MONETARY POLICY REPORT

December 2020

MONETARY POLICY REPORT
December 2020

CONTENTS [1,2]/

[1]/ This Monetary Policy Report's statistical cutoff date was 2 December 2020, except where otherwise indicated herein. The Report also takes into account the monetary policy decision announced on 7 December.
[2]/ This document was originally written in Spanish. In case of discrepancy or difference in interpretation, the Spanish version prevails.

PREFACE

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

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

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

This Report was approved at the Board's meeting on 7 December 2020 for publication on 9 December 2020.

The Board

SUMMARY

Both the local and international economic scenario continues to be determined by the evolution of persons' mobility and its relationship with the pandemic. In Chile, despite a decline in infections and increased mobility with respect to mid-year, improvements in activity, have been slower than foreseen in September. This has been especially significant for the sectors most affected by social distancing, such as construction and a good fraction of services. The anticipated withdrawal of pension funds has led to temporary increases in consumption, especially of imported goods, which have had a positive impact on sectors such as trade, while also putting pressure on the prices of the most in-demand products. Investment, beyond the reactivation of public and private projects, is being affected by the financial situation of companies and the persistent uncertainty. The labor market has shown some recovery, with an increase in employment compared to mid-year. The recently announced rollback of the Metropolitan Region to phase 2 of the step-by-step plan to unwind the confinement measures may hold back somewhat the process of economic recovery, but may also reduce the risk of tougher measures later on. Going forward, the central scenario foresees that the economy will continue to improve, mobility constraints will not go back to the levels of mid-2020, and that the fiscal and monetary stimulus will go on. Even so, the erosion caused by the sharp drop in activity and the need to use public and private strenghts to overcome the emergency has increased exposure to risk scenarios and poses significant challenges for the economy to return to near-trend growth rates.

The global economy has further recovered from the pandemic-related shock, in a context of increased mobility and continued efforts to combat the disease. After falling due to the resurgence of infections in the United States and Europe, international financial markets have seen a significant recovery, reacting to news of successful vaccine trials. Activity, employment, and income figures exceeded expectations in a significant number of countries, despite big differences across sectors, with trade in tradable goods contrasting with trade in services. China has led the recovery, with several indicators already matching or exceeding their pre-pandemic levels. This has contributed to the dynamism of international trade in goods, which has been more resilient than previously estimated and has affected positively some variables such as the copper price, consolidating it above US$3 per pound. Even as the worst of the economic crisis is left behind and the reality of a vaccine takes shape,

fiscal and monetary support will still be necessary to ensure a less burdensome outcome for the productive system and large sectors of the population.

Chile has mirrored the world's mobility trends and economic performance. Compared with mid-year, a significant part of the country emerged out of the heavier confinements, with increased mobility and reopening of several economic activities. However, the remaining sanitary restrictions mean that sectors such as services and construction continue to be severely affected, delaying recovery. In contrast, manufacturing activity has already reached its pre-pandemic levels, and trade has even surpassed them. The latter has been heavily driven by the withdrawal of pension savings, with sales reaching record highs in lines such as home equipment, clothing and footwear, and construction materials. There are also differences among regions of the country, related mainly to the timing of the quarantines.

The strong impulse to the consumption of durable goods resulted in a significant depletion of inventories in some product lines, putting pressure on their prices. This, in a context where imports have dropped significantly throughout 2020. In the November Business Perceptions Report, companies reported difficulties in meeting the greater demand, in part due to the lower inventories foreseen for this year, some logistical constraints and uncertainty in programming their purchase and import orders and/or in anticipating greater sales. All this helps to explain the high and unexpected monthly CPI variations of September and October, which were partly offset in November. The baseline scenario considers that in the immediate future consumption will continue to be driven by the withdrawal of pensions funds, although the impact of the second withdrawal is expected to be weaker than the first. To some extent, this responds to the fact that the drop in income caused by the pandemic has already been more than compensated by earlier measures, and because the withdrawable resources are concentrated in the higher quintiles, which are less motivated to use them in consumption. The combined effect of labor income recovery, government transfers and pension savings use is foreseen to increase private consumption by around 11% in 2021, after losing nearly 7% in 2020.

The greater mobility and the sectoral disparity of the economic recovery have also reflected in the labor market. Incoming data show that about one third of the jobs lost during the pandemic have been recovered. Employment growth has been slower in services, which are more labor-intensive. It is noteworthy that the increase in employment has been significantly less beneficial to women. Indeed, in the last year, the rate of women's participation has dropped by about 9 percentage points, citing as the main reason their family responsibilities.

Investment has seen some improvement recently, favored by the gradual resumption of construction and other works, although still behind schedule. After falling 13% this year, in 2021 gross fixed capital formation is projected to increase 7.3%. This projection is subject to higher than usual degrees of uncertainty. The surveys on prospects and indicators of the evolution of the prices of copper and financial assets paint a mixed picture. In addition, the financial situation of companies, affected by falls in profits and greater indebtedness, could limit their capacity to embark on new projects. Added to this is the still high level of uncertainty regarding the evolution of the sanitary situation, the pace and composition of growth, as well as the fear of renewed episodes of violence such as those of late 2019.

Summing up, the economy has improved after its sharp contraction of the second quarter, and the measures adopted to support households and credit have succeeded in limiting the threat that it posed on the people's well-being and the firms' solvency. However, the extension of sanitary constraints, the sluggish recovery of the hardest-hit sectors and the repercussions of the crisis have had a negative impact on the recovery's dynamics, affecting not only aggregate demand, but also the supply's capacity to respond. As a result, this year activity will post a deeper drop than was estimated in September.

Economic activity will continue on a path of gradual recovery in the next few quarters, and is still expected to return to September 2019 levels only by 2022. This considers that the evolution of the pandemic will allow for greater mobility than its mid-2020 levels, and that during 2021 the vaccination process will progress as indicated by the Government. The withdrawal of pension savings will have a significant effect on consumption and trade-related activities next year. The fiscal stimulus will continue to be positive, in line with the approved budget. The economy will receive a somewhat greater than expected boost from abroad, with our trading partners growing by an average of 4.9% in 2021-2022, and the copper price averaging US$3.15 per pound in the same period. All considered, our projections are that, after falling between 6.25% and 5.75% this year, the Chilean economy will grow between 5.5% and 6.5% in 2021, and between 3% and 4% in 2022.

The boost to tradable goods consumption coming from the withdrawal of pension savings has prompted an increase in some prices in recent months, driving inflation above expectations. However, these price increases will hardly have an impact on medium-term inflation given the wide gap in activity that the pandemic has opened up. In fact, the reversal in November of many of the increases of earlier months confirms the volatile and transitory nature of these surprises. Annual inflation is expected to hover around 3% for several quarters, consolidating its convergence to the target by 2022. This scenario assumes that the inventory restocking will eventually normalize the supply of goods, and the gradual reopening of the economy will result in increased supply of services.

The Board reiterates that the strong monetary stimulus will be maintained over a prolonged period of time, in order to ensure the

INTERNATIONAL SCENARIO ASSUMPTIONS

	Avg. 10-19	2020 (f)	2021 (f)	2022 (f)
	(annual change, percent)			
Terms of Trade	1.3	6.8	2.3	-2.4
Trading partners GDP (*)	3.8	-2.7	5.5	4.2
World GDP at PPP (*)	3.7	-4.0	5.4	4.5
World GDP at market exchange rate (*)	3.1	-4.1	4.9	4.3
Developed economies' GDP at PPP (*)	1.9	-5.4	4.1	4.2
Emerging economies' GDP at PPP (*)	5.0	-3.0	6.3	4.6
External prices (in US$)	0.6	-1.6	5.2	2.2
	(levels)			
LME copper price (US¢/lb)	306	280	320	310
WTI oil price (US$/barrel)	72	39	45	47
Brent oil price (US$/barrel)	80	42	48	51
Gasoline parity price (US$/m3) (*)	610	331	361	405
Fed Fund Rate (%)	0.7	0.5	0.3	0.3

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

Source: Central Bank of Chile.

ECONOMIC GROWTH AND CURRENT ACCOUNT

	2019	2020 (f)	2021 (f)	2022 (f)
	(annual change, percent)			
GDP	1.1	-6.25/ -5.75	5.5- 6.5	3.0-4.0
National income	0.8	-4.8	7.0	3.0
Domestic demand	1.0	-9.1	9.4	2.9
Domestic demand (w/o inventory ch.)	1.5	-7.8	9.6	2.5
Gross fixed capital formation	4.2	-13.0	7.3	5.1
Total consumption	0.8	-6.3	10.3	1.8
Goods and services exports	-2.3	-1.7	4.3	4.8
Goods and services imports	-2.3	-12.6	16.0	3.4
Current account (% of GDP)	-3.9	0.9	-1.5	-1.8
Gross national saving (% of GDP)	18.9	19.7	17.0	17.6
Gross national investment (% of GDP)	22.8	18.9	18.5	19.4
GFCF (% of nominal GDP)	22.4	20.5	20.6	21.2
GFCF (% of real GDP)	21.8	20.2	20.4	20.8
	(US$ million)			
Current account	-10,900	2,200	-4,400	-5,500
Trade balance	4,200	16,500	12,300	11,800
Exports	69,900	71,100	80,200	83,200
Imports	65,700	54,600	67,900	71,400
Services	-5,100	-4,700	-5,500	-6,300
Rents	-11,400	-10,700	-12,600	-12,500
Current transfers	1,400	1,100	1,400	1,500

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

INFLATION (1)

	2019	2020 (f)	2021 (f)	2022 (f)
	(annual change, percent)			
Average CPI	2.3	3.0	2.8	2.8
December CPI	3.0	2.8	2.6	3.0
CPI in around 2 years (2)				3.0
Average core CPI	2.3	2.7	3.2	2.8
December core CPI	2.6	3.2	2.7	3.0
Core CPI in around 2 years (2)				3.0

(1) Core inflation is measured using CPI excluding volatile

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

(f) Forecast.

Source: Central Bank of Chile.

consolidation of the economic recovery and compliance with its objectives. In particular, it foresees that the MPR will remain at its minimum level over most of the two-year monetary policy horizon. Unconventional measures will remain in place. This considers that the total stock of bank bonds acquired under various programs —near US$8 billion— will continue over the next six months, reinvesting the coupons as they mature. This excludes the purchases made under the CC-VP program. With respect to the FCIC facility, the Board decided not to make changes in the total of available resources and conditions for its utilization. However, it will evaluate its possible extension and changes in access parameters that facilitate its use in response to the needs of the economy at this stage.

The macroeconomic scenario continues to display more uncertainty than usual, with forecasts highly conditioned to the evolution of the pandemic and its effects on the income of firms and individuals. The risk of a significant increase in infections is fully present and could have significant economic effects if thighter sanitary measures need to be reinstated. Should such a scenario become true, it would be necessary to explore actions to increase the monetary impulse. Into the medium-term, however, such a scenario will be less severe in view of the advances made in developing a vaccine. In fact, should a vaccine be made available sooner, herd immunity could be achieved earlier in the country, allowing some supply constraints to be removed, so expectations and demand would recover more quickly and robustly. To the extent that the dominant factor in these scenarios is the recovery of supply, the monetary policy trajectory may not deviate significantly from the central scenario. On the other hand, if investment remains weak beyond projections, owing to factors of uncertainty and/or the after-effects of the pandemic, the lower demand could ease medium-term pressures on inflation. This would imply leaving the MPR at its technical minimum for a longer time, opening up the possibility of increasing the use of unconventional measures.

Although the sanitary risks seem to be more balanced, in particular in the medium term, the consequences of the crisis point to an economic environment where risks are unbiased for inflation, but downward biased for activity. The economy is undergoing a recovery process that faces both the challenges posed by the evolution of the pandemic and the political situation associated with the social crisis that broke out just over a year ago. The central scenario assumes that the latter will continue to follow the institutional path approved in Congress. It must be noted that the government, firms, households and financial institutions have weathered the pressures of the last fifteen months by making extensive use of the strengths accumulated in previous years, deteriorating their asset position. This, as has been pointed out in previous reports, increases the country's exposure to negative scenarios, which could significantly compromise the recovery of the economy and have severe consequences on the well-being of families and the viability of many businesses. Monetary policy will continue to sustain the economy’s recovery by ensuring adequate financial conditions for households and firms, keeping inflation under control and safeguarding financial stability.

MONETARY POLICY DECISIONS IN THE LAST THREE MONTHS

September meeting

For the September MP Report, the macroeconomic scenario was still dominated by the advances of Covid-19 and the necessary containment measures to protect the health of the population. After a sharp initial decline, the Chilean economy was showing signs of stabilization, supported by a better sanitary response, a faster adaptation to the new operating conditions of several activities and the impulse of the various actions taken. However, the shock caused by the pandemic was very significant and a large number of people and companies had seen their source of income disrupted.

Although activity had recovered in especially hard hit sectors, such as retail, others—including construction—, were still badly affected by the geographic and time extension of the quarantines. The contraction of activity and employment was particularly sharp in areas intensive in social contact, directly affecting the income of their employees. On the aggregate demand side, consumption and investment had been depressed by the loss of income, limitations on social interaction and high uncertainty.

However, the outlook for consumption had improved thanks to a number of support measures introduced in the third quarter. One important development was the approval of the withdrawal of a portion of pension savings, involve resources estimated at roughly 6% of GDP, of which nearly half would be allocated to consumption. In any case, the impact of this measure was limited by its transitory nature and the weight of imported goods in the composition of the higher demand. The Central Bank, other regulators, and the AFPs had implemented a number of measures and a portfolio management strategy that had mitigated the impacts on local markets of said partial withdrawal of pension funds.

Considering the performance of the economy in the second quarter, the gradual lifting of the most stringent sanitary measures and the temporary boosting of income support policies, the projection scenario lowered the estimated contraction of the economy in 2020, to a GDP drop in the 4.5% to 5.5% range. This range was still wider than usual, reflecting the greater uncertainty surrounding the effects of the pandemic. In 2021 and 2022, GDP would grow between 4% and 5%, and between 3% and 4%, respectively. These rates were consistent with a sanitary scenario that allowed for gradual deconfinement, where economic sectors continued to adapt their operations to carry out their activities and where credit would continue to flow to support the recovery process. The projections also assumed an institutional channeling of the social crisis that begun in late 2019.

Inflation would converge to 3% by 2022, and would not fall below 2% annually in the short term. Core inflation would remain above 2.5% in the short term, to gradually converge to 3%, also in 2022.

In this context, at the September Monetary Policy Meeting, the Board kept the monetary policy interest rate (MPR) at 0.50% and decided to maintain the unconventional liquidity and credit support measures. It also reiterated that it would maintain the high monetary stimulus policy for a prolonged period of time, in order to ensure compliance with its objectives. In particular, it anticipated that it would keep the MPR at its minimum for much of the two-year monetary policy horizon and maintain the unconventional measures in place. In particular, it would continue with its asset purchase program defined in June, reactivating its bank bond component at market prices. In addition, should economic developments so require, it would continue to consider options for adjusting this stimulus and supporting financial stability.

October meeting

At this meeting, external incoming economic indicators were showing some moderation in the pace of recovery, especially in the developed economies, in a context where the resurgence of Covid-19 cases had called for the implementation of intermediate containment measures, with a lower incidence of critical cases in those countries. In the emerging world, worth noting was the dynamism of China's activity and demand indicators, which had allowed the copper price to remain around

US$3 per pound. In Latin America, by comparison, the recovery process was lagging behind, with different epidemiological, economic and social situations among countries, also reflecting the different intensities of their policy responses.

In this context, the financial markets had shown higher volatility, influenced not only by the sanitary situation, but also by events in the global political and economic sphere. With respect to the last Meeting, there had been minor falls in stock prices, currencies had depreciated against the dollar and risk premiums had fallen somewhat. In the Chilean market, the rise in long-term interest rates, the decline in stock prices and the depreciation of the peso stood out.

In terms of activity, August's Imacec posted an 11.3% annual fall in domestic activity in the month, contracting more than expected by the market, although with increasing speed compared to the previous month: 2.8% month-on-month in de-seasonalized terms. Aside from mining, sectors such as services and construction continued to exhibit markedly negative annual variations. In contrast, retail had continued to see significant improvement, reaching the first positive figures in the annual comparison since February. Qualitative information compiled in the interviews for the Business Perceptions Report (IPN) reflected that the outlook for activity was strongly associated with the temporality of the pandemic´s cycle and respondents continued to report a high level of uncertainty.

The labor market had shown signs of further stabilization, with a slight recovery in employment and hours worked in the moving quarter ending in August. Both the Central Bank's Internet job ads index and the hiring expectations had recovered partially, which, together with the advances in the deconfinement process and the government's employment subsidy measures, led to expect further improvements in this area in the coming months. In this context, business and consumer expectations had continued to recover, despite persisting on pessimistic territory.

Although annual growth rate in commercial credit remained higher than early in the year —due to the strong impulse coming from the measures implemented— its dynamism had declined. The annual variation in consumer loans continued to contract and that of mortgage loans had stabilized at the margin. The Bank Lending Survey of the third quarter had again reported tighter supply conditions for all credit categories. In addition, qualitative information collected under the IPN indicated a lower demand for new loans by businesses. This could be because they had already obtained one, their financial situation had improved, or they did not want to increase their indebtedness in the face of perceived uncertainty.

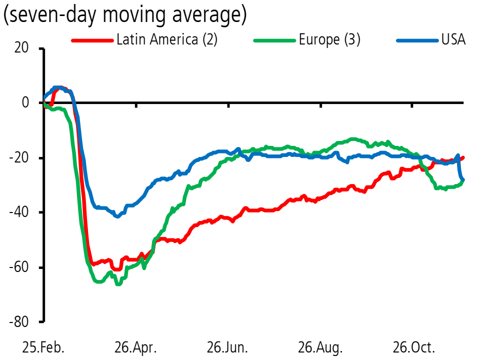
Between August and September, headline inflation had risen to 3.1% annually and its core component to 2.9%. This increase was mainly explained by the prices of goods and foodstuffs in September, which had brought the monthly CPI change to 0.6%. This evolution was mainly consistent with the temporary boost to the consumption of goods linked to the partial withdrawal of pension savings and to some short-term constraints in supply to satisfy this demand.

All five Board members agreed that, although the global and local economy had evolved in line with the September forecast, the overall risks remained significant with generally negative implications. Thus, the macroeconomic context produced by the pandemic only stressed the message that monetary policy would remain highly expansionary for an prolonged period of time. This implied maintaining the MPR at its technical minimum for several quarters and the prevailing unconventional measures in place. The Board agreed that in the medium term it would be essencial to be alert for events that could create instability in the financial markets, reacting in an effective and timely manner.

In this scenario, the Board unanimously decided to keep the monetary policy rate at 0.5%, noting that it would be maintained at this level for an prolonged time period. It also agreed to maintain the unconventional liquidity and credit support measures in place.

I. INTERNATIONAL SCENARIO

Figure I.1
Mobility (1)
(seven-day moving average)



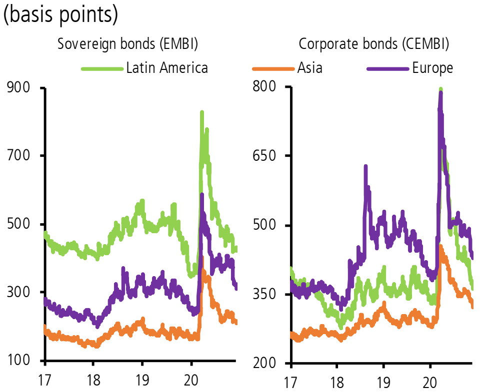
(1) Corresponds to the average of categories retail and leisure, grocery and pharmacies, transit stations and workplaces.

(2) Simple average between Chile, Argentina, Brazil, Mexico, Colombia and Peru.

(3) Simple average between Germany, Spain, France, Italy and the United Kingdom.

Source: COVID-19 Community Mobility Reports, Google.

Figure I.2
Emerging market spreads
(basis points)



Source: Bloomberg.

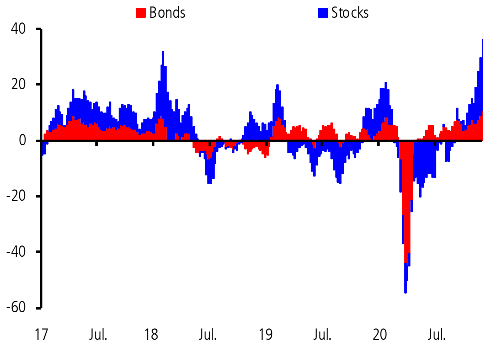
This chapter analyzes the recent evolution of the world economy and the outlook for the next two years and describes the most probable external scenario and the main risks

Global activity is steadily recovering from the shock caused by the Covid-19 pandemic, in a context of increased mobility and the struggle against the disease continues. Data on activity, employment and income exceeded expectations in an important number of economies, but the recovery process is heterogeneous across countries and economic sectors, and is exposed to the effects of the new outbreaks seen in the United States and parts of Europe. China shows a sustained and widespread improvement, which has been permeating other economies through the upturn in international trade in goods. This has also favored the prices of commodities, particularly copper, which, coupled with higher growth in trading partners, anticipates a rather stronger than expected external boost to the Chilean economy. International financial markets have shown a significant recovery in the last month and financial conditions for emerging economies remain favorable, amid the high monetary stimulus. The outlook for global activity will continue to be determined by the evolution of the pandemic, with opposing effects from new outbreaks and advances in vaccines.

Covid-19 is still present worldwide, although mobility indexes have recovered from the lows of the early stages of the pandemic. With major outbreaks in the US and parts of Europe, more stringent measures have been reinstated. However, these have been less severe, more focused —mainly on services that rely more on direct human contact— and have been applied more gradually than they were for the first wave. Partly, this obeys to better prepared sanitary systems and greater testing and tracking capabilities. Thus, the decline in mobility has been moderate, which, combined with businesses' and households' adaptation, would lead to a much more moderate slowdown in activity (figure I.1). Meanwhile, in recent weeks there has been significant progress in finding a vaccine, with several in advanced stages of development and highly effective, possibly with early medical approval for mass use in the population that would impact global activity most dramatically as from the second half of 2021 (Box I.1). The financial markets have responded positively to

Figure I.3

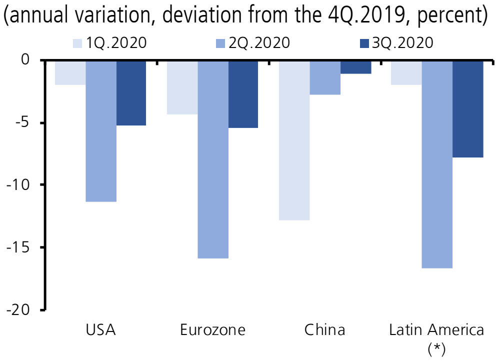
Net capital flows to emerging economies
(US$ trillions, four moving weeks)



Source: Emerging Portfolio Fund Research.

Figure I.4

Selected economies: GDP
(annual variation, deviation from the 4Q.2019, percent)

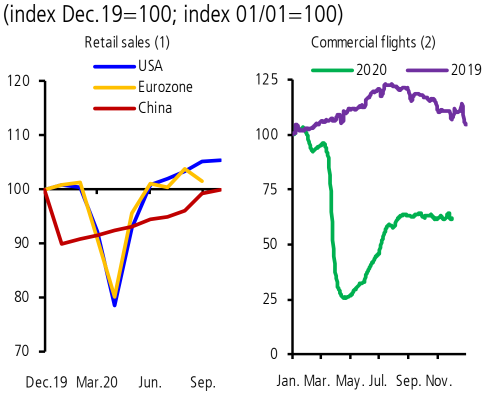


(*) Includes Argentina, Brazil, Colombia, Mexico and Peru, weighted at PPP using data from the World Economic Outlook (WEO, October 2020). For Argentina, the 3Q.2020 figure corresponds to the average of the annual variations of the EMAE between July, August and September. For Brazil, includes GDP for the third quarter published on 12/03/2020.

Sources: Bloomberg and International Monetary Fund.

Figure I.5

Trade and services indicators
(index Dec.19=100; index 01/01=100)



(1) Monthly series seasonally adjusted

(2) Seven-day moving average.

Sources: Bloomberg and Flightradar24.

these developments, with increased appetite for risk and triggering a global rebound in stock markets and commodity prices. In emerging economies, have also been observed lower risk premiums, capital inflows and appreciated currencies with respect to the dollar (figures I.2 and I.3). Long-term interest rates showed mixed variations and persisted around their historic lows. Even so, uncertainty in the sanitary and economic spheres continues to imprint some volatility.

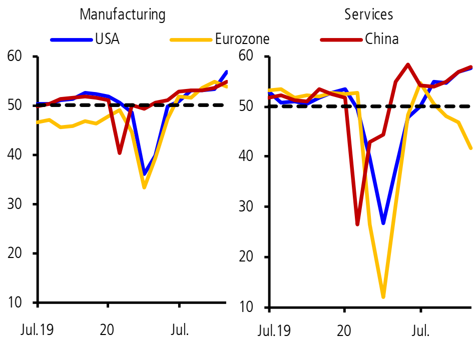
In this context, the world economy has continued to recover, with third quarter activity and demand indicators showing a significant upturn and positive surprises in several economies (figure I.4). In any case, the pace of recovery has been different across sectors and countries. The good performance of trade —retail sales surpassed their pre-pandemic levels in several economies— contrasts with services that rely more on personal interaction, which are still far below those of the beginning of the year (figure I.5). Actually, the short-term outlook for the latter has deteriorated in Europe as sanitary restrictions were reinstated that affect them most (figure I.6). The labor market has continued to recover, with unexpectedly high employment and income figures, although there is still room for improvement.

China has spearheaded the recovery in activity, which has been more widespread in its economy —in components such as investment, consumption and foreign trade— and has been spreading to other economies, especially in Asia (figure I.7). Many of its activity and demand indicators matched or exceeded their pre-pandemic levels. Investment has been the main driver of the upturn, especially in connection with public infrastructure, which has reflected in manufacturing production, business prospects and imports, particularly of steel. The labor market has also been recovering, giving an additional boost to consumption and improving its prospects. The external sector has also contributed to the recovery with increased demand for goods, such as health care and electronic products.

Trade in goods has recovered faster than in the global financial crisis of 2008-2009, while trade in services has been slower to recover. This has especially benefited economies whose export basket contains a larger share of consumer goods and commodities, such as countries in Asia and emerging Europe and Latin America (figure I.8). This has also been visible in the industrial production of consumer and durable goods, supporting their recovery. Among the factors that would explain these dynamics are (i) the change in people's preferences, favoring the consumption of goods; (ii) income support policies; (iii) sanitary restrictions on the supply of some services; (iv) the recovery of investment in China and its boost to trade in commodities; and (v) the role of the significant monetary stimulus (Box I.2). This is consistent with the WTO's reduction in the contraction of world trade in goods expected for this year.

Figure I.6

PMI (*)
(diffusion index)

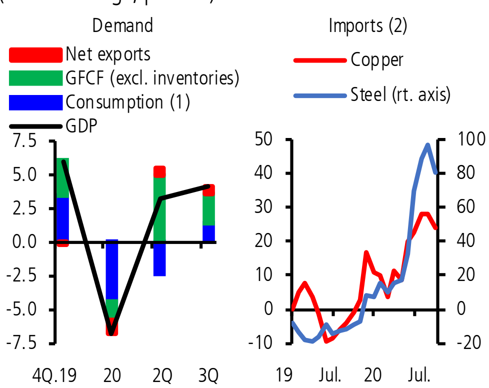


(*) A value under (over) 50 indicates pessimism (optimism).

Source: Bloomberg.

Figure I.7

China: demand and imports
(annual change, percent)



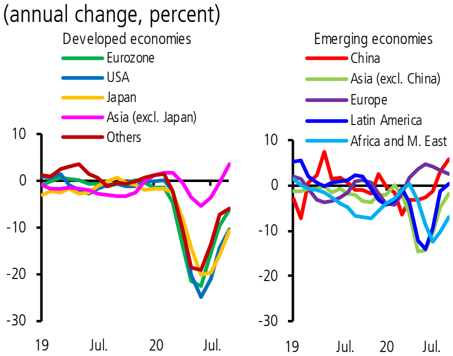
(1) Includes government consumption.

(2) Three-month moving average.

Source: Bloomberg.

Figure I.8

Real exports of goods (*)
(annual change, percent)



(*) Three-month moving average.

Source: CPB World Trade Monitor.

The prices of most commodities have been improving along with the upturn in activity and world trade. The copper price has exceeded US$3 per pound and higher levels are projected for the next two years: US$3.15 per pound for the average 2021-2022 (US$2.85 in September). Lately, the oil price has coupled with this trend, thanks to better prospects for passenger travel following positive news about vaccines. In any case, it will continue to recover more slowly than other commodities, and no significant change is expected. Thus, at the statistical close, the average price per barrel (Brent-WTI) was around US$45 and projections continue to be around US$48 for the period 2021-22 (figure I.9).

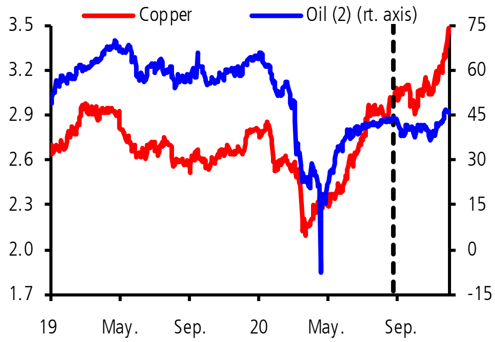
Financial conditions for emerging economies continue to be expansionary, amid the significant monetary impulse. This has allowed for a sharp increase in government and corporate sector borrowing as a mechanism to adjust to the economic impacts of the pandemic, keeping corporate risk-free rates and spreads low. The central banks of developed economies have made no major announcements and have maintained the high monetary impulse. Lately, commercial credit has been slowing down in several economies, amid increased income flows that have allowed for greater mobility and higher levels of corporate debt (figure II.3).

Inflation has behaved unevenly from one country to another, with a greater deceleration in developed than in emerging countries. In the former, inflation has decreased both because of lower energy prices and low core figures. The latter responds to lower demand for services that have been curtailed to contain the Covid-19, which has spurred expectations of further monetary expansion. In the emerging world, core inflation has remained more stable due to the impact of the depreciation of their currencies on the prices of tradable goods. Finally, food inflation has been stabilizing globally after the fluctuations that began with the pandemic, although it rose again in some emerging economies. The international price of most food commodities increased again, due to supply restrictions resulting from climatic factors and some rebound in demand.

Chile's external scenario looks somewhat better. This is mainly explained by the higher effective figures of our trading partners, which compound with a recovery rate that is expected to be similar to the September forecast. This is partly due to the significant monetary and fiscal stimuli still in place. Although the latter have been scaled down in some economies —notably in the United States, where Congress has not yet decided on the size or timing of a possible second stimulus package— the magnitude of transfers in the first half of the year, together with the sharp drop in consumption of services, has meant significant increases in household savings in the major economies. This would contribute to the recovery process once the large-scale application of the vaccine releases the sanitary restrictions and

Figure I.9

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



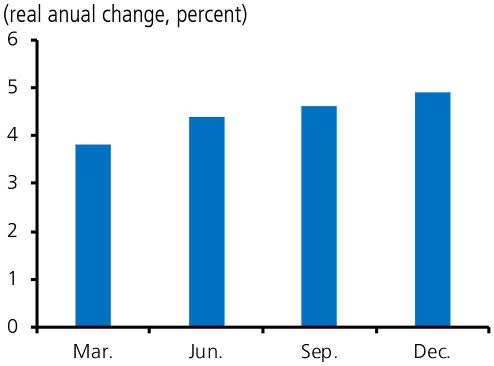
(1) Vertical dotted line marks the cutoff date of the September Report.

(2) Simple average of Brent and WTI oil prices.

Source: Bloomberg.

Figure I.10

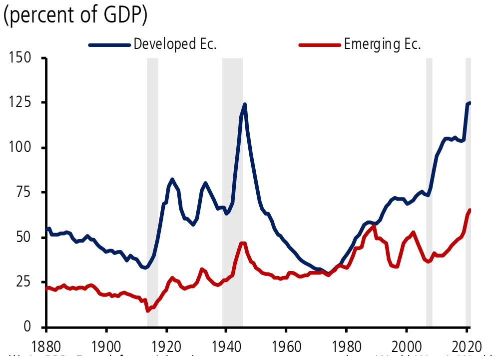
Trading partners growth in 2021-2022 in the last Reports
(real anual change, percent)



Source: Central Bank of Chile.

Figure I.11

General government debt (*)
(percent of GDP)



(*) At PPP. From left to right, the gray areas correspond to: World War I, World War II, Global Financial Crisis, and Covid-19 Crisis.

Source: International Monetary Fund.

reverses the precautionary behavior that has inhibited the demand for services. Together, these elements explain the upward revision to the trading partners' growth forecast for this and next year —up to –2.7 and 5.5% per year in each case; –3.5 and 4.7% per year in September, respectively. For 2022, it is slightly adjusted downwards to 4.2% per year (–0.3pp with respect to September). As a result, trading partners will average higher growth over the 2021-2022 period (figure I.10).

The risks of more negative scenarios on the external front have been decreasing due to cumulative expertise in pandemic management and advances in vaccine development, even fueling more favorable scenarios. In the sanitary field, there is a possibility that herd immunity could be achieved sooner than expected, allowing a faster control of the pandemic. However, it cannot be ruled out that in the meantime, new waves of infections —or a worsening of existing ones— will make it necessary to resort to more limiting sanitary responses that might hinder the recovery of the world economy and inflict longer-lasting scars. In fact, a more concrete assessment of the latter is still pending, to determine how much of economic activity was lost to the pandemic, what impact it had on human and physical capital, and how it might be restored. The impact of increased public and private indebtedness on future investment, hiring and growth possibilities, and/or by causing greater vulnerability to more negative scenarios, also needs to be examined (figure I.11). Another important challenge will be how and when to withdraw the significant fiscal and monetary support measures, so as to avoid negative repercussions on financial stability and the recovery of activity.

Box I.1: **Vaccines, outbreaks and expected impact on activity**

News regarding the development of Covid-19 vaccines seems to lessen the medium-term risks concerning the control of the disease. In fact, health authorities in Chile and other countries have said that the vaccination process is expected to begin soon, and it is possible that in the course of 2021 several countries will achieve herd immunity[1]/. Yet, in the short term, the risks remain, as until such immunity is achieved, the possibility of further outbreaks is still there. What is happening in much of Europe and the United States is a good example of how a second wave could affect our economy in the coming months. In these cases, the reaction of the sanitary authorities has been less drastic than at the beginning of the pandemic, the constraints have been more focused and not as severe, the impacts on mobility have been milder as have the effects on activity. This Box describes advances in vaccines and the recent trends in outbreaks and control measures, as well as the expected impact on activity.

Developing a vaccine

During November, four laboratories reported successful results in vaccine development, which were announced with the publication of positive results from Phase III of the process. Three of them showed effectiveness above 90% (Pfizer BioNTech, Moderna and Gamaleya) and a fourth one reported 70% effectiveness (AstraZeneca).

If approved by the health authorities soon, which is already happening in some countries, these laboratories would be able to produce and deliver doses to vaccinate about 2% of the world's population in the remainder of 2020 and about 46% next year. This would mean that a large part of the population at risk would be inoculated in the coming months and several countries would achieve herd immunity in 2021[2]/. This process will take place at different speeds throughout the world, depending on the production capacity of the laboratories, their agreements with governments, their distribution and application capacity, and the people's willingness to be vaccinated. In connection with this, based on a survey of more than 13 thousand people in 19 countries, Lazarus *et al.* (2020) report that 47% of respondents would definitely get vaccinated if they could and 25% probably would, although this varies across countries, which may slow down the vaccination process in some places. In addition, to build immunity, vaccines will generally require two doses administered within a few weeks, which will require a stronger commitment from the population for them to be effective.

The Chilean government recently announced that the vaccination process will begin during the first quarter of 2021 and will provide for the vaccination of 15 million people. The government has signed and pre-signed contracts with five different laboratories, including the aforementioned Pfizer and AstraZeneca.

The pace of the vaccination process will determine the magnitude and speed of the economic impact, but it will also depend on other factors, including how quickly restrictions will be relaxed and people adjust their behavior, and the pace at which business and consumer confidence is normalized.

The central scenario of this Report assumes that the vaccination process and its economic impact will occur at different speeds around the world. It is expected to begin in some countries in the remainder of 2020 and in most of the world during 2021. Herd immunity will be achieved in some countries by the second and third quarters of 2021, and in the rest of the world between late 2021 and 2022. The end of social distancing, the full lifting of restraints, and the adjustment of population behavior will not be seen until countries achieve herd immunity. Accordingly, the central scenario of this Report assumes that the economic impact of vaccines on growth will be felt in some economies by the second half of 2021 and more generally in 2022.

Recent resurgence in Europe and the United States

As long as herd immunity is not achieved, countries will remain vulnerable to new waves of the disease, like the ones that have been sweeping through Europe and the US. These outbreaks will continue to affect economic recovery, although to a significantly lesser extent than was seen earlier this year.

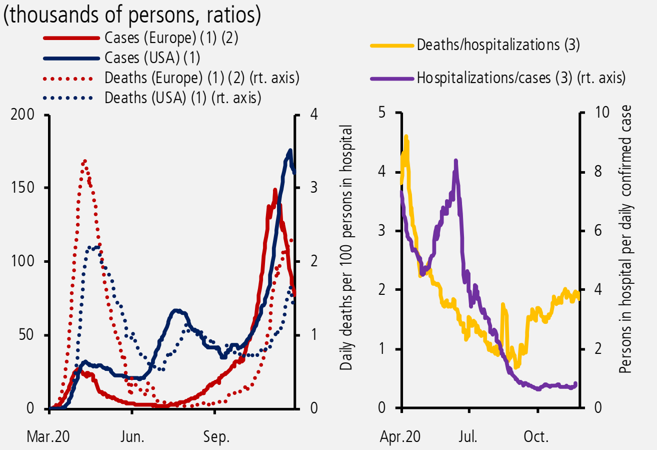
[1]/ Herd immunity is the biostatistic describing a population where a defined portion has become immune to a disease, preventing non-immunized individuals to be infected.

[2]/ Estimated based on each laboratory's reports.

This is so because the measures taken by the authorities have been milder than at the beginning of the year, considering several factors. On the one hand, the increase in confirmed cases, which multiplied six- to eightfold compared to March and April, is partly explained by the significant increase in the number of tests, which grew along with the improvement in the capacity for tracking and traceability worldwide[3]/. On the other hand, although hospitalizations have risen and are approaching the levels of the first wave, the number of deaths compared to the total number of people hospitalized is lower in several of the countries that were hit hard during the first wave, such as the United Kingdom, Spain and France, partly due to the increase in hospital capacity and the improvement in the treatment of those infected[4]/. All this points to rather more effective handling in both Europe and the United States (figure I.12).

Figure I.12

Confirmed cases and deaths (left panel) — Deaths/hospitalizations and hospitalizations/cases (right panel)
(thousands of persons, ratios)

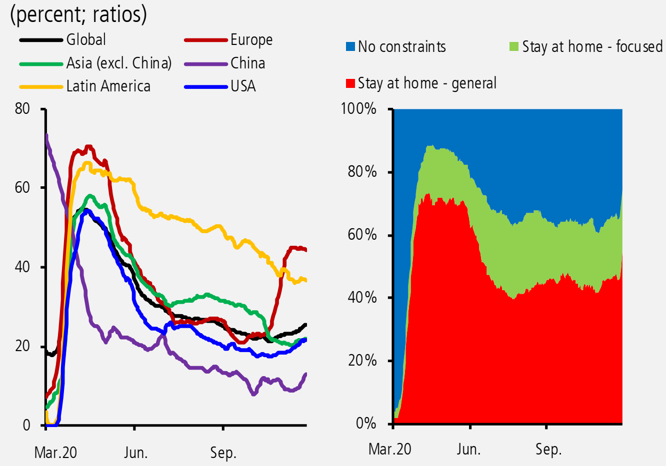


(1) Seven-day moving average. (2) Europe includes France, Germany, Italy, Spain and the U.K. (3) Ratios of daily deaths to hospitalizations due to Covid-19 in seven days, and of hospitalizations to daily cases in seven days (median considering France, Italy, the U.S. and the U.K.).
Source: Our World in Data.

With few exceptions, since mid-year countries have refrained from imposing restrictions as harmful to activity as those of March and April. Thus, the share of countries with nationwide confinements dropped from 70% in March and April to 40% in recent months. In Europe, measures were imposed at the end of October that reduced mobility substantially less than at the beginning of the year, but have been sufficient to show a slight improvement in contagion indicators in recent days. In the U.S., restrictions have been even more localized and have not affected mobility significantly (figure I.13).

Figure I.13

Effective lockdown index (left panel) — distribution by country according to stay at home requisite (right panel) (*)
(percent; ratios)



(*) Seven-day moving average effective lockdown index.
Sources: Goldman Sachs and University of Oxford.

The impact of new outbreaks on activity depends not only on the constraints but also on other factors, most notably the precautionary behavior of individuals. The evidence analyzed in [Bertinatto *et al.* (2020)] suggests that the economy's sensitivity to restrictions has been falling with the passing of time. Thus, between March and April 2020, the strict confinements imposed and the precautionary behavior of individuals led to a collapse in global activity unseen since World War II. These contractions were most intense in countries where containment measures were more severe and extensive, and the virus was more widespread. In the following months, the level of global activity recovered substantially, beyond what the easing of constraints and the recovery of mobility would have suggested. Thus, more recently, the level of activity associated with a certain degree of restrictions or spread of the virus has been high compared with the beginning of the year (figure I.14).

Multiple factors explain this more favorable economic performance. In particular, companies from diverse sectors and households managed to adapt to the constraints through teleworking, taking precautions to circulate despite the high spread of the virus and the use of other technological tools, such as increased online shopping. At the same time, several

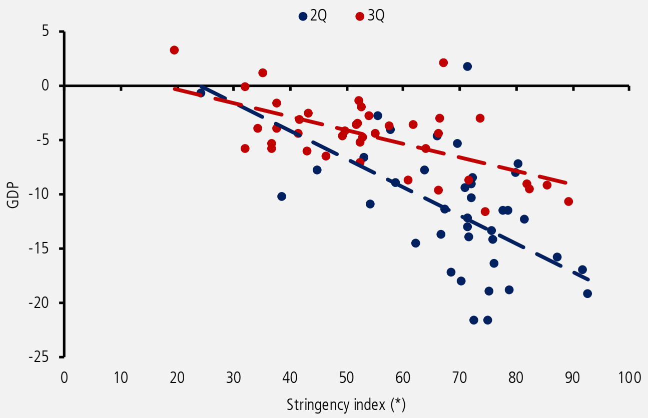
[3]/ There are different estimations of the number of true infections, which vary among them, but they all suggest that the real level of infections is significantly more than confirmed cases, especially compared with the onset of the pandemic. See Giattino (2020).

[4]/ Horwitz *et al.* (2020) and the Center for Evidence-Based Medicine—in an article published in The Economist—present evidence of the fall in the mortality rate in the U.S. and the U.K., controlling for the age of those infected.

countries began to tackle the pandemic with fewer restrictions and, therefore, less reductions in mobility. These are also explained, in some economies, by the size of their informal sector, which in general cannot make use of teleworking and needs to mobilize to work and generate income. Finally, the exceptionally expansionary fiscal and monetary policies also favored a rapid economic recovery supported by a significant increase in goods consumption and global trade (Box I.2).

Figure I.14

Stringency index and GDP
(level; annual change, percent)



(*) Quarterly average.
Sources: Bloomberg and University of Oxford.

The central scenario of this Report assumes that, in the short term, the economic recovery in Europe and the U.S. will be slowed down by new outbreaks, but to a much lesser extent than at the beginning of the year. The adaptation of companies and households suggests that the impact of the new restrictions will be smaller. Moreover, as they are more focused, they will affect directly only some sectors of the economy. In Europe it is expected to impact businesses such as hotels, transportation, recreational services and tourism (which account for nearly 20% of the Eurozone's GDP), in contrast with previous restrictions, which also affected construction and some manufacturing activities, among others. This is consistent with confidence indicators that, despite having deteriorated again, have done so in by a smaller magnitude and more concentrated in services.

In any case, further falls in activity in the short term, even if more moderate than those of March and April, could leave more permanent marks in the economic sectors most affected by the pandemic, making it impossible for some companies to survive and slowing down the subsequent recovery. In addition, if a second wave hits emerging economies, the fiscal policy response could be more limited because fiscal room has narrowed since the onset of the pandemic.

Conclusion

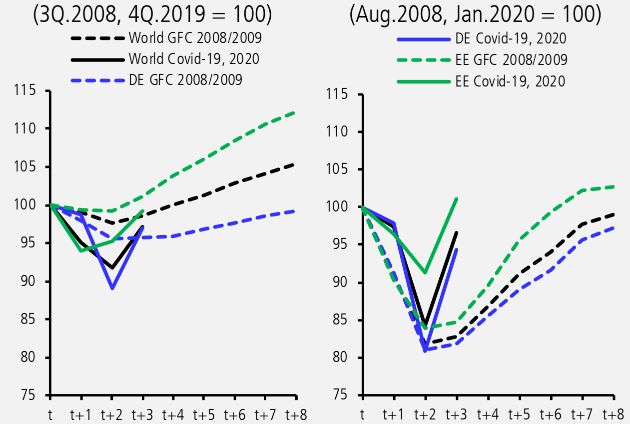
The pandemic's progression will continue to shape the evolution of activity worldwide. The central scenario of this Report assumes that mass vaccination will begin in late 2020 in some developed countries and will expand to more countries over next year. The impact on global activity will be felt during the second half of 2021 and 2022, as countries achieve herd immunity, restrictions are lifted, and people adjust their behavior. Meanwhile, outbreaks such as those recently observed in Europe and the U.S. will hold back the global recovery, although with significantly less impact than at the beginning of the year.

Box I.2: **Recovery of global trade**

According to data from the World Trade Organization (WTO), as of October, the volume of world trade in goods —as measured by total exports— was at virtually the same levels as it was before the pandemic struck. This rapid recovery means that the contraction in world trade will be less than that estimated early this year and contrasts sharply with the global financial crisis of 2008-2009 (GFC) (figure I.15). This Box explains the causes of its dynamism and the implications for the global outlook.

Figure I.15

GDP (*) (3Q.2008, 4Q.2019 = 100)	Real exports of goods (*) (Aug.2008, Jan.2020 = 100)



(*) Levels. GFC stands for Global Financial Crisis. DE denotes developed economies. EE corresponds to emerging economies. For the third quarter 2020, only countries that have published their national accounts are considered. Sources: Central Bank of Chile, Bloomberg and CPB World Trade Monitor.

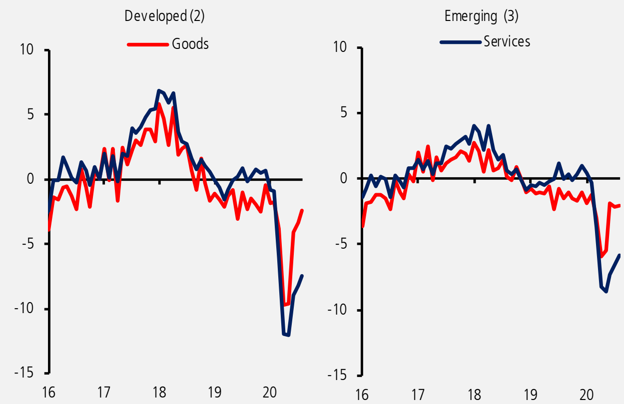
International trade in times of a pandemic

Although the volume exported has recovered across the board, there are some differences between countries and sectors. The recovery has been slower in developed economies and stronger in goods than in services (figure I.16). Among goods, shipments of consumer goods have grown more than those destined to investment.

The dynamics of international trade during 2020 derive, in large part, from the containment measures to mitigate the spread of Covid-19. For example, limitations on the movement of people between countries sharply reduced tourism flows, which make up a significant share of international trade in services. On the other hand, restrictions on human contact within each country limited the provision of many services, thus preventing its consumption. In addition, a drop in demand for services was induced by fear of infection.

Figure I.16

Nominal exports (1)
(anual change, percent)



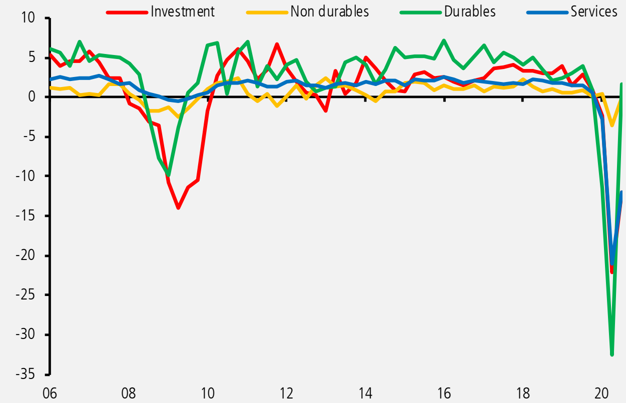
(1) The first principal component of the annual variation is extracted for a sample of countries. (2) Includes Australia, Belgium, Canada, Czech Republic, Denmark, Estonia, Finland, France, Germany, Greece, Italy, Japan, Korea, Latvia, Lithuania, Luxembourg, Malta, Portugal, Slovakia, Slovenia, Sweden, the United Kingdom and the United States. (3) Includes Belarus, Brazil, Bulgaria, China, Hungary, India, Poland, Romania, Russia, Turkey and Ukraine.
Source: World Trade Organization.

In this scenario, and considering that the response of fiscal policy made it possible to greatly mitigate (and in some countries even reverse) the fall in households' disposable income, consumers replaced their lost consumption of services by increasing consumption of goods. This can be clearly seen in the third-quarter national accounts of several countries, especially due to increased spending on durables (figure I.17). Since most durable goods are tradable, the rise in relative consumption of these goods explains a large part of the recovery observed in international trade.

Another relevant factor in explaining the vigorous recovery of world trade in goods is the positive performance of China—which also occurred after the GFC—, which will be one of the few economies in the world that will see growth this year. After a sharp fall in the first quarter due to confinement, a fiscal stimulus plan was launched in which investment played a central role. This boosted demand for the commodities used in the construction industry, such as iron and copper, which also enhanced world trade.

Figure I.17

Consumption: median of selected countries (*)
(annual change, percent)

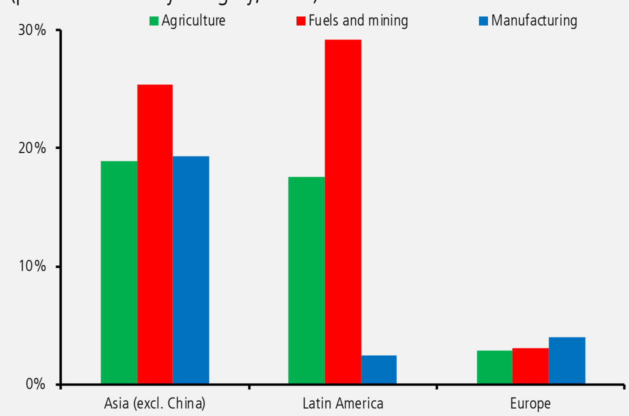


(*) Considers Chile, Colombia, France, Germany, Italy, Japan, Spain, the United States and the United Kingdom.
Sources: Bloomberg, DANE, Eurostat and Haver Analytics.

Most recently, consumption in China has given signs of recovery. This has also contributed to boost demand for goods and inputs, many of which are imported. All this has favored the demand for exports from China's suppliers. Among these are emerging countries which, compared to developed ones, are more exposed to the Chinese economy (figure I.18).

Figure I.18

Exports to China
(percent of total by category, 2017)



Source: World Trade Organization.

The monetary policy response also explains some of the resilience of world trade. As noted in previous MP Reports, the stimulus provided by central banks succeeded in dissipating the sharp rise in financing costs seen early in the pandemic. This contrasts with the post-GFC scenario, which caused a rise in financing costs that would have amplified the negative effects of the weakening demand on international trade[1]/. The improved continuity of the credit channel has also contributed to the global supply responding when the demand for goods grew in each country, thus favoring a stronger recovery in world trade.

Looking ahead

The recent international trade scenario has relevant implications for the global economic outlook. The dynamism of world demand for goods, to the detriment of services, has been beneficial for the price of the metal commodities—including copper—and foods, while it has been detrimental to others, such as fuels.

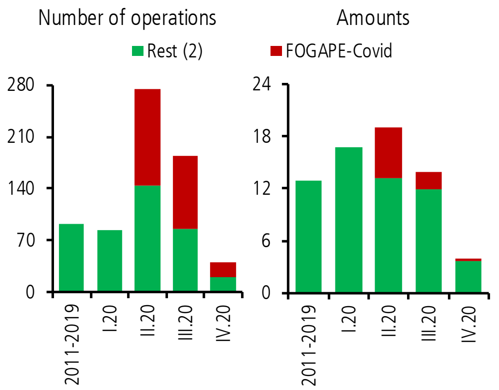
The recovery of the services sectors will be conditional on the widespread availability of the vaccine, and its effect on lifting restrictions, and on the confidence of households to redirect their consumption towards a more balanced mix of goods and services. While incoming news suggests that the vaccination process will begin shortly, the baseline scenario of this Report assumes that the lifting of constraints and the reallocation of consumption will occur gradually over the next year. Accordingly, this scenario considers an increase in the terms of trade and in the volumes exported of Chilean goods to other economies, while the exports of services, such as tourism, remain comparatively weak.

[1]/ Amiti & Weinstein (2011) and Chor & Manova (2012) explore the channels through which financial crises negatively affect trade flows.

II. FINANCIAL CONDITIONS

Figure II.1

Commercial credit flow (1)
(thousands; trillions of pesos)



(1) For the fourth quarter of 2020, considers information up to November 24. Period 2011-2019 corresponds to the average of the quarterly data.

(2) Excludes rescheduling and *factoring*.

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

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

The economic recovery shows important differences by sectors and agents. While for some households and businesses the improvement in income flows may have reduced their financing needs, for others there are still important challenges that need to be addressed. This occurs within a context where a significant number of deferrals negotiated in the most complex months of the pandemic are coming due, and where several firms have needed to incur more debt to face the toughest moments of this cycle. Financial institutions have reduced their use of the credit facilities provided to address the current circumstances, amid perceptions pointing to somewhat tighter lending conditions for some economic sectors at the margin. Amid all these developments, commercial credit growth has been slowing down since mid-year. Interest rates continue to be favorable in general, responding to the various measures introduced by the Central Bank and other entities. Local stock markets continued to recover, in line with international trends. Once again, various global and domestic events have prompted movements of opposite sign in the Chilean markets. In recent months, those relating to the withdrawal of pension savings stand out, as do somewhat more optimistic prospects in the international scenario and their impact on commodity prices, particularly copper.

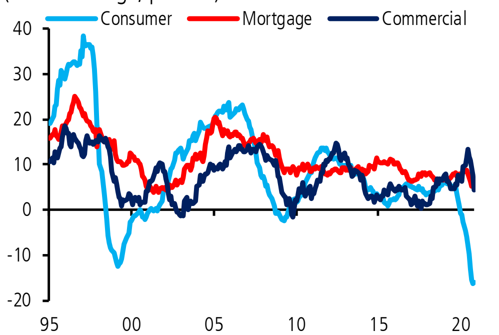
Evolution of bank credit

Commercial portfolio activity has weakened in recent months, as financing needs have decreased for a group of companies, given the improved cash flows that have allowed them to reopen their businesses, and a greater corporate financial burden. Qualitative data, such as the November Business Perceptions Report, indicates that more than half of survey respondents who had already obtained a loan do not report additional credit requirements for varied reasons, ranging from not needing new credit to being unable to meet the obligations of a new loan. Meanwhile the Bank Lending Survey (BLS) for the third quarter showed a decline in working capital requests for the first time this year. This is in addition to the weak demand for funds for investment purposes that the survey has been reporting for

Figure II.2

Real loans (*)

(annual change, percent)



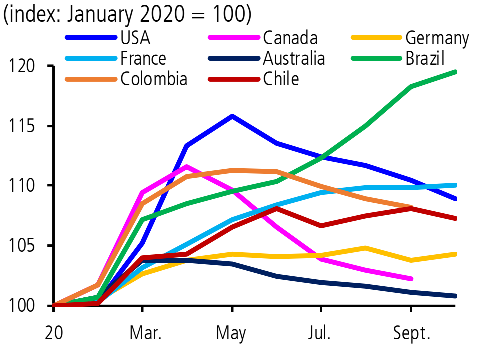
(*) Real data constructed with the spliced CPI series with base year 2018, monthly frequency. Last figure corresponds to November 2020.

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

Figure II.3

Bank credit to non-financial companies

(index: January 2020 = 100)

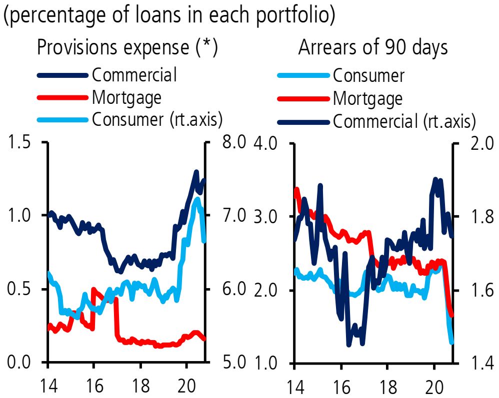


Sources: Bank of Canada, Central Bank of Chile, European Central Bank, Reserve Bank of Australia, Reserve Bank of New Zealand and Bloomberg.

Figure II.4

Bank credit risk indicators

(percentage of loans in each portfolio)



(*) Moving sum of 12 months.

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

several quarters, in line with the fall in this component of spending. The BLS also reports that lending standards continue to be tight.

Corporate borrowing has increased significantly in recent quarters, which has been a natural and sought-after response to the need to prevent the plunge in cash flows caused by the pandemic from creating solvency problems. According to the Financial Stability Report (FSR) for the second half this year, at September total corporate debt amounted to 134% of GDP, compared to 118% of GDP in the same period of 2019. Leverage has grown across companies of different sizes and sectors, although it has been most intense in the medium-sized firms and retail, business and personal services sectors (Chapter V). The upward trend in indebtedness has also been seen in the rest of the world, as all have the same needs to sustain companies after the shock of the sanitary emergency. The impact that this higher corporate financial burden may cause or be already causing on credit growth, investment and hiring possibilities, and ultimately on the pace of economic recovery, are also factors of cross-cutting concern among economies.

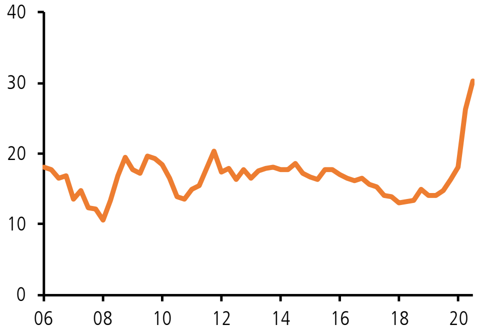
The combination of the supply and demand factors mentioned above have resulted in less dynamic commercial loans. After a record high in the number of loans granted during the second quarter —driven mostly by the Covid-19 lines for working capital with *Fogape* state guaranty—, the number of new loans and the amounts involved have dropped significantly in the last part of 2020 (figure II.1). In this context, real corporate credit growth fell to 4.3% annually in November, from a peak of 13.3% in June (figure II.2). Several other countries have also experienced a slowdown in commercial credit (figure II.3).

Regarding households, consumer credit has fallen sharply, as has happened in previous recession cycles, while for housing the slowdown has been much more moderate. The former stabilized its contraction in recent months (in the order of -16% real in annual terms in September, October and November), reflecting a still partial upturn in employment, as well as the increase in available household resources as they withdrew part of their pension savings. For its part, mortgage loans continue to grow, averaging around 6% in real terms per year since the statistical closing of the September MP Report (figure II.2).

Banks' provision expense is at its highest of several years, suggesting expectations of a deterioration in compliance rates. This contrasts with the decrease in the system's delinquency rate, which in any case has been accompanied by an increase in other indicators such as write-offs, especially in consumer credit, or restructurings. At the margin, the impact of the partial withdrawal of pension funds stands out, which in addition to avoiding greater indebtedness and having made

Figure II.5

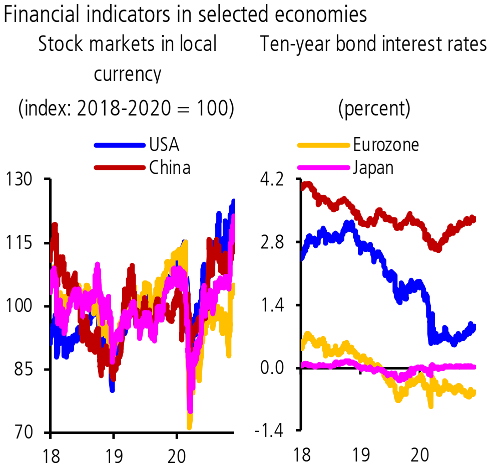
Assets on the Central Bank's balance sheet
(percentage of GDP)



Source: Central Bank of Chile.

Figure II.6

Financial indicators in selected economies



Source: Bloomberg.

it possible to finance regular payments by a number of households, has also helped to settle non-performing debt (figure II.4). Another related aspect to be considered is that in the coming months reprogrammed credit of an important group of agents —i.e. operations that peaked in the second quarter— will be coming due, and the companies that requested Covid-19 lines will have to start repaying off their installments.

Interest rates remain low from a historical perspective for the different users of credit, supported by the expansionary measures taken by the Central Bank. As of November, interest rates were 19% annually in the consumer segment and 5.5% in the commercial segment, both in pesos, while for UF-indexed mortgage loans they stood at 2.4% annually.

The current highly expansionary monetary policy combines the MPR at its technical minimum (0.5%) and the application of a range of unconventional measures. Among the programs adopted are the FX swap and REPO programs, the repurchase of Central Bank debt certificates and the purchase of bank bonds, as well as the Financing Facility Conditional on Increased Lending (FCIC). In the days prior to the publication of this Report, a second partial withdrawal of pension savings was approved, so the Central Bank announced a package of measures to ensure an orderly liquidation of assets by the pension funds, and thus preserve the stability of the financial markets and the efficiency of the pricing process. This includes the reopening of the special programs of Cash Purchase and Term Sale (CC-VP) and Purchase of Time Deposits, both for the remainder of the former program.

The extraordinary tools have expanded the assets on the Central Bank's balance sheet by more than 12 percentage points of GDP between the first and third quarters of 2020 (figure II.5). On the monetary liabilities side, there is an increase in the banking system's liquidity and in the Central Bank's Discount Notes (PDBCs). Specifically, the implementation of the FCIC has allowed local banks to replace their funding sources at a funding cost of 0.5% over four years, i.e. the duration of the program. This has significantly reduced the preference of these institutions for term deposits, whose rates have posted significant declines, which the Bank has compensated by increasing its issuance of PDBCs.

Evolution of financial markets

External financial conditions remain favorable, amid abundant global liquidity, the rebound in world activity and, most recently, news of progress in vaccines. The bulk of indicators further reversed the bad numbers caused by the pandemic and in some cases returned to pre-pandemic levels. Thus, since the September Report, there have been

Table II.1

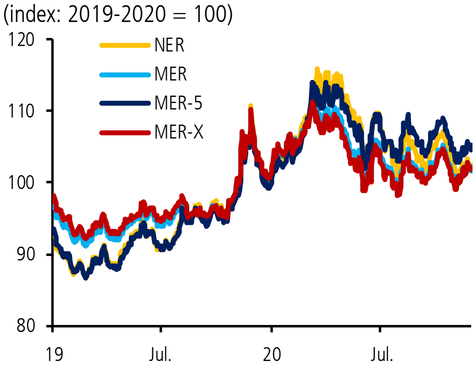
U.S. dollar exchange rates (1)
(percent)

	Change until Dec.20 Report			
	09.20	06.20	03.20	12.19
Latin America (2) (3)	**-5.5**	**-1.1**	**-4.3**	**13.7**
Brazil	-3.5	4.2	6.2	26.4
Chile	-3.4	-2.8	-10.2	-4.1
Colombia	-5.3	-1.1	-11.7	4.0
Mexico	-9.0	-8.2	-15.0	3.1
Peru	0.7	5.2	1.9	6.4
Commodity exp.(2)	**-3.6**	**-6.0**	**-12.8**	**-3.2**
Australia	-2.1	-6.3	-18.9	-7.5
Canada	-1.4	-3.8	-8.7	-2.1
New Zealand	-6.0	-8.2	-16.0	-7.9
South Africa	-11.1	-10.1	-10.5	3.9
Developed (2)	**-0.9**	**-5.2**	**-7.7**	**-6.1**
Eurozone	-0.5	-5.5	-8.3	-7.2
Japan	-1.8	-3.7	-4.3	-4.4
United Kingdom	-1.5	-5.7	-10.8	-3.2
Other emerging				
China	-5.0	-7.4	-6.8	-6.5
Rep. Korea	-6.5	-8.9	-10.8	-5.8
India	-1.0	-2.1	-1.3	3.2
Indonesia	-4.2	-0.6	-9.4	0.3
Poland	0.8	-5.0	-9.3	-3.9

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

Figure II.7

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



Source: Central Bank of Chile.

additional reversals of risk premiums and increases in most stock markets —with some U.S. indexes returning to new highs— while a significant group of currencies continued to strengthen against the dollar (figure II.6 and table II.1). Interest rates on sovereign bonds showed mixed variations and persist around their historic lows, consistent with the expansionary stance of monetary policy around the world. In any case, the current uncertainty in sanitary and economic matters continues to add some volatility to these movements.

In Chile, the financial markets have performed in line with their peers abroad. Sovereign (EMBI) and corporate (CEMBI) spreads have been approaching their values at the beginning of the year, as have the peso/dollar parity and other multilateral exchange rate measures, in the context of a sustained improvement in the copper price (figure II.7). The IPSA has recovered a good part of its losses arising from the sanitary emergency, although since the end of last year its trajectory has run below that of comparable economies (figure II.8). It should be noted that after the statistical close of this Report, the markets showed some ups and downs linked to a variety of idiosyncratic factors.

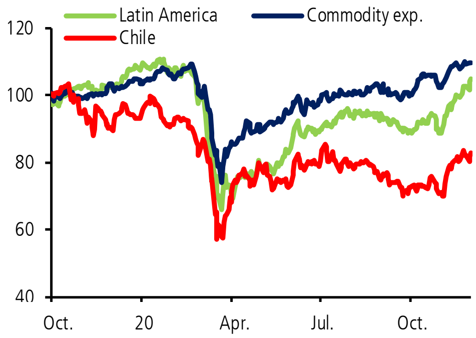
In the fixed-income market, unconventional Central Bank programs have had noticeable effects on the short end of the benchmark bond curve in pesos, influenced by the duration and financial conditions stipulated for the FCIC1[1]/. Thus, interest rates on nominal papers under 5 years show a substantial drop since April. In turn, this has led to the liquidity premiums of these instruments being in negative territory since then, in contrast to their high value for terms longer than 10 years. Consequently, the nominal yield curve has been steepening in recent months. In the case of indexed benchmarks, it is worth noting the decline in shorter-term rates since the September Report, coinciding with the rise in inflation expectations (figure II.9). This was partly undone on the runup of the publication of this Report, after the negative surprise of November's CPI. The interest rates on corporate and bank bonds also reflect the impact of the extraordinary tools mentioned above —with record lows for the lower-risk categories— with spreads below those at the end of March (figure II.10). In addition, in the money market, all interest rates on instruments with terms under 180 days are below the MPR, backed by today's abundant liquidity.

The monetary and financial policies of the Central Bank of Chile have contributed significantly to the performance of the local financial and credit markets in the last year. The adjustments and programs implemented, together with the actions of the fiscal and regulatory authorities, have made it possible to navigate through unprecedented situations without major disruptions on this front. The Board reiterates

[1]/ For details, see https://www.bcentral.cl/contenido/-/detalle/impacto-de-lainyeccion-de-liquidez-en-el-mercado-cambiario-y-financiero-beltran-de-ramon

Figure II.8

Stock markets in Chile and comparable economies (*)
(index: October 2019 = 100)

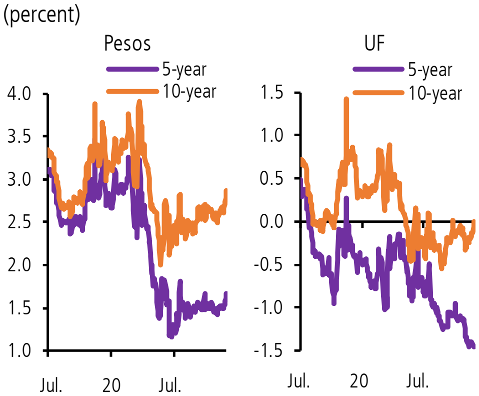


(*) Latin America corresponds to the simple average of the stock indices of Brazil, Colombia, Mexico and Peru, and for commodity exporters of Australia and New Zealand.

Source: Bloomberg.

Figure II.9

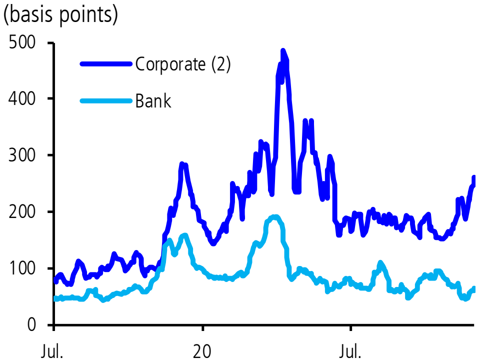
Benchmark bonds interest rates
(percent)



Source: Central Bank of Chile.

Figure II.10

Spreads of bonds issued in the local market (1)
(basis points)



(1) Seven-day moving average.

(2) Excluding risk category BB or lower.

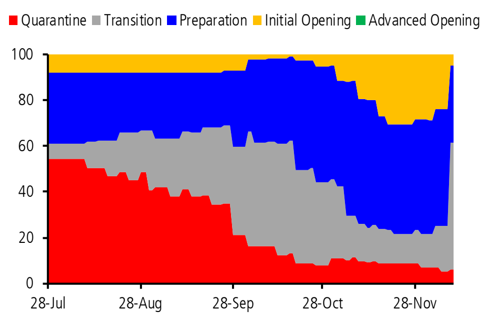
Source: Central Bank of Chile based on information from the Santiago Stock Exchange and Financial Market Commission.

that it will maintain a high monetary stimulus for a prolonged period of time, in order to ensure the consolidation of the economic recovery and the fulfillment of its objectives. In particular, it anticipates that the MPR will remain at its minimum over much of the two-year monetary policy horizon. Unconventional measures will remain in place (see Summary and Chapter V for more detail).

In any event, more permanent changes in investors' portfolios or others of a structural nature may require reassessing the effectiveness of any further actions. With this, the various risk scenarios presented, both external and internal, keep latent the possibility of an abrupt correction of the financial markets. It must also be taken into account that to deal with the pressures that the local economy has been subject to since the end of 2019, the different agents have been using up the slack accumulated in previous years. This has deteriorated their asset position and exposes them to more negative episodes. As detailed in the last FSR, given the difficulty of generating income over a longer time span, restrictions that were originally of liquidity could be transformed into solvency problems. For their part, the banking institutions, which have managed to weather the emergency by supporting counter-cyclical credit policies, entered the pandemic with less capital reserves than in previous situations and less than their international peers.

III. OUTPUT AND DEMAND

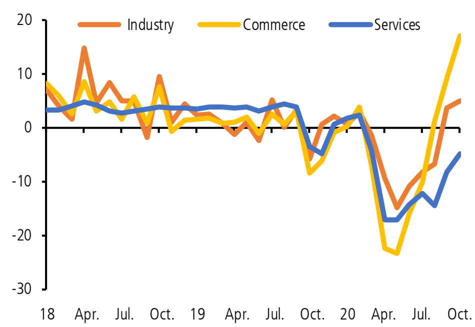
Figure III.1
Step-by-Step Plan (*)
(population by stage, percentage)



(*) Consider announcements and information until December 7.

Source: Central Bank based on information from the Chilean Ministry of Health.

Figure III.2
Imacec: industry, commerce and services
(annual change, percentage)



Source: Central Bank of Chile.

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

The Chilean economy has recovered part of the sharp drop it experienced during the first half of the year, albeit at a slower pace than anticipated and with pronounced differences across sectors. The activities that are most affected by social distancing—such as personal services and transportation, construction and related services—are still lagging behind. In contrast, the manufacturing industry has already reached its pre-pandemic output levels, and trade has even exceeded them thanks to the increased availability of household resources as a result of a series of support measures. The labor market has also improved; however, disparities are quite noticeable in employment, given the weight of the service sectors.

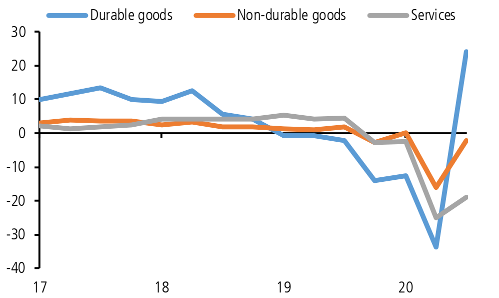
Recent Background

Output on the whole has been recovering since mid-year, hand in hand with the lifting of the tightest sanitary restrictions, the increased mobility and the gradual adaptation of people and businesses to the new operating conditions posed by the pandemic. In this way, in the third quarter, the GDP showed a 5.2% recovery against the previous quarter in seasonally adjusted terms. This is in line with a favorable evolution in the number of infections, which has allowed progress to be made with the gradual opening of most of the communes. Even if considering the recent setback in the Metropolitan Region under the Step-by-Step Plan, the portion of the country that is quarantined has decreased notably—from just over a half in early August to only 6% at the closing of this Report (figure III.1).

However, the recovery in output has been slower than expected in September, which illustrates the complexity of this process for the sectors that are most sensitive to social distancing. Specifically, the October Imacec fell by -1.2% as compared to the same month last year—lower than expected—and posted a 0.5% deseasonalized monthly drop. If anything, the vast number of changes that have been taking place in the economy since the beginning of the pandemic renders the projection of short-term movements more complex, as is also reflected in the inflation

Figure III.3

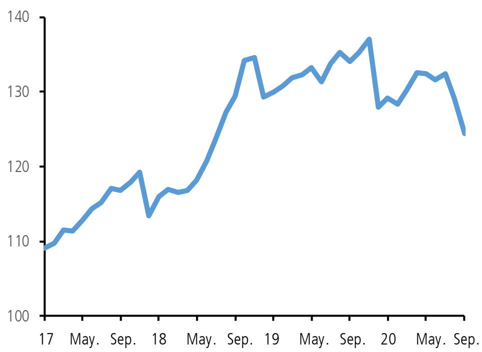
Household consumption
(annual change, percentage)



Source: Central Bank of Chile.

Figure III.4

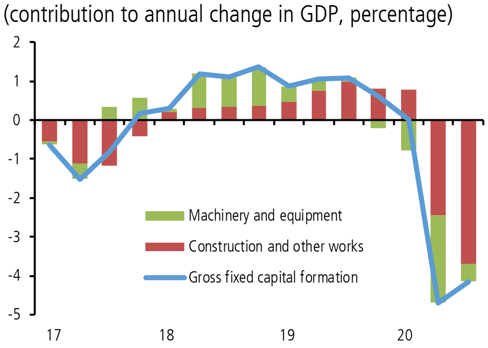
Trade inventories
(index December 2014=100)



Source: National Institute of Statistics.

Figure III.5

Components of the GFCF
(contribution to annual change in GDP, percentage)



Source: Central Bank of Chile.

behavior. For this same reason, month-to-month variations may well be less informative than in periods of greater stability.

The performance of the economy shows a considerable divergence across the different economic sectors and regions of the country. Activities such as personal services, construction and related services, transportation, and restaurants and hotels are among the most lagged ones due to the effect of the restrictions that are still in place and the self-care measures that people have adopted. In contrast, the manufacturing industry has already reached its pre-pandemic output levels, and commerce has even exceeded them (figure III.2). Furthermore, the Business Perceptions Report of November shows sharp differences in the performance among communes, with the duration of quarantines and their impact on business operations playing a major role.

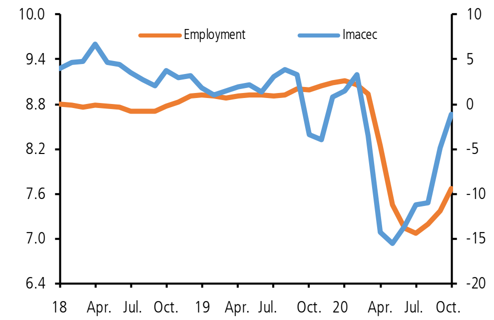
On the demand side, the withdrawal of pension savings has had a significant impact on the consumption of durable and non-durable goods, mainly imports (figure III.3). Consistent with National Institute Statistics' retail trade activity index, sales of durable goods recently rebounded strongly and recorded an annual variation of 33.5% in October, the highest ever recorded. Recovery in recent months has occurred in the sales of both new and used vehicles, and electronic products and household equipment. By October, non-durable goods had already resumed pre-pandemic sales levels, the most significant of which were increases of over an annual 30% in construction materials and clothing, but also vehicle accessories, personal items, and more habitual products, such as foodstuffs, recovered as well.

The shock to the consumption of durable goods caused the depletion of stocks in some product lines, coinciding with an increase in their prices in recent months. During August and September, there was a significant decumulation of inventories in trade (figure III.4), in a context where imports have shown significant annual declines throughout 2020, and logistics chains have had to adapt to the new operating conditions. As evidenced in November's Business Perceptions Report, some companies reported difficulties in meeting the increased demand, in part because of inventories that were budgeted lower for this year, of some logistical restrictions, and the uncertainty for scheduling purchase orders or anticipating increased sales. This decumulation was mainly focused on goods such as hardware, certain household equipment items, or automobiles, but did not entail a disruption to trade in general, as evidenced in the perception of relatively balanced inventories at the aggregate level (IMCE trade).

In contrast, consumption of services continues to show very significant annual drops and actually performed below expectations. This combines the restrictions on supply resulting from the sanitary measures and a contained demand resulting from concerns about the spread of the

Figure III.6

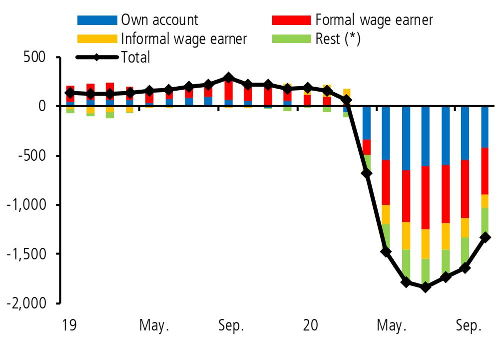
Employment and Imacec
(quarterly moving average, millions of people; annual change, percentage)



Sources: National Institute of Statistics and Central Bank of Chile.

Figure III.7

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

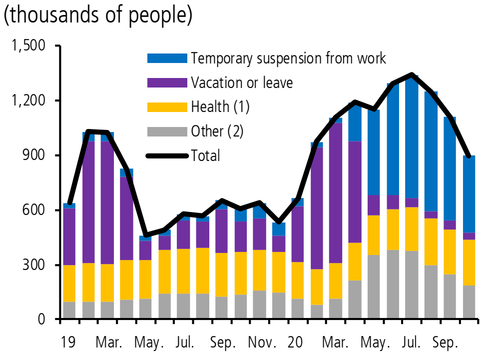


(*) Includes employers, domestic service personnel and unpaid family member.

Source: National Institute of Statistics.

Figure III.8

Busy absent: Reasons
(thousands of people)



(1) Considers medical leave or health problems.
(2) Considers business closure, variable shift, occasional work, seasonal work, strike or labor dispute, attendance to training courses, no orders, climatic reasons or natural catastrophes, economic or technical reasons of the company and other reasons .
Source: National Institute of Statistics.

disease. So, in the third quarter, the annual variation in consumption of services stood at –19.1% (–25% in the second quarter).

Investment improved marginally in the third quarter, although indicators are still low and it remains more lagged than anticipated, as it has been negatively affected by the financial situation of companies and the persistent uncertainty. Thus, during the third quarter, gross fixed capital formation fell by 18.5% a year (–20.9% the second quarter) with a sharp drop in construction and other works and a less pronounced fall in machinery and equipment (figure III.5). The poor performance of the construction and other works was transversal for all its components. In turn, the quarterly report of the Association of Engineering Companies and Consultants shows that this industry's activity has deteriorated further. The activity of the engineering industry fell by 10.2% annually during the quarter, which shows the lag in the activity related to the early stages of investment. In this area, there are delayed projects and tenders, as well as several modifications to working protocols that had to be implemented to adjust to the pandemic.

Foreign trade in goods has been relatively resilient, in line with a more dynamic global market than anticipated at the beginning of the pandemic (Box I.2). During the third quarter, the volume of exports showed an annual change of –2.3% (second quarter: 6,7%). Mining and manufacturing were the least severely affected components, with losses of 0.8 and 1.9%, respectively. Imports of goods fell by an annual 11.6% (second quarter): –18%). In contrast, foreign trade in services is still struggling, largely due to the drop in tourism and transportation. Meanwhile, in the last moving year, the current account has accrued a surplus of 0.1% of GDP.

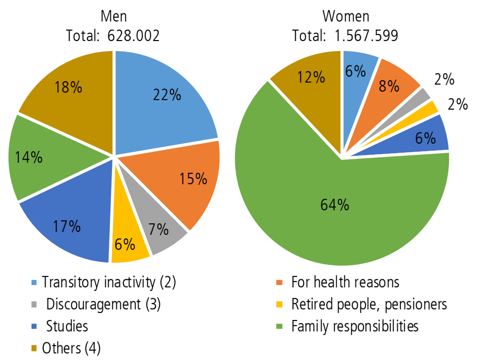
The increased mobility and sectoral disparity of the economic recovery can also be noted in the labor market (figure III.6). Data from the moving quarter ending in October show that nearly a third of the jobs lost during the pandemic have been recovered, which has been seen primarily in informal salaried employment and self-employment (figure III.7). Also, the number of absent workers has fallen by more than 400,000—including workers who were covered by the Employment Protection Law (EPL) —from 1.3 million at its peak (figure III.8). Thus, according to data from the INE, the percentage of workers covered by the EPL fell to 7.6% of the total[1]/ in September, from the peak of 9.8% recorded the previous month, strongly concentrated in accommodation and catering (41%), and artistic and recreational activities (47%). Real wages as measured by the wage index have advanced positively in recent months, particularly in trade, manufacturing, and mining. Hours worked have also increased since mid-year, although still below pre-pandemic levels.

Employment growth has been slower in services; this is relevant not only because of the extent of their initial drops but also because they are the

[1]/ Total workers hired by formal companies with five or more employees within the country.

Figure III.9

Reasons for inactivity (1)
(percentage)



(1) Data from the National Employment Survey for the moving quarter that ended in October.
(2) Will start a self-employment activity soon, found a job that will start soon, awaits the busiest season, awaits the results of a selection process or to be called.
(3) Thinks that because of his/her age will not find a job, thinks that will not find a job, got tired of searching, thinks that no job or activity suits his/her qualification, too many procedures are needed to start an activity on their own, do not know where to go or who to turn to.
(4) Is a rentier, is pregnant, a member of the household does not allow it, does not want to, does not need to work, another reason.
Source: National Institute of Statistics.

most labor-intensive. Thus, the most harmed employment segments are artistic, entertainment and recreational activities, activities of households as employers, and accommodation and catering services, which as of October recorded nearly 40% less employment as compared to pre-pandemic levels. It also worth noting that the recovery in employment has favored women to a much lesser extent. In fact, the female participation rate (44%) is almost 9 points below the reading of one year ago[2]/. Besides, the National Institute Statistics data show that 64% of women justify their inactivity based on family duties, as opposed to 14% of men who do so[3]/ (figure III.9). This phenomenon may help explain the difficulty in filling vacancies in some areas, as reported in the November's Business Perceptions Report, despite the increase in job postings.

Short-term outlook

The extended duration of the restrictions, the slow recovery of the most affected areas, and the scars left by the economic crisis have harmed the dynamics of recovery, which has affected not only aggregate demand but also the responsiveness of supply. As a result, the drop in output in 2020 will be more pronounced than what was forecast in September. Thus, this year's GDP contraction is expected to be between 6.25% and 5.75% (between –5.5 and –4.5% in the September MP Report).

In the central scenario, the output level is projected to continue improving gradually in the coming quarters. In terms of public healthcare, developments are consistent with the evolution of the pandemic, which will enable increased levels of mobility in relation to those observed in mid-2020. In 2021, advances will be made in the vaccination process, as stated by the Government.

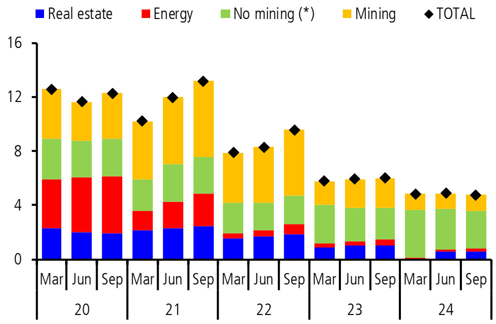
The central scenario also predicts that consumption will continue to be driven by the withdrawal of pension savings. However, the impact of the second withdrawal is expected to be smaller than that of the first one, partly because the drop in income caused by the pandemic has probably already been more than offset by the previous measures and because the resources that could be withdrawn are mostly concentrated in the higher income quintiles—who are less likely to use them for consumption (Box III.1).

The outlook for investment suggests a slow recovery, with greater than usual degrees of projected uncertainty. The last the Corporation of Capital Goods (CBC) survey included new energy and mining projects for 2021 and 2022, which may be partly a response to the improved outlook for copper prices and the fast expansion of non-conventional renewable energies, but it still does not show any significant increases in other sectors (figure III.10). The Business Perceptions Report survey in November shows that almost half of the companies intend to make

[2]/ Male participation in October was 67%, i.e., 7 points less than in October 2019.
[3]/Considering the population between 25 and 54 years of age.

Figure III.10

Investment projects 2020-2024
(billions of dollars)



(*) Excludes real estate and energy.

Source: Capital Goods Corporation.

investments during 2021, mainly focused on renewing existing structures and automating processes. On the other hand, improvements have been seen in expectations indicators and asset prices, which also anticipate better investment performance. However, there are still some factors that could delay its recovery. Among them, it is worth noting the high level of debt that companies have had to incur—for good reasons—in the most complex months of the pandemic (see the Financial Stability Report). Together with the gradual recovery of activity and the decline in profits, this could limit the ability to undertake new projects. Added to this are the still high level of uncertainty about the evolution of the sanitary conditions, the rate of growth and its composition, and the concerns about a resurgence of the violent outbreaks seen in late 2019.

Box III.1: **Evolution of household income, support measures and implications for consumption**

The Covid-19 pandemic has had very significant adverse effects on household income. Policymakers have deployed various support measures to cushion these effects and improve the households' consumption possibilities. Among them, fiscal aid programs and the withdrawal of pension savings. This box quantifies the drop in household income in Chile and evaluates the effect of these support policies on different income brackets. It also presents estimates on the propensity of households to consume by income quintiles[1,2]/. Both results are an important input for evaluating the perspectives for household consumption and savings.

Impact of the sanitary crisis on the autonomous income of households

Based on the information at hand, it is projected that the autonomous income of households -income from work and other sources, not including transfers or other liquidity measures- will fall by 5.7% in 2020. The greatest contraction seems to have occurred during the second and third quarters, with a smaller reduction in the fourth (figure III.11, Panel a). By quintile, the lowest income groups have been the most affected (figure III.11, panel b).

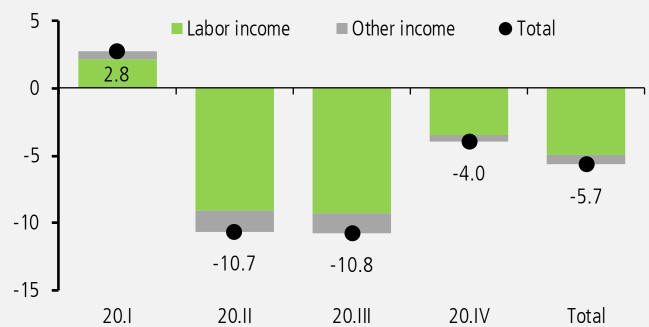
Effects of liquidity support measures

From March to date, various measures to support household income have been implemented. For the purposes of this analysis, these are grouped as follows: (i) fiscal transfers, including all government subsidies, whether monetary or in kind; (ii) mandatory use of savings, i.e., self-financing of individuals through unemployment insurance or pension funds[3]/; (iii) spending and credit facilities, grouping measures such as extensions of consumer and mortgage loans provided by the private sector, as well as government loans with favorable conditions. It is worth stressing that, although conceptually the fiscal transfers —which constitute income for the receiving households— are very different from withdrawing pension funds and the use of self-owned unemployment funds—which are tantamount to dissaving and therefore a net decrease in wealth—, both types of measures have contributed to increase liquidity and mitigate the fall in autonomous income, so both are included in the analysis.

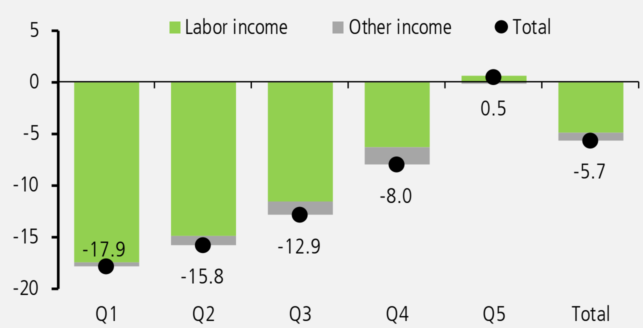
Figure III.11

Household income forecast, 2020
(annual change, percent)

(a) By quarters



(b) By quintiles



The time evolution of the measures shows that their effect concentrated in the second half of 2020. The injection of liquidity has been dominated by the use of mandatory savings, mainly through withdrawals of pension funds. Credit facilities have had a lesser effect. Fiscal transfers and payment facilities have been important from a historical perspective but have only partially compensated for the drop

[1]/For details on estimations and forecasts, see Barrero *et al.* (2020).
[2]/Each quintile represents 20% of national households, in ascending order, according to their autonomous per capita income. Thus, the first quintile represents the 20% with the lowest income, while the fifth quintile corresponds to the 20% with the highest income.

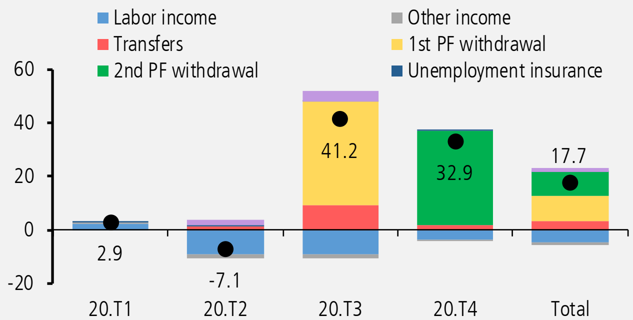
[3]/The unemployment insurance includes the Employment Protection Act and its additional use, which considers both the use of the Individual Accounts and the use of the Solidarity Fund as legally requested.

in revenue. For the year, the set of measures would more than offset the falls in revenues, with liquidity projected to grow 17.7% annually on a net basis (figure III.12, Panel a). By quintiles, estimates suggest that the package compensated for income declines across all groups, especially for quintiles 1st and 5th (figure III.12, Panel b). The former has benefited greatly from the transfers, which alone would compensate for the fall in their income. In turn, the liquidity of the 5th quintile, whose income was not affected on aggregate, has risen significantly due to self-financing measures, especially the use of pension savings.

Figure III.12

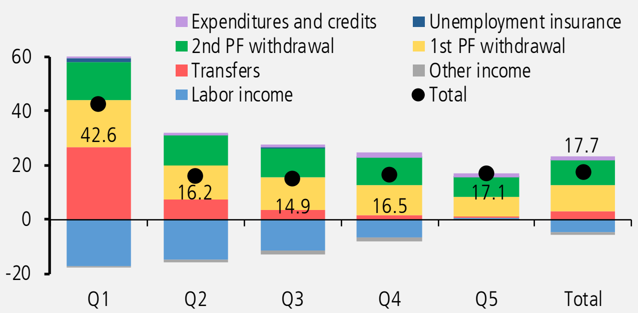
Effect of support measures on household income, 2020
(annual change, percentage)

(a) By quarters



Source: Barrero *et al.* (2020).

(b) By quintiles

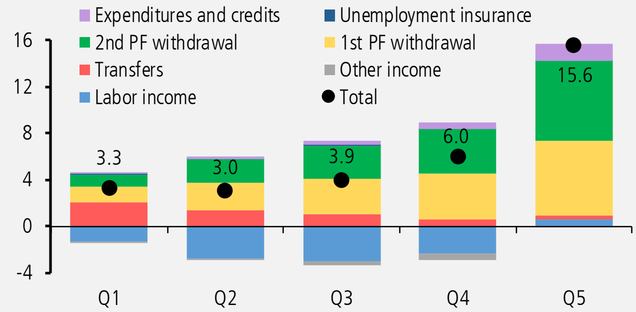


Source: Barrero *et al.* (2020).

In short, considering the evolution of autonomous income and the various support measures, it can be seen that the higher-income groups received a proportionally greater total injection of liquidity, especially because of the smaller effect on their income (figure III.13).

Figure III.13

Change in income and additional liquidity, 2020
(billions of dollars)



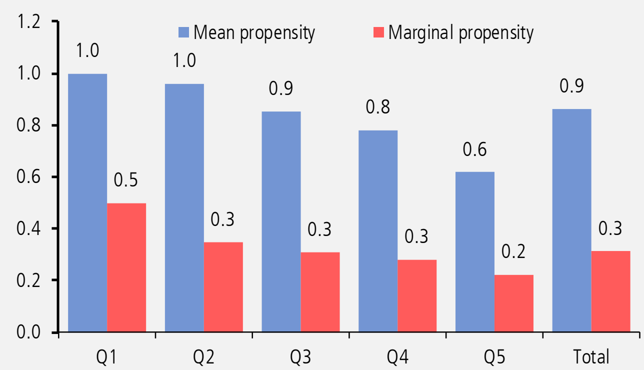
Source: Barrero *et al.* (2020).

Future evolution of consumption and propensity to consume by quintiles

Given the differences in the behavior of autonomous income and liquidity by quintile, forecasting the evolution of consumption requires examining the different consumption patterns of each group, for which the analysis of the mean and marginal propensity to consume is relevant. Consistent with the level of resources received by each group, the data show that the fraction of permanent income that is destined to consumption—mean propensity—is very high in the lower quintiles and decreases as resources increase (figure III.14). Furthermore, the reaction of consumption to a shock on resources —marginal propensity— is higher in the lower quintiles of the distribution, but consistent with economic theory, its effect is smaller than it would be if faced with a permanent change in income.

Figure III.14

Mean and marginal propensities to consume by quintiles
(percentage of the available resources)



Source: Barrero *et al.* (2020).

Although the income support measures constitute a transitory increase in the households' disposable resources, it is possible that at the current juncture the marginal propensity of the lowest quintiles has matched the mean propensity. This is because the sharp drop in their income has meant that they have been able to cover a large proportion of their consumption with these transitory resources. For the highest quintile, however, this change in marginal propensity is unlikely to have occurred, because their earnings on average have not been affected as strongly. It is precisely the latter group that has seen its liquidity grow the most in 2020, and the second withdrawal of pension funds is especially relevant in their case (figure III.13), it is possible that the remainder of the liquidity generated will be allocated primarily to savings.

Considering the estimated propensities to consume and the differences in liquidity across quintiles, the impact of the two pension fund withdrawals on aggregate consumption is estimated. For the first withdrawal, it is assumed that households managed to cover their income losses in 2020, and going forward, the remaining liquidity will be spent based on three scenarios. In the first (scenario 1), the remaining funds are consumed in a proportion consistent with the marginal propensity of each group (figure III.14). The second scenario (scenario 2) considers that the first three quintiles spend on average between their mean and marginal propensities, while the fourth consumes according to its marginal propensity and the fifth does not spend on consumption. In scenario 3, an alternative estimate is used based on the crossing of data between unemployment insurance and pension fund withdrawals. For this scenario, it is assumed that employed persons will consume according to their marginal propensity, while the unemployed will make full use of their available surplus. The total resources of the second withdrawal are analyzed on the basis of these three scenarios.

Our projections suggest that the sum of the fiscal transfers and part of the first withdrawal were sufficient to compensate for the loss of household income. Up to the end of November, the first withdrawal amounted to US$17 billion, of which US$4.5 billion is estimated to compensate for income losses and thus will have an effect close to unity on consumption. Of the remaining US$12.5 billion, its effect on consumption will depend on the assumption chosen regarding the marginal propensity to consume, implying an additional impact in the range of US$3.1 to 4.4 billion (table III.1). The second withdrawal (potentially US$17 billion) is expected to have a smaller effect on consumption, as it corresponds entirely to remaining liquidity. In this case, the increase in consumption could be between US$4.1 and 5.8 billion depending on the assumption about its use. Measured by its effect on activity, the first withdrawal would have implied a positive impact in the order of 1.8 percentage points of GDP accumulated in 2020 and 2021, while the effect of the second would be rather smaller, around 1.0 percentage points.

Table III.1

Consumption projection scenarios (1) (1)
(billions of dollars)

		Transf.	1st PF withdrawal	2nd PF withdrawal
Use of liquidity to cover income losses in 2020		4,6	4,5	
Use of remaining liquidity (2)	Scenario 1		3,1	4,1
	Scenario 2		3,0	4,6
	Scenario 3		4,4	5,8
Total projected liquidity use		4,6	[7,5 – 8,9]	[4,1 – 5,8]

(1) Figures show amount of liquidity injected by fiscal transfers and the two pension savings withdrawals, which would be allocated to private consumption during the years 2020-2022. (2) Scenario 1: The remainder is consumed according to marginal propensity. Scenario 2: The first three quintiles spend as a function of the average between their mean and marginal propensities; the fourth quintile consumes according to marginal propensity; the fifth quintile does not use it for consumption. Scenario 3: Employed persons will consume according to their marginal propensity, while the unemployed will make full use of the remaining funds available.
Source: Barrero *et al.* (2020).

Conclusions

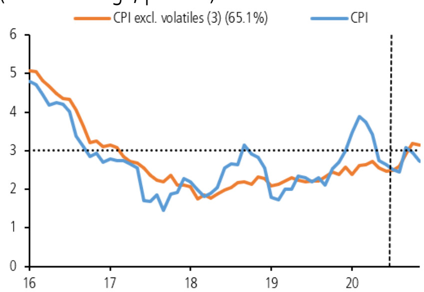
Consumption behavior will depend on several factors, including the pace of employment recovery, the response of households to the evolution of the pandemic, social distancing measures, and the impact of income support measures. Among the latter, the withdrawal of pension funds has dominated, injecting a significant quantity of liquidity that more than compensates for the projected falls in autonomous income by 2020. While a substantial proportion of this liquidity would be allocated to consumption, this effect is diminishing as the additional liquidity is mostly directed to higher income quintiles, who have been less affected and have a lower propensity to consume. Therefore, it can be anticipated that the second withdrawal of funds will have a more moderate impact on consumption than the first, because a greater share of the resources will be allocated to savings and/or investment.

IV. PRICES AND COSTS

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

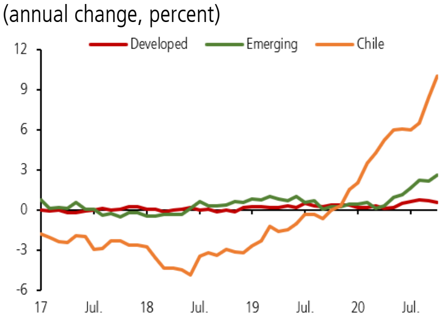
Annual inflation is higher than expected in the last MP Report, as it combines significant upward surprises in September and October, which were partially offset in November. Price movements were largely determined by the impact on goods consumption caused by the withdrawal of pension savings, which occurred amid supply constraints in some markets. This pressure on the demand for goods will decrease as inventory replenishments return to normal and as the gradual reopening of the economy boosts the supply of services. In fact, as indicated, November data already showed reversions in several of these increases. Furthermore, in the medium term, the economy continues to face significant challenges on its path to recovery from the negative impacts of the pandemic and the social crisis, and it is expected to take several more quarters to return to previous output levels and to close the gaps in the labor market. In this context, medium-term inflationary pressures have remained under control, consolidating their convergence to the target during 2022.

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



(1) Segmented vertical line corresponds to the statistical closing of the September 2020 Report. (2) In parentheses, share in the total CPI basket. (3) For more details, see Box IV.1 December 2019 Report and Carlomagno and Sansone (2019).
Sources: Central Bank of Chile and National Institute of Statistics.

Figure IV.2
Durable goods inflation, international comparison (1) (2)
(annual change, percent)



(1) Series constructed using harmonized Eurostat methodology. For developed (emerging) the median is calculated from a group of 27 (14) economies.
(2) Considers the data published up to October.
Sources: Bloomberg and Statistics Offices.

Recent evolution of inflation[1]/

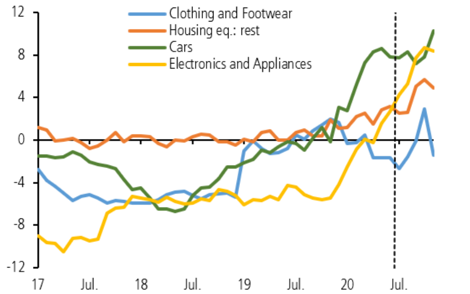
Between August and November, the CPI cumulative variation was 1.3 percentage points (pp), driven by the high monthly records of September and October. As a result, headline inflation rose to 2.7% by November (2.5% in July at the closing of the previous MP Report), and its core component—non-volatile CPI—increased to 3.2% (2.5% in July) (figure IV.1).

The main factor behind the inflation increase in September and October was the effect on consumption of goods brought about by the withdrawal of pension funds, in a context of supply constraints in some markets. In fact, around 0.5pp[2]/ of the inflation accumulated in August and November is explained by this CPI component. During this period, 57% of the products making up the basket of goods accumulated a positive price variation. In particular, in recent

[1]/ Unless otherwise indicated, the inflation series and components use the new indexes with base year 2018=100, so they may not be strictly comparable with earlier data.
[2]/ Adding together the cumulative contributions of goods without volatiles and volatile goods. For details, see Carlomagno and Sansone (2019).

Figure IV.3

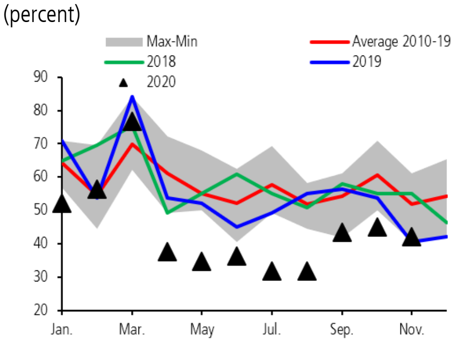
Examples of goods affected by high demand (1) (2)
(annual change, percent)



(1) Shows the price evolution of the selected groups of goods. (2) Segmented vertical line corresponds to the statistical closing of the September 2020 Report.
Source: Central Bank of Chile.

Figure IV.4

Underlying services: Percentage of products with positive monthly variation
(percent)



Source: Central Bank of Chile.

months, the inflation trajectory for durable goods has stood out for its differences from the rest of the world (figure IV.2).

The sharp increase in consumption that began in August led to a fast decumulation of inventories—in a context of low import levels halfway through the year—and their slow replenishment. In the November's Business Perceptions Report, some companies informed of difficulties in meeting part of this increased demand, and some of the reasons cited were lower budgeted inventories for this year, some logistical restrictions, and the prevailing uncertainty for scheduling purchase orders or anticipating increased sales. This led to stockouts in some products, such as automobiles, construction materials, and housing items (figure IV.3) (Box IV.1). The increase in the prices of goods has also been a reaction to a lagging passthrough of the peso depreciation, as suggested by the background data collected for the November's Business Perceptions Report. Thus, in November, goods core inflation rose to 4.4% annually (3.6% in July).

Services inflation has remained contained, although it shows an increase in the margin, in the context of the gradual recovery of output in some sectors and communes in the country. As a result, in November the annual variation of the underlying services rose to 2.3% (1.7% in July). During this period, there were some price increases in service lines such as hotels and restaurants, and leases. However, they remain weak in the aggregate, in a context where the supply of services is still limited, and price imputations remain in force (figure IV.4). In this regard, the technical supplement issued by the INE with the November CPI states that the general imputation rate was somewhat lower than that observed at the statistical closing of the last MP Report. Likewise, some activities such as recreation and culture, and hotels and restaurants showed a significant decrease in the data imputation as compared to July.

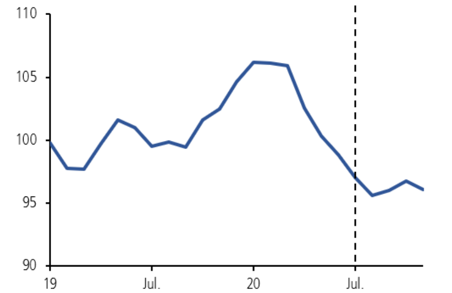
Since the last MP Report, the prices of certain food products have risen significantly, although some of these increases were foreseeable for seasonality reasons. Fruit and vegetable prices experienced positive monthly variations, partly influenced by higher seasonal demand in September for some products, such as tomatoes. In other food products, there were increases in the price of pork, beef, and chicken, which to some extent are related to supply constraints. All of this is visible in a scenario where prices of some types of meat have risen due to supply restrictions in exporting countries, among other reasons. Additionally, limited beef imports and increased meat exports in general have kept supply low locally. In the aggregate, food inflation stood at 6.8% annually in November, the same as in July.

Energy reduced its negative contribution to accumulated inflation. Between August and November, its CPI variation moderated its fall, accumulating –0.6pp in this period, which mitigated the downward trend it had shown up until the latest MP Report. The recovery of

Figure IV.5

CPI fuels (*)

(index, base 2018=100)



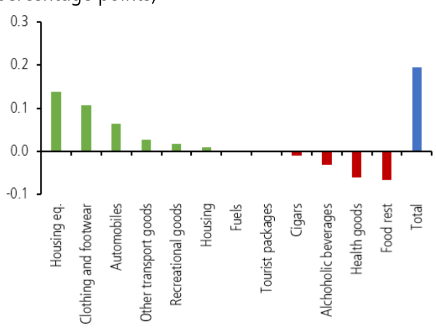
(*) Segmented vertical line corresponds to the statistical closing of the September 2020 Report.

Source: National Institute of Statistics.

Figure IV.6

Goods: Accumulated surprises since the September Report (*)

(percentage points)



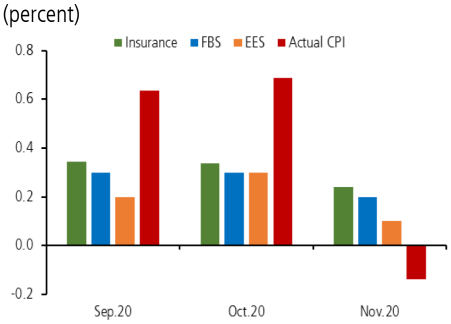
(*) Corresponds to the sum of accumulated surprises of the non-volatile goods and volatile goods, for more details see Carlomagno and Sansone (2019).

Source: Central Bank of Chile.

Figure IV.7

CPI: Market expectations and effective monthly data (*)

(percent)



(*) Considers the last data available prior to the publication of the CPI for the corresponding month.

Sources: Central Bank of Chile, National Institute of Statistics and Tradition Chile.

gasoline prices as compared to the beginning of the year and their gradual passthrough to local prices increased the records of the CPI for fuels in September and October, after the successive falls that had been accumulating since the turn of 2020 (figure IV.5).

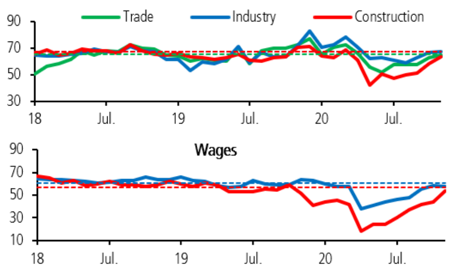
Since the last MP Report, the accumulated surprise in inflation was positive—considering differences of different sign in September, October, and November—and was explained by goods and services. This surprise was grouped in the items with the highest demand, such as housing equipment, clothing and footwear, and automobiles (figure IV.6). On the services side, it was concentrated in hotels and restaurants, and leases. The effective inflation figures were also very different from what the market had predicted. While in September and October they exceeded the projections, in November they came lower than expected (figure IV.7).

No upcoming major changes in cost pressures are expected. The exchange rate stands at a lower level as compared to the last MP Report. Considering the average of the peso/dollar parity in the last ten working days before the current and previous statistical closings, the peso has appreciated by 3.3%. Meanwhile, in the November's Business Perceptions Report, companies mentioned some cost increases due to sanitary issues, which not all of them had been able to offset through the expense control plans implemented since the onset of the pandemic. This was particularly relevant in the more labor-intensive sectors or those involving greater social interaction. The three-month cost expectations reported in the November IMCE show an increase, but trade and construction are still below their historical averages (figure IV.8).

Labor costs remain limited in a context of a gradual and heterogeneous recovery in the labor market. Also, their outlook points to a more gradual recovery than output, to the extent that social distancing rules continue to affect the operation of certain more labor-intensive sectors. The annual variation of the wage indicators published by the INE—Wage Index and Labor Cost Index—rose in September; however, the most significant increases were concentrated in specific sectors, such as trade and manufacturing. In line with the complementary bulletin on wages and labor costs published by INE, this situation is likely to be related to the reincorporation of part of the employees under the Employment Protection Law, the gradual reversal of the measures to reduce wages and benefits, as well as the increases in commissions for higher sales in trade. Perceptions compiled in the November's Business Perceptions Report ratify the above. However, weakness persists in other sectors, particularly those where most jobs were destroyed. Thus, the same bulletin shows that, in September, there was still a high heterogeneity in the expectations about possible layoffs within a three-month horizon, with the administrative and support services, and accommodation and catering services among the most pessimistic activities. In fact, closing the gaps that the pandemic has

Figure IV.8

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



(1) A value above (below) 50 indicates prospects for expansion (contraction). (2) The horizontal segmented lines correspond to the historical averages from January 2004 to November 2020 for each series. (3) Expectations for costs are for a 3-month term and for wages for a 6-month term.
Source: Icare / Adolfo Ibañez University.

created in the labor market will take time, considering that output will take several more quarters to return to pre-October 2019 levels.

Inflation outlook

The effective figures of recent months have been very far from expectations. November featured a negative CPI, after the high figures of September and October. This reversal confirms the volatile and temporary nature of these surprises. It also reflects the difficulty in drawing conclusions from recent data on inflationary trends, given all the changes that are occurring in the economy since the beginning of the pandemic. In fact, market expectations have picked up on the temporary price shock and now show swings in the short term and stability at around 3% in two years' time.

The baseline scenario considers that the CPI will fluctuate around 3.0% in 2021. The effects of the withdrawal of pension savings on inflation will fade away as the replenishment of stocks normalizes the supply of goods and the supply of services increases, prevailing in its evolution the gradual closing of the gaps in the economy. Thus, inflation will fall to numbers below 3% at the beginning of 2022 and then converge to the target over the policy horizon.

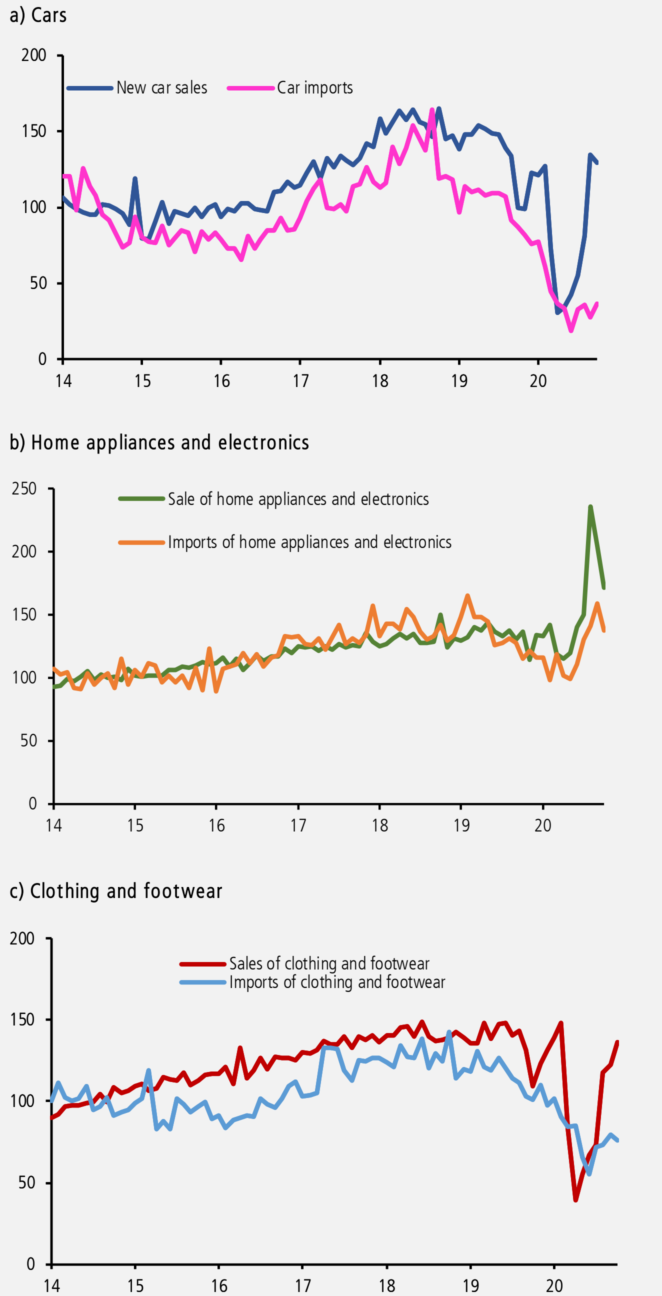
Box IV.1: **Inflation dynamics, demand shocks and the role of supply factors**

In September and October, inflation in Chile was significantly above the projections in the last MP Report and markets' expectations, in a context of a major positive demand-side shock associated with the withdrawal of pension savings. The inflationary pressures driven by this increase in aggregate demand has coupled with a limited reaction capacity of supply due to the effects of the pandemic-related confinements. Plus, short-term factors associated with a rapid inventory depletion that even resulted in stock-outs in some products. It is also possible that medium-term factors exist causing the destruction of productive relationships among firms triggered by the sharp fall in economic activity after the pandemic outbreak. This box describes the recent dynamics of inflation while it examines the role of associated demand- and supply-side factors, and outlines possible developments for the short and medium term.

The role of inventories

The inventories of certain categories of goods saw a significant depletion after the approval of the withdrawal of pension funds, even causing some stock-outs. This is confirmed by the perceptions gathered in November Business Perceptions Report and the IMCE. The comparison between sales and imports of goods not produced domestically is also revealing in this regard: between August and October sales showed a strong upturn, which was not matched by import increases of a similar magnitude (figure IV.9). This can be explained by the sudden nature of the increase in demand: since import orders typically take months to arrive, the available supply will depend more on the available inventories.

Figure IV.9
Real sales and imports (*)
(index, 2014=100, seasonally adjusted)



(*) CPI-deflated imports of new cars, clothing and footwear, and electronics (includes: home appliances, fax machines, audio equipments and cell phones) as appropriate. Imports of home appliances and electronics includes cell phones, computers, television sets and electric appliances.

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

When confronted with a stock-out situation due to a transitory demand shock, prices will naturally overreact[1]/. If in the face of such transitory shock inventories are sufficient, price increases will be limited and inventories will be used up until the demand goes back to its "normal" level; if excessive, stock-outs will occur and the prices will exhibit a stronger response.

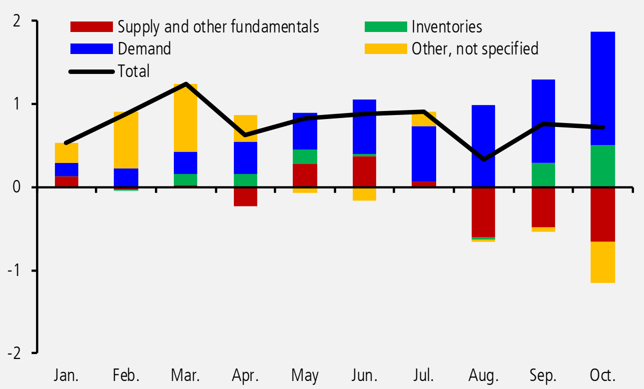
To quantify the effect of the demand shock and inventory stock-out on prices, the Arroyo et al. (2020) strategy is used, which allows estimating the contribution of these factors to the monthly price variation in different areas of the economy.

In the case of electronic goods and appliances, the combined effects of the demand shock and inventory depletions were the main source of upward pressure on prices in last September and October. For automobiles, the price increase observed in October was almost entirely explained by stock depletion. Finally, in the clothing sector, the contribution of both elements was also significant in September and October, explaining just over half of the price increase of said months (figure IV.10).

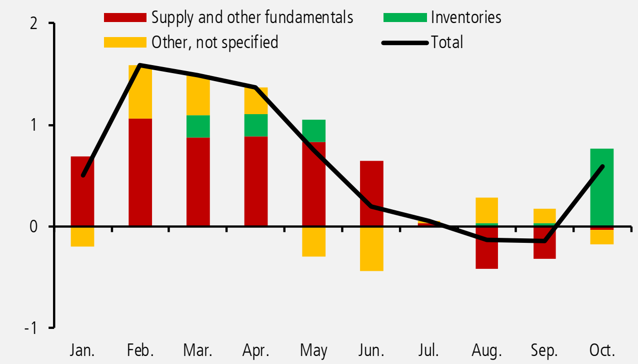
Figure IV.10

Breakdown of price changes in selected sectors (*)
(monthly change, moving quarterly average, percent)

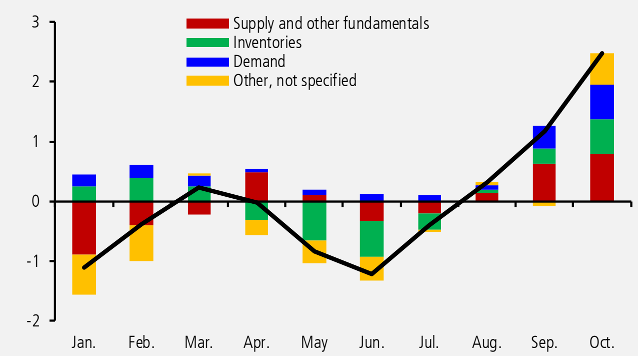
a) Home appliances and electronics (2.5% of CPI)



b) Cars (2.9% of CPI)



c) Clothing and footwear (4.1% of CPI)



(*) Other fundamentals include: exchange rate, consumers' expectations and the inertial series dynamics. Other not specified are variables not explained by the model.

Source: Arroyo et al. (2020)

The role of destruction of productive relations

Whenever economic activity suffers a steep downfall, it can take a toll on the firm-supplier relationships. This may occur because suppliers go bankrupt or close down, or because of low demand by end clients that forces the firm to stop purchasing from some suppliers. If these relationships cannot be rebuilt easily, the costs may rise and cause inflationary pressures, especially in an episode of sharp increase in demand.

To quantify this mechanism, we build measures for the creation and destruction of commercial relationships between firms and its providers by using anonymized digital bill data[2]/. These data show that the levels of gross and net creation of

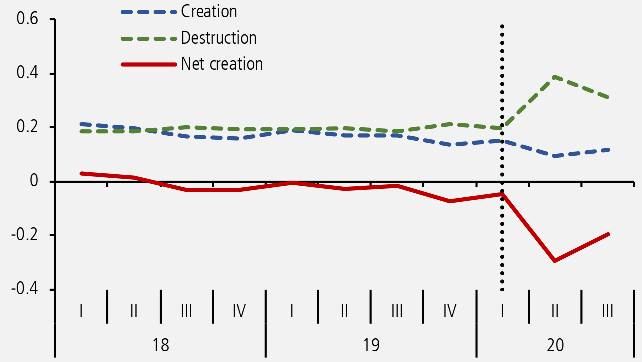
[1]/ The theory that studies the role of inventories in price formation is known as the "competitive storage theory". It states that firms decide on their inventory levels with the purpose of transferring supply between periods to maximize expected profits. Two key elements are involved in this decision: inventory technology and price expectations. Technology refers to the way inventories are accumulated, the cost of accumulating and/or depleting them and their depreciation. At this point there are several modeling alternatives. Regarding the role of expectations, all theories follow a similar logic: if firms expect prices to go up (down), they accumulate (deplete) inventories. The market price will then result from the balance between the current level of demand, the current level of inventories and the expected prices.

[2]/ The methodology is adapted from the standard definitions presented by Davis and Haltiwanger (1992) in the context of job creation and destruction. It must be noted that these measures refer to the number of relationships, irrespective of associated expenditures. Thus, strictly speaking, the destruction may consider relationships that were interrupted by the pandemic, but may be resumed on a future date.

said relationships are the lowest ever in the history of measured digital billing (first quarter 2018) and the levels of gross destruction are the highest (figure IV.11). In the second quarter of 2020, roughly 40% of these relationships with suppliers was destroyed and discounting creation, net destruction is close to 30%. A partial reversal is observed in the third quarter, consistent with the gradual opening of the economy.

Figure IV.11

Creation and destruction of relations with suppliers (1) (2) (3)
(percentage points)



(1) The figure shows quarterly gross creation and destruction, and net creation of productive relationships with suppliers. (2) Companies belonging to the National Accounts directory, excluding those linked to Electricity, gas, and water and Public administration. (3) The vertical dashed line marks the onset of the pandemic.
Source: Central Bank of Chile.

Some background information suggests that in the manufacturing sectors, the net creation of supplier relationships could be negatively correlated with inflation[3]/. The importance of this mechanism for medium-term inflation will depend on how fast the firms manage to rebuild their relationships with suppliers and/or create new comparable ones, a phenomenon that is quite new in the academic literature[4]/.

Conclusion

The high inflation numbers of September and October were concentrated in the goods and services most affected by the demand shock associated with the withdrawal of pension savings and, in the case of goods, inventory depletion in some specific sectors. Likewise, a disruption of productive relations between firms has been observed that may be causing supply disruptions that translate into inflationary pressures. By its very nature, the demand shock will not be permanent —although its impact would extend for a few more months, due to the second pension withdrawal— so the inflationary pressure from this factor should ease as inventories are restored.

[3]/ The lack of relationship in services may be due to a significant number of these components being imputed in the CPI by the INE, given the difficulty of on-site measuring in the context of the pandemic.

[4]/ This notion has been extensively studies in the macro literature on the labor market (e.g., Birinci *et al.,* 2020, Giupponi and Landais, 2018) but less is known on matter in the intermediate input market (some exceptions are Huneeus 2018 and Lim 2019).

V. FUTURE EVOLUTION OF MONETARY POLICY

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

The medium-term outlook for the Chilean economy continues to be determined by the major negative impacts of the pandemic, so the Board reiterates that it will keep the strong monetary impulse for an extended period of time, to ensure the consolidation of economic recovery and compliance with its objectives. In the central projection scenario, the economy will continue on a gradual recovery path in the coming quarters, with the closing of capacity gaps and the convergence of inflation to 3% still expected to consolidate towards 2022. All in all, uncertainty is still higher than usual, as the economy is undergoing a recovery process that faces the challenges of not only the pandemic but also of the political climate driven by the social crisis that broke out some 14 months ago.

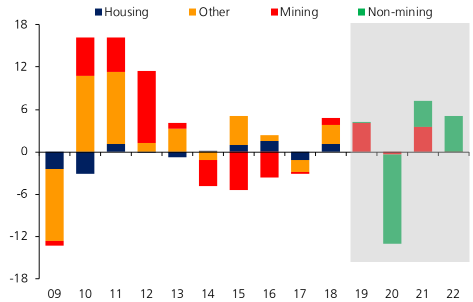
Projections for activity and demand

The Chilean economy has undone part of the steep fall it suffered after the pandemic hit, albeit at a slower pace than was anticipated in the last MP Report. This has been especially important for the most affected businesses such as construction and most services, where the extension of sanitary constraints and social distancing measures have had very significant effects. As a result, in 2020 the fall in activity will be more pronounced than was foreseen in September.

Going forward, the central scenario envisages that activity will continue to improve gradually. This considers that the sanitary situation will allow mobility at a national level to remain above the levels of mid-2020, despite possible advances and setbacks of the various districts of the country under the deconfinement program in place. In addition, it considers that during 2021 there will be advances in the vaccination process, in line with the government's announcement. In any case, the projections consider that the activity of the sectors that rely more on social interaction will continue to lag, as a result of both supply-side constraints that will continue to be present and the still-contained demand due to fears of contagion.

Figure V.1

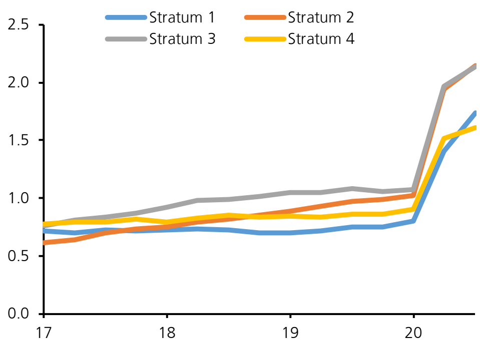
Real annual contribution to GFCF (*)
(percentage points)



(*) The effective data until 2018 comes from information contained in National Accounts by Institutional Sector. Forecasts for the years 2019, 2020, 2021 and 2022 are made using forecasting models of the Central Bank of Chile and sectoral sources, such as investment plans and the CBC survey.
Source: Central Bank of Chile.

Figure V.2

Indebtedness (1) (2)
(debt / sales ratio)



(1) The debt to sales ratio is calculated at the level of each firm for each period. The numerator is stock of banking and foreign debt of each firm. The denominator is calculated as the average of the real sales of each firm (deflated by the UF) between the third quarter of 2018 and 2019. The indebtedness by sales stratum is calculated as the median among the firms of each stratum. (2) Stratum 1 and 2: annual sales less than UF25,000. Stratum 3: annual sales greater than UF 25,000 and less than UF 100,000. Stratum 4: annual sales greater than UF 100,000.
Sources: Central Bank of Chile, Commission for the Financial Market and National Statistics Institute (INE).

In addition to increased mobility, activity will continue to be supported by a still highly expansionary monetary policy and a fiscal policy that will continue to contribute to the economy's recovery in line with the recently approved budget for 2021 and the implementation of the various plans and programs that have been announced in recent months. Also, a greater external boost compared with this year, because of both the recovery in global activity and better terms of trade. Furthermore, the economy will receive another boost from the second withdrawal of pension savings, speeding up the pace of growth in 2021 above the estimates in the September MP Report. The central scenario assumes that the second withdrawal will have an impact of the order of 1 percentage point on GDP, which is less than was estimated for the first withdrawal, in part because the drop in income caused by the pandemic in the second and third quarters has already been more than compensated for by previous measures. This leads to foresee that households will save a greater fraction of the amounts withdrawn this time around. Moreover, the resources that could be withdrawn are concentrated in the higher income quintiles—which are less motivated to use them up for consumption.

In this context, for 2020 the economy is projected to contract between 6.25 and 5.75% annually, while in 2021 it would grow between 5.5 and 6.5%. In 2022, the comparison base effects—resulting from the important initial impact of the pandemic—and the transitory increase in consumption will no longer be present, so GDP would grow between 3.0 and 4.0%. It is also assumed that, during 2022, the fiscal and monetary impulse will be reduced as the economy consolidates its recovery process and gaps are closed.

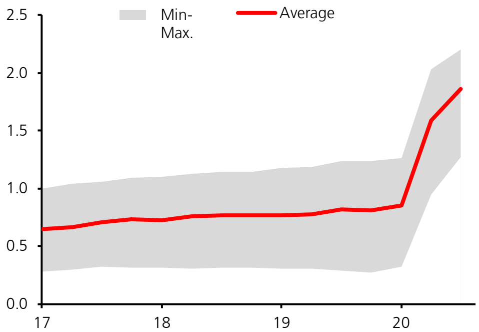
On the expenditure side, the central scenario assumes that consumption will be driven by recovering labor income, government transfers and the aforementioned withdrawal of part of pension savings. About the latter, the projections consider that its greatest effects on consumption will be seen between the end of this year and the turn of the next and will continue to be concentrated in goods. Subsequently, consumption will evolve more in line with its fundamentals, in a context where employment and income will gradually improve. The latter will occur in a scenario where, until herd immunity is achieved[1]/, mandatory and voluntary social distancing measures will continue to affect the operation of the service sectors, which are more labor intensive. Thus, it is estimated that after falling 6.9% this year, private consumption will grow 10.7% in 2021 and 1.9% in 2022.

The central scenario foresees a recovery in investment, supported by the reopening of the economy, public investment, the continuation of

[1]/ Herd immunity is the biostatistic observed in some population when a specified fraction of it has become immune to a disease, thereby preventing infection of nonimmunized individuals.

Figure V.3

Indebtedness: selected economic sectors (*)
(debt / sales ratio)



(*) The debt to sales ratio is calculated at the level of each firm for each period. The numerator is stock of banking and foreign debt of each firm. The denominator is calculated as the average of the real sales of each firm (deflated by the UF) between the third quarter of 2018 and 2019. The indebtedness by sector is calculated as the median among the firms of each sector. The red line is the simple average between the sectors. The gray area indicates the minimum and maximum debt-to-sales ratio among the selected sectors for each period. The sectors included are: business services, housing services, financial services, personal services, commerce, restaurants and hotels, industry, construction, and

Sources: Central Bank of Chile, Commission for the Financial Market and National Statistics Institute (INE).

Table V.1

Economic growth (*)
(annual change, percent)

	Avg. 00-07	Avg. 10-18	2019 (e)	2020 (f)	2021 (f)	2022 (f)
World GDP at PPC	4.5	3.8	2.9	-4.0	5.4	4.5
World GDP at market exchange rate	3.3	3.2	2.5	-4.1	4.9	4.3
Trading partners GDP	3.7	4.0	2.9	-2.7	5.5	4.2
United States	2.7	2.3	2.2	-3.5	3.8	4.1
Eurozone	2.2	1.4	1.3	-7.4	4.8	5.1
Japan	1.5	1.4	0.7	-5.3	2.1	1.7
China	10.6	7.9	6.1	1.9	8.3	5.1
India	7.1	7.4	4.2	-8.7	7.0	5.6
Rest of Asia	5.3	4.6	3.4	-3.4	5.5	4.5
Latin America (excl.Chile)	3.4	2.0	-0.8	-8.0	3.2	3.1
Commodity exporters	3.1	2.4	1.5	-5.6	4.3	3.5

(*) For its definitions, see Glossary.
(e) Estimate (f) Forecast

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

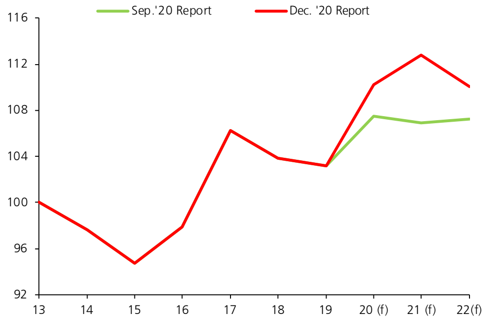
large mining projects that were shelved during the pandemic and the highly expansionary stance of monetary policy. However, investment will improve slowly, reaching pre-September 2019 levels only in early 2023. Thus, it is estimated that, after falling 13% this year, gross fixed capital formation will grow 7.3% in 2021 and 5.1% in 2022 (figure V.1). This projection is subject to more uncertainty than usual. On one hand, the Corporation of Capital Goods (CBC) Survey reports increased investment for next year, especially in mining and energy projects, but with no significant increases in other sectors. In turn, the quarterly report of the Association of Engineering Companies and Consultants shows that this industry's activity has deteriorated further, with a fall of 10.2% annually in the third quarter. This report points out the shelving of declared investments, along with projects being stopped or slowed down. On the other hand, the evolution of financial asset prices, the better expectations and the higher copper price could boost investment.

The significant increase in business leverage—which was necessary to get through the most complex months of the pandemic and prevent a large number of businesses from going bankrupt—is another element that could explain the slower recovery of investment. Indebtedness has grown across the board, though most intense in medium-sized firms and in trade, business and personal services sectors, which are among the hardest hit by sanitary measures and households' precautionary behavior (figures V.2 and V.3). In a context of partial recovery of activity, the considerable fall in profits and the aforementioned increased indebtedness, could limit the capacity of companies to embark on new projects. This adds to the still high level of uncertainty about the sanitary evolution, the pace and composition of growth, as well as concerns about the country's political situation and a possible resurgence of episodes of violence as described in November's *Business Perceptions Report.*

It is estimated that, on average, the impulse that the Chilean economy will receive from abroad in the next two years will be somewhat stronger than was foreseen in September, mainly due to better effective third-quarter numbers among our trading partners and more favorable terms of trade. In particular, it is worth noting the resilience shown by trade in goods around the world. The central scenario assumes average trading partners' growth of 4.9% in the period 2021-2022 (4.6% in the September MP Report) (table V.1). However, the recovery will be heterogeneous across countries and economic sectors, being slower for services. In addition, global activity prospects continue to be determined by the evolution of the pandemic, where new outbreaks like those in the United States and parts of Europe contrast with the advances in the process of developing and implementing various vaccines. In any case, although infections have increased significantly, the impact on activity is expected to be milder than in the early stages of the pandemic. This is partly explained by

Figure V.4

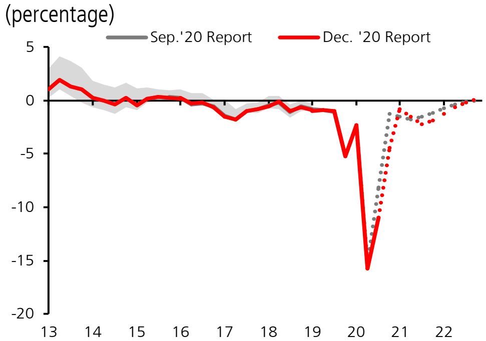
Terms of trade
(index, 2013=100)



(f) Forecast
Source: Central Bank of Chile.

Figure V.5

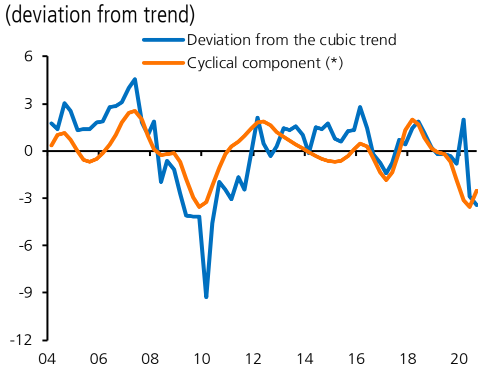
Activity gap (1) (2)
(percentage)



(1) Gray area shows minimum and maximum ranges for gap estimates, using different potential GDP estimation methods (trivariate, multivariate, HP, SVAR, MEP and SSA methods). See Fornero and Zúñiga (2017). (2) Dotted lines show forecast. Source: Central Bank of Chile.

Figure V.6

Electricity generation National Electric System (NES)
(deviation from trend)



(*) Cyclical component is obtained from a band pass filter (See Christiano and Fitzgerald (2003)).
Sources: Central Bank of Chile and National Electrical Coordinator.

the sanitary systems being better prepared and constraints being more focused. Actually, despite reduced mobility in countries that have reinstated constraints, the deterioration has not been as severe compared with the onset of the pandemic.

The Chinese economy will continue to lead the global recovery, driven by public investment and growing external demand for its products, which will continue to permeate the rest of the world via foreign trade. This also explains the upward revision to the copper price projection with respect to the previous Report, from US$2.8 to 3.15 per pound in the period 2021-2022. For the oil price, projections show no major changes, standing at around US$48 per barrel (Brent-WTI average). Thus, throughout the projection horizon, the terms of trade will follow a more favorable trajectory than was considered in September (figure V.4).

Chilean shipments of goods abroad have also been more dynamic than expected, which, together with the revision to National Accounts data for the second quarter 2020, the upward correction of the copper price, and weaker imports, lead to forecast that the current account will post a surplus of 0.9% of GDP this year (-1.5% in September). Accordingly, the projection of the current account deficit at trend prices[2]/ is lowered from 3.5 to 1.6% of GDP in 2020. For 2021, the current account deficit estimate is lowered from 2.5% to 1.5% of GDP, also influenced by the copper price, which more than offsets the upward revision of imports due to the pension savings withdrawal. For this same reason the current account deficit at trend prices estimate is increased from 4.6% to 4.9% of GDP in 2021.

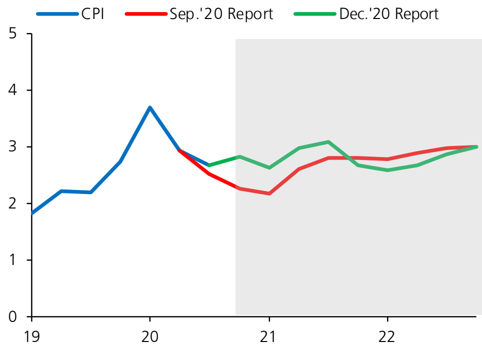
Capacity gaps

After the sudden, significant widening of the activity gap in the second quarter it began to close. In the central scenario this closing will conclude only towards 2022, considering a change in potential GDP of nearly -1.2% and 0.2% in 2020 and 2021, respectively (figure V.5).

As has been mentioned before, measuring the activity gap is subject to a high degree of uncertainty, which on this occasion is still greater than usual. Therefore, in order to evaluate its implications for the inflation trajectory, it is necessary to analyze the gaps in the goods and factors markets. In this regard, various indicators suggest that these are still important in some markets. On one hand, electric

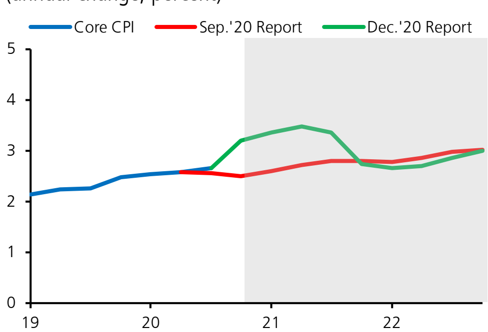
[2]/ This measurement adjusts the value of mining exports and fuel imports considering the deviations of the prices of copper and oil from their long-term estimates. The same for rents and transfers associated with copper exports. The rest of exports and imports is valued using the current prices. It does not correct for possible changes in quantities exported or imported due to changes in the prices of copper or oil. 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 MP Report and box V.1 in the December 2015 MP Report).

Figure V.7
CPI inflation forecast (*)
(annual change, percent)



(*) Gray area, as from fourth quarter 2020, shows forecast.
Sources: Central Bank of Chile and National Statistics Institute (INE).

Figure V.8
Core CPI inflation forecast (*)
(annual change, percent)



(*) Core inflation is measured using CPI excluding volatile. Gray area, as from fourth quarter 2020, shows forecast.
Sources: Central Bank of Chile and National Statistics Institute (INE).

generation has remained below its trend (figure V.6). On the other hand, although the labor market shows some improvement, according to job creation, gaps are still substantial. A significant number of jobs lost after the onset of the social crisis and the pandemic have yet to be recovered, and there is still a considerable number of workers with their contracts suspended. Many of these job losses and suspensions correspond to service activities, whose recovery has been slower. In this context, although inactivity has decreased somewhat compared to the last MP Report, it is still well above usual values (around 7 million people in October versus 5.7 million on average in 2019). It is worth noting that, in the case of women, the data show that a significant percentage of them justify their inactivity on grounds of family responsibilities. This, in a context where November's *Business Perceptions Report* also shows a more stable labor market, with fewer layoffs and increased rehiring of suspended workers. At the same time, it reports difficulties to fill vacancies in some sectors, which would be related with, among other factors, fears of infection and the just mentioned difficulties of women to enter the labor force.

Convergence of inflation

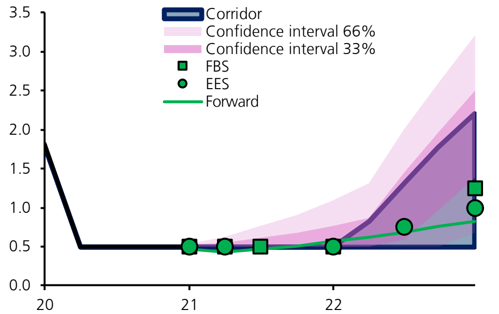
Inflation surpassed the estimates in the last Report, responding to the surprising hikes of September and October, and which were partly offset in November. In this period, several prices had important movements, particularly those goods that were highly demanded after the consumption shock caused by the withdrawal of pension savings. This occurred in a context of limited capacity of supply to react in the short term. Although this hypothesis is still under evaluation, the destruction of productive relations between companies resulting from the sharp drop in economic activity after the onset of the pandemic, may also have created bottlenecks that put pressure on certain prices, a factor that could remain present in the coming months.

Beyond the short-term fluctuations in inflation, the wide gap in activity opened by the pandemic means that medium-term inflationary pressures remain limited. Mainly, the economy continues to face significant challenges in recovering from the shocks of the past year and is expected to take several more quarters to return to the activity levels of the third quarter of 2019 and close the newly-created gaps in the labor market. Thus, the inflation convergence process will be consolidated only during 2022.

In this context, the projection scenario estimates that the CPI will hover around 3.0% annually for several quarters and will consolidate its convergence to the target no sooner than 2022. This implies that the inflationary effects of the withdrawal of pension savings will fade out gradually as restocking normalizes the supply of goods and the supply of services increases progressively, with the state of the economy's gaps and their gradual closing determining its evolution.

Figure V.9

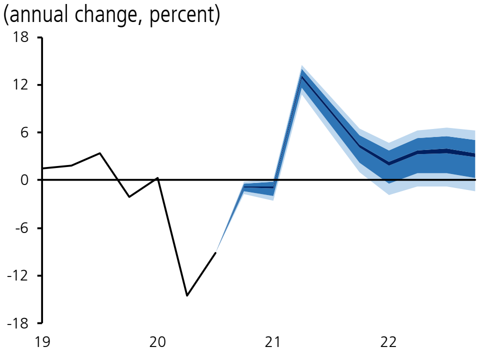
MPR corridor (*)
(percent)



(*) The corridor is built following the methodology of Box V.1 of the March 2020 Report. It includes the FBS of December 2nd, the EES of November 9th and the Forward curve derived from 10-day average of financial assets at statistical closing.
Source: Central Bank of Chile.

Figure V.10

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



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

This will be more visible in core inflation, which will stand above 3% annually for much of 2021, to then fall to lower figures and converge to 3% in the fourth quarter of 2022 (figures V.7 and V.8).

Monetary policy strategy

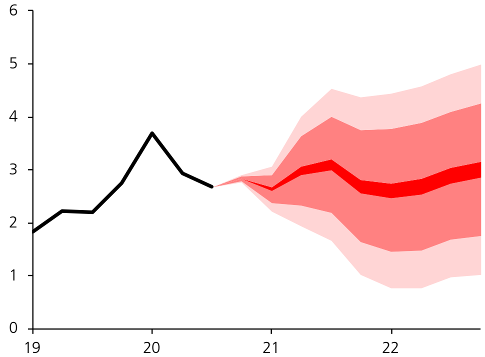
The Board has stated that it will maintain the high monetary stimulus for an extended period of time, in order to ensure the consolidation of the economy's recovery and compliance with the Bank's objectives. In particular, it foresees that the MPR will remain at its minimum level over much of the two-year monetary policy horizon. Unconventional measures will continue in place. This considers that the total stock of bank bonds acquired under various programs—around US$8 billion—will be maintained for the next six months, reinvesting the coupons as they mature. This excludes purchases made under the CC-VP program. With respect to the FCIC facility, the Board decided to make no changes to the total resources available and the conditions for their utilization. However, it will evaluate its possible extension and changes in access parameters that facilitate its use to respond to the needs of the economy at this stage.

As always, there are sensitivity scenarios where the evolution of macroeconomic conditions might call for adjustments to the monetary impulse, as derived from the MPR corridor (figure V.9). As in previous quarters, uncertainty remains higher than usual, with projections largely conditioned by the evolution of the pandemic and its implications for business and personal income. On one hand, the risk that a significant increase in infections will require the simultaneous reinstatement of quarantines for a significant percentage of the population remains fully valid. A situation like this could have important economic effects, making it necessary to evaluate actions to enhance the monetary impulse. In the medium term, however, advances in vaccine development reduce the likelihood of this scenario being as harmful to the economy as was observed at the beginning of the pandemic. In fact, if the vaccination process begins earlier in Chile, herd immunity could be achieved sooner. This would allow some supply constraints to be lifted, helping expectations and demand to recover more quickly and deeply. To the extent that a restored supply dominates in such a scenario, the monetary policy trajectory may not deviate much from the central scenario.

Beyond the vagaries of the pandemic, doubts remain about the scars it will leave on the economy, which may affect the convergence of inflation to the target in opposite directions, depending on its relative effects on demand and supply. Thus, future adjustments in monetary policy around these forces will depend largely on which of them predominates. The high uncertainty and high corporate indebtedness could diminish the capacity of companies to invest and contract for longer than assumed in the central scenario. In addition, as has been

Figure V.11

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

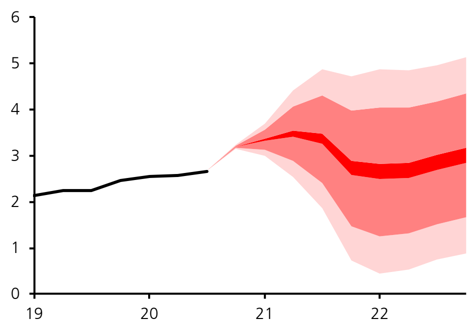


(*) The figure shows confidence interval of baseline projection over the respective horizon (colored area). Confidence intervals of 10%, 70% and 90% around the baseline scenario are included. Confidence intervals are built based on the RMSE of averaged XMAS-MEP models from 2009 to 2017. Also, the intervals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

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

Figure V.12

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



(*) Core inflation is measured using CPI excluding volatile. The figure shows confidence interval of baseline projection over the respective horizon (colored area). Confidence intervals of 10%, 70% and 90% around the baseline scenario are included. Confidence intervals are built based on the RMSE of averaged XMAS-MEP models from 2009 to 2017. Also, the intervals contain the risk evaluation on inflation performed by the Board.

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

mentioned on other occasions, the pandemic may bring about more permanent changes in the way different economic sectors operate, encouraging the reallocation of resources among them and affecting long-term growth. This because, among other reasons, the labor market may take some time to adapt, especially if the skills of those who became unemployed in this cycle become obsolete over time and a mismatch develops between the skills required and offered.

Although the sanitary risks seem more unbiased, particularly in the medium term, the after-effects of the crisis paint an economic picture with unbiased risks for inflation, but downward biased for activity (figures V.10, V.11, V.12). The economy is undergoing a recovery process that faces both the challenges posed by the evolution of the pandemic and the political situation associated with the social crisis that broke out just over a year ago. The central scenario assumes that the latter will continue to follow the institutional path approved by Congress. It must be noted that the government, firms, households and financial institutions have weathered the pressures of the last fifteen months by making extensive use of the slack accumulated in previous years, deteriorating their asset position. This, as has been pointed out in previous reports, increases the country's exposure to negative scenarios, which could significantly compromise the recovery of the economy and have severe consequences on the well-being of families and the viability of many businesses. Monetary policy will continue to sustain the economy’s recovery by ensuring adequate financial conditions for households and firms, keeping inflation under control and safeguarding financial stability.

GLOSSARY

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

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

Commodity exporters: Australia, Canada, and New Zealand, weighted at PPP (using data from the October 2020 WEO).

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

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

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

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

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

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

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

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

Latin America: Includes Argentina, Bolivia, Brazil, Colombia, Mexico, and Peru, weighted at PPP using data from the World Economic Outlook (WEO, October 2020).

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

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

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

NER: Nominal exchange rate.

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

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

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

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

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

Rest of Asia: Hong Kong, Indonesia, Rep. Korea, Malaysia, Philippines, Singapore, Taiwan, and Thailand, weighted at PPP (using data from the October 2020 WEO).

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

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

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

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

World growth: Regional growth weighted by share in world GDP at PPP, published by the IMF (WEO, October 2020). World growth forecasts for the 2020–2022 period are calculated from a sample of countries that represent about 85% of world GDP. For the remaining 15%, the average growth rate of advanced and emerging economies is used.

Alejandro Zurbuchen S.

LEGAL REPRESENTATIVE

CENTRAL BANK OF CHILE
Corporate Affairs Division
DECEMBER 2020
ISSN: 0716-2219
Santiago, Chile
Agustinas 1180, Santiago, Chile
Casilla Postal 967, Santiago, Chile
Tel.: 56-2 2388 2000
www.bcentral.cl
bcch@bcentral.cl

BANCO CENTRAL
DE CHILE

MONETARY POLICY REPORT December **2020**