this, unemployment could increase even further and growth could fall in the bottom of the forecast range, increasing the probability of a recession (i.e. two consecutive quarters with a negative quarterly GDP variation) during 2020.

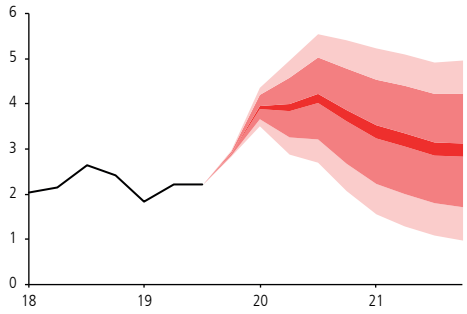
There are also scenarios of more intense pressures for a peso depreciation, due to, say, a resurgence of external uncertainty and/or a deepening of the local crisis. While this scenario would also imply a wider activity gap, it would be accompanied by a depreciation that would increase inflationary pressures. Finally, one cannot rule out a scenario where more significant labor cost pressures predominate, leading to higher unemployment and inflation, together with a deeper contraction of activity.

Although a scenario of lower uncertainty and more quickly restored confidence is also possible, the Board considers that, in the current context, scenarios of weaker activity and labor are more likely. In fact, if during 2020 growth stands on the lower bound of the range projected in this Report (0.5% to 1.5%), a

recession is highly probable, that is, two consecutive quarters with negative quarterly GDP growth (figure V.10). In any case, its effects on inflation are not obvious, because some of the scenarios where this situation could occur also entail stronger inflationary pressures. In fact, the Board estimates that there is symmetric probability of scenarios where inflation is higher or lower than the baseline estimate (figures V.11 and V.12).

Other scenarios exist where economic performance would escape these discussed projection ranges. For example, a deeper deterioration of consumption and investment fundamentals could result in a reduction in demand and trigger a more persistent period of economic contraction. To the extent that the deflationary pressures associated with that scenario —particularly the evolution of the activity gap— dominate the inflation dynamics over the policy horizon, this could use up an important part of the remaining monetary policy space. It is also possible that the economy's trend growth could be affected by a more sustained reduction in investment, the existence of distortions in the labor market and/or a deterioration in productivity. In such case, although the monetary impulse required to reach the inflation target would be lower, the convergence would occur with a lower level and pace of economic growth. A particularly worrying scenario could be one where regulatory changes lead to significant increases in labor costs, in a context of economic weakness. Although this could increase unemployment substantially and affect economic growth, the higher inflationary pressures would limit the countercyclical role of monetary policy.

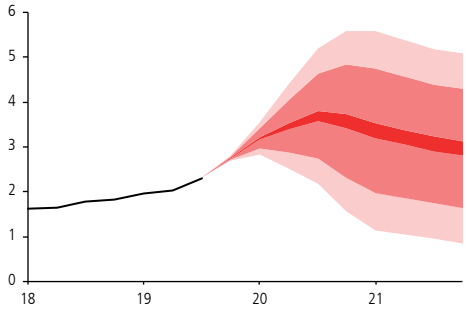
FIGURE V.11
CPI inflation forecast (*)
(annual change, percent)



(*) 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.

Source: Central Bank of Chile.

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.

Source: Central Bank of Chile.

BOX V.1
SOCIAL TURMOIL, UNCERTAINTY, AND ECONOMIC ACTIVITY: EVIDENCE, TRANSMISSION CHANNELS, AND POLICY IMPLICATIONS

This box presents a summary of the evidence on episodes of social turmoil and the channels through which they can affect economic activity. It also summarizes the resulting implications for economic policy.

The main facts that are highlighted in this literature review are, first, that the economic implications of the turbulence are limited when duration is brief. However, the costos increase considerably if the disturbances are longer-lasting and begin to affect consumer and business confidence. In this context, monetary policy becomes less effective than other stimulus measures, such as an expansion of fiscal policy.

Turmoil and economic activity: Evidence

There is a lot of heterogeneity in the types of social protests worldwide, their institutional contexts, and their underlying objectives. A first difference is the level of violence, ranging from peaceful protests to armed conflicts. A second difference is the political context, with some unfolding in a democracy, others under a dictatorship, and still others in a transition between the two. Finally, the underlying objectives can include anything from sectoral demands, income redistribution to deep political changes.

Despite this heterogeneity, the literature identifies some common elements in terms of the economic implications of social protests. First, the effects on economic activity have been fairly limited when the duration of the protests has been brief, even when accompanied by violence. Based on a sample of 90 countries in the 1974–2003 period, Jong-A-Pin (2009) shows that the effects of protests increase with duration. In another study, based on annual data for 183 countries in 1980–2010, Bernal-Verdugo, Furceri, and Guillaume (2013) find that in the short term, the effects of strikes and protests are between 0.3 and 0.6 points of lower annual growth. At longer terms, the effects remain moderate to the extent that the reforms adopted after the crisis improve governability and stability.

A specific example of a violent, but short-lived social disturbance is the recent case of France and the yellow vests movement, which began in November 2018. Over the course of nearly two months, there were violent demonstrations throughout the country, which were triggered by increases in gasoline costs and other redistributive demands. Despite the intense violence in Paris and other regions of the country, the short duration prevented the macroeconomic effects from becoming significant. The estimated cost was just 0.1 percentage points (pp) of lower growth in terms of quarterly GDP (IMF, 2019).

At the other extreme, the literature indicates that the macroeconomic costs of social protests can increase considerably if the violence continues over an extended period. Examples include the protests that occurred in several countries in North Africa and the Middle East in 2010, during the so-called Arab spring. In several of these cases, the violence lasted for months and even years, with major consequences for economic activity. In Tunisia, GDP suffered an average annual loss of 5.7 pp between 2011 and 2013 (Matta, Appleton, and Bleaney, 2016).

Khandelwal and Roitman (2013) study 11 episodes of political regime change in low- and middle-income countries, which were accompanied by massive protests. For these episodes, which include Argentina 2001–03, South Korea 1980–81, and South Africa 1990–94, the authors find that the loss in annual growth ranged from 1 to 7 pp, and the economies took up to five years to recover their historical long-term growth pace. The authors also show that inflation can increase due to the depreciation of the local currency. In five of the eleven cases studied, strong currency depreciations of 10 to 100% led to an increase in annual inflation of 7 to 17 pp. In the remaining six cases, the exchange rate did not depreciate substantially, and inflation only fluctuated 1 to –3 pp.

Turmoil and economic activity: Channels

There are at least three channels through which violent social turmoil can have real effects on economic activity.

A first channel, which operates in the short term, has to do with the disruption of production chains due to vandalism, looting, communication blackouts, and so forth. At the firm level, this has a direct impact on the main inputs: employment is affected because workers cannot get to their jobs or cannot do so regularly; physical capital is affected to the extent that the firm experiences looting or vandalism. At the level of the total production network, even businesses that do not experience losses in terms of capital or employment can face difficulties if the firms that supply their intermediate goods are weakened.

A second channel is uncertainty, which can have effects in both the short and medium terms if the turmoil is longer-lasting. Measuring uncertainty is not trivial. The literature uses indirect measures, such as the use of certain words alluding to uncertainty in newspapers and magazines; or through the dispersion of economic forecasts. In both cases, the uncertainty measures are found to be countercyclical: they rise when economic activity falls, and they also rise in response to bad news such as wars or terrorist events (Bloom, 2014). It has also been documented that when uncertainty rises, the number of firms facing adverse conditions increases suddenly and unexpectedly. This is known in the literature as rare disasters (see, for example, Gourio, 2012; Bloom et al., 2018; Kent and Phan, 2019). The next section addresses in more detail the mechanisms through which uncertainty shocks have adverse consequences for economic activity.

The final channel is related to the impact on long-term growth, which is associated with changes in political institutions generated by the events. Acemoglu and Robinson (2012) offer an optimistic perspective, arguing that to the extent that these events bring about a better distribution of political and economic power, they can lay the foundations for robust and sustainable economic growth. On the other hand, Aguirre (2016, 2019) shows that under certain conditions, violent conflicts can lead to institutional change in the other direction, reducing long-term growth.

Real effects of an uncertainty shock

As mentioned, various studies document how uncertainty generally spikes in response to events like those occurring in Chile since mid-October. The literature identifies two mechanisms through which this type of shock can affect economic activity, over and above the initial effects that caused uncertainty to rise.

The first mechanism operates through the increased benefits of waiting, in terms of decisionmaking by both businesses and households. On the firm side, the "wait and see" option becomes more advantageous for decisions on investment, hiring, capacity expansion, etc. If there are fixed costs or costs associated with backing out of a decision after the fact, the wait-and-see option is even stronger. On the household side, this option applies to the purchase of durable goods like houses, automobiles, furniture, etc. Moreover, heightened uncertainty regarding labor market conditions fosters cautious behavior on the part of families, who reduce their consumption and thereby contribute to a drop in aggregate activity under nominal rigidities (see, for example, Ravn and Sterk, 2017; Der Haan et al., 2017; Bayer et al., 2019). Thus, the individual decisions of many firms and households to reduce spending can imply a brake on aggregate investment, employment, and consumption.

The second mechanism is the effect on spreads. In the presence of risk aversion and an expansion of the set of possible tail events, there is an increase in default risk (bankruptcy), which raises spreads. This can amplify the brake on aggregate demand mentioned in the preceding paragraph.

Identifying and quantifying the real effects of an uncertainty shock poses important challenges, since it is possible that causality runs in the other direction—that is, the increase in uncertainty could be caused by the drop in economic activity. To address this, the literature incorporates structural approaches or the study of natural experiments. One example of the latter method is Baker and Bloom (2013), who use data on 60 countries between 1970 and 2012 for events such as natural disasters, terrorist attacks, or spontaneous political shocks that could not have been predicted. Using the associated volatility component in the stock market as a predictor of GDP growth in the periods following the event, they find that nearly half of the drop in aggregate output was associated with these events. Another important finding is that the more persistent the uncertainty shock, the larger the real effects.

Conclusions

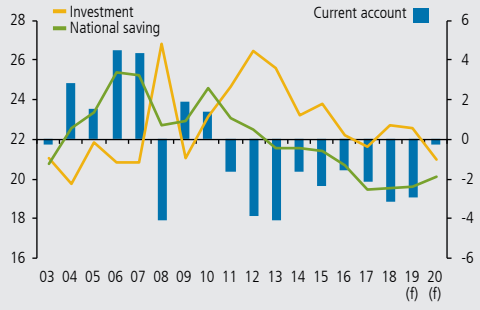
The increase in uncertainty deriving from violent social unrest affects the traditional mechanisms through which monetary policy operates, which can reduce its effectiveness. In such situations, other macroeconomic stimulus tools that have a more direct impact on aggregate demand will be more effective. One example is countercyclical fiscal policy, as recently announced by the government.

BOX V.2
RECENT EVOLUTION OF THE CURRENT ACCOUNT

In recent quarters, the current account has recorded a trend of increasing deficits. Taking the accumulated balance in the last rolling year, the deficit, which was around 2% of GDP between the second half of 2015 and the third quarter of 2018, increased to 3.5% of GDP in the third quarter of 2019. This trend could increase sensitivity, given that this variable is a key indicator of external vulnerability. This box examines the composition of the current account and finds that the deficit level should not be a source of concern, since the need for external financing is largely tied to mining investment by nonresident firms. In addition, the strong adjustment in domestic spending since the start of the social crisis, as well as the real exchange rate depreciation, will bring the current account to levels around zero in 2020.

After several years of a current account surplus, the balance of payments began to record deficits in 2011. This reflected both an increase in mining investment in the country and the maintenance of saving (figure V.13)[1]/.

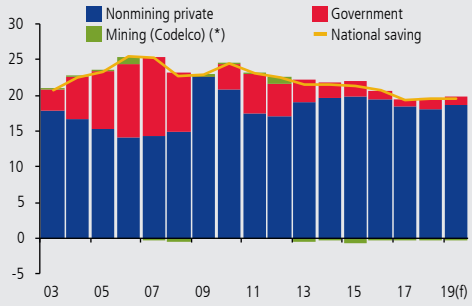
FIGURE V.13
Current account, national saving, and investment
(percent of nominal GDP)



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

With regard to saving, the level in the nonmining private sector increased steadily in the 2012–2015 period, reaching nearly 20% of GDP (figure V.14). Subsequently, with the slowdown of the economy, private spending grew faster than income. This reduced the saving rate, which is expected to be around 18% of GDP this year. Despite this decline, the nonmining private saving level remains slightly above the average of the last 15 years. Mining (Codelco) reduced its saving sharply between 2012 and 2015—due to the drop in the copper price—and then recovered steadily starting in 2016[2]/. With regard to the government, after the international financial crisis of 2008–09, the saving rate recovered to around 5% of GDP in 2011 and then began to decline in 2012. It has recently stabilized at around 1.2% of GDP.

FIGURE V.14
National saving by economic agent
(percent of nominal GDP)



(f) Forecast.
(*) For Codelco, retained earnings are calculated as the annual difference in accumulated gains/losses based on the company's financial statements.
Sources: Central Bank of Chile and Codelco.

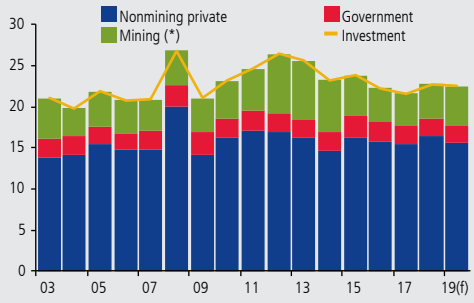
[1]/ The evolution of the current account of the balance of payments reflects the difference between investment carried out in the country and saving on the part of residents. In this sense, a current account deficit shows how much external saving is required to finance domestic investment.

[2]/ Calculating the national saving of the mining sector would require using the retained earnings of resident mining companies. Given the difficulty of that calculation, only Codelco is used. The undistributed earnings of nonresident private mining companies are not considered national savings.

The investment rate decreased steadily between 2011 and 2017 (figure V.15). This decline is mainly explained by the strong contraction in the mining share, associated with the end of the upward phase of the copper price cycle and, to a lesser extent, by a drop in the investment rate in the nonmining private sector. In the most recent period, the slight uptick in investment is being driven by a new expansion of the mining component.

The above discussion shows that a significant share of the current account deficit is associated with mining investment, such that the deficit level does not necessarily represent a vulnerability. It is mainly being financed by foreign investment—capital increases, loans between related companies, and the reinvestment of profits. The baseline scenario in this Report projects weak domestic demand in 2020 and a reduction of the current account deficit. This reflects a sharp drop in nonmining private investment and an increase in nonmining private saving. The adjustment in the nonmining private sector will be partially offset by net government saving, which will become more negative, based on the set of fiscal spending measures announced over the past few weeks. Mining investment, in turn, is expected to remain around the levels recorded over the past few years (figure V.16).

FIGURE V.15
Investment by economic agent
(percent of nominal GDP)

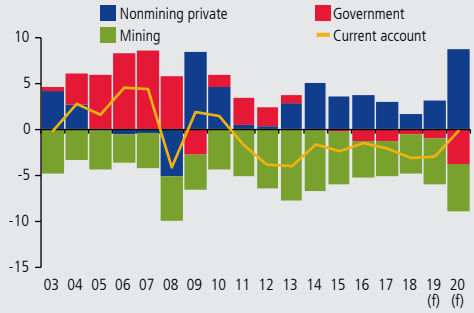


(f) Forecast.

(*) Mining investment is based on mining GFCF. In annual terms, data published in the investment matrix by economic activity are used through 2017. The 2018 and 2019 estimates are based on financial statements (plant and equipment).

Source: Central Bank of Chile.

FIGURE V.16
National saving less investment
(percent of nominal GDP)



(f) Forecast.

Source: Central Bank of Chile.

GLOSSARY

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.

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 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.

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.

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 2019, 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.

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).

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).

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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