

# MONETARY POLICY REPORT PRESENTATION BEFORE THE FINANCE COMMISSION OF THE HONORABLE SENATE OF THE REPUBLIC\*

Mario Marcel Governor Central Bank of Chile 10 June 2019

<sup>\*</sup> The June 2019 *Monetary Policy Report* can be found on <u>http://www.bcentral.cl</u>.

## I. Introduction

Mr President of the Senate's Finance Commission, senator Ricardo Lagos-Weber, Senators members of this Commission, ladies, gentlemen,

I am grateful for your invitation to present the vision of the Board of the Central Bank of Chile on recent macroeconomic developments, outlook and monetary policy implications. This vision is detailed in our June 2019 *Monetary Policy Report* released this morning. Its contents also provide the background for the decision adopted by the Board in its monetary policy meeting of last Friday.

There we decided unanimously to reduce the Monetary Policy Rate (MPR) by 50 basis points, taking it to 2.5%. Key in this decision was our evaluation that the monetary policy had to be recalibrated, because the delivered impulse was not enough to ensure the timely convergence of inflation to the 3% target in light of the new CPI figures and the new estimates for the activity gap and the neutral monetary policy rate.

The vision that the macroeconomic scenario could need a different monetary impulse began to be forged in the March *Monetary Policy Report*, when the measurement of inflation with the new Consumer Price Index (CPI) showed us an increase in prices significantly smaller tan with the previous figures, postponing for about a year its convergence to the 3% target. As you will recall from the presentation we made on that occasion, we linked lower inflation to the possibility of greater capacity gaps as a result of the massive immigration of recent years, and to a lower pass-through from exchange rate variations to prices.

When presenting that diagnosis, we said that the lower inflation as measured by the new CPI had implications for monetary policy, so we halted the normalization process that we had started in late last year. In addition, in order to fine-tune the diagnosis, we decided to advance to June the updating of the structural parameters—i.e. trend GDP, potential GDP and the neutral monetary policy rate. Then, at our May Monetary Policy Meeting, we discussed the option of reducing the MPR, advancing that such an adjustment would be justified in case of a significant widening of the gaps, or a lesser dynamism of the economy, a worsening of external conditions and/or a lower neutral MPR.

At last Friday's meeting we verified that all these conditions have been met. First, estimates of trend and potential economic growth have increased as a result of immigration, which translates into greater capacity gaps. Second, the neutral MPR is lower, partly because of the fall in the estimated neutral rates in the main economies. Third, in recent months, the dynamism of the economy has been below potential growth, helping to widen the activity gap. Finally, the external scenario has deteriorated, mainly because the balance of risks has become more negative.

After considering these elements and the prospects for the economic scenario, the right move was to reduce the MPR. I believe it is important to stress that this decision is based on an important analytical effort of the Bank, backed by the search for more evidence and capacity to identify structural phenomena that affect the Chilean economy. This is the conclusion of an announced and documented process, which required a rigorous development before materializing in a change of the MPR, because monetary policy cannot be conducted on the basis of intuitions or perceptions.

We have characterized this exercise as a monetary policy recalibration because it is largely derived from an update of the structural parameters that serve to characterize the macroeconomic situation and inform the policy rate decision. This translates into a one-time adjustment of the rate, whose exceptionality is reinforced by the unusual combination of changes in the parameters, including the new measurement of inflation.

However, we must make it clear that this does not mean ignoring the recent performance of the economy. On the contrary, the effective growth rate of recent months is weaker when compared with a higher trend growth.

Similarly, recalibrating the MPR does not mean that it cannot be adjusted in the future in the face of changes in the macroeconomic environment: rather it will allow for an adequate response to said changes to be evaluated on their own merits, without mistaking them for the factors that justified this adjustment.

Going forward, activity will grow above potential over the next two years and inflation will converge to 3% during 2020. The beginning of the MPR normalization will depend on our conviction that inflation is in a clear process of convergence to 3%. Especially important for this evaluation will be the way the labor market absorbs the strong immigration flow, the response of investment and external developments. At the same time, there are important risks around these projections.

Let me now describe this scenario and associated risks.

### II. Macroeconomic scenario

### **II.1. Recent evolution of activity and inflation**

In the first quarter this year, activity grew 1.6% annually, which combined a 3.6% fall in the mining sector and a 2.2% increase in the non-mining sectors (Figure 1). The high basis for comparison of the same period in 2018 anticipated that first-quarter growth this year would underperform that of 2018, but the result was lower than expected. This combined the negative performance of mining—affected by climatic factors, downtime at some mines and the lower ore—and several of the more volatile sectors—linked to natural resources—of non-mining GDP. In particular, the worse-than-expected performance of agriculture, fishing, and electricity, gas and water stood out.

Most of the non-mining sectors whose activity is more related to demand behaved in line with expectations, particularly construction and services. One exception was the export industry, which combined high bases for comparison, weak demand from its target markets—mainly Latin America—and stronger competition abroad.

On the demand side, the main changes in the first quarter were the slowdown in investment in machinery and equipment and in exports (Figure 2). This coincides with the deterioration of the external scenario in recent quarters and an inventory buildup that has not been undone as expected. On the other hand, investment in construction and other works and consumption evolved as expected, without major changes compared to the previous quarters. All in a context where various indicators show an increase in job creation.

Headline inflation as measured by the CPI and core inflation (CPI excluding food and energy, CPIEFE) continue near 2% per year. In the case of the CPI, with a level that has increased somewhat in the most recent past (Figure 3). In any case, the same phenomena identified in the March *Report* are still present: greater competition in certain markets, wider capacity gaps than previously estimated and lower pass-through of the accumulated peso depreciation than its historical averages.

### **II.2.** Updating the structural parameters

As I just said, in this *Report* we have updated the estimates of the structural parameters that are used to assess the state of the economy, its outlook and the calibration of monetary policy. This allowed mainly to quantify the effect of the massive immigration flow of recent years on trend and potential growth, increasing both. It was also possible to compare the impact on the neutral MPR of a higher trend growth with that of the fall in international interest rates.

Before I dive into the detail of the estimates, I would like to make a couple of precisions regarding the concepts of trend and potential GDP. In the first place, it is evident that estimating the growth capacity of an economy is very important when defining monetary policy and macroeconomic policies in general. In fact, not only the

Central Bank estimates trend growth, but also the Ministry of Finance to calculate the structural income of the Treasury. In our case, we estimate two concepts: trend GDP and potential GDP. The first has to do with the medium-term growth capacity of the economy, while the second refers to the level of GDP consistent with stable inflation and, therefore, is adequate to measure the activity gap associated with short-term inflationary pressures. Although in the long term the potential and trend growth rates converge to the same number, in the short term there are transitory elements—such as temporary shocks to productivity and restrictions in the use of factors—that alter the productive capacity and cause differences between the two. Hence the importance of analyzing them separately (Figure 4).

## II.3. Trend GDP

The updating of our trend growth estimate—which dated back to 2017—had the purpose of measuring the effects of the considerable immigration flow of recent years on the country's medium- and long-term growth capacity.

A box in the *Report* identifies episodes of significant immigration flows into other economies. Although each case is, in some sense, unique, and international experiences are not easily transferable, its analysis provides some useful background to understand the Chilean case. The first is to confirm the exceptional nature of the Chilean experience, due to its size and speed. In addition, given the factors that motivate migration—particularly from Venezuela—one can think that it will not be reversed any time soon. Secondly, recent immigration is characterized by an average population that is more qualified, younger and with a greater labor participation than the Chilean population. Third, relative to other countries, Chile poses fewer legal impediments to enter the labor market, and unlike other migratory cases, shares the language and other cultural aspects with a majority fraction of the immigrant population.

To update our trend growth estimate, we use the population projections for the period 1992-2050, published by the *National Statistics Institute* (INE) at the end of 2018. These reflect the significant immigration flow observed since 2015, which is expected to continue to be important in the coming years (Figure 5). This affects the projection of the labor factor and, through it, the growth capacity of the economy. The other forecasting assumptions do not undergo major changes with respect to the fiscal year of 2017, except for the updating of the Quarterly National Accounts figures and an explicit modeling of the way in which capital and total factor productivity respond to the immigration-related increase in the labor factor.

Despite the importance of the labor force increase, its impact on trend growth is not immediate or transmitted one for one. The economy must undergo a process of adjustment while the sharp increase in the supply of labor is completely absorbed, so that new workers are placed in positions that match their skills. The international experience is not conclusive regarding the duration of this transition, because, as I mentioned, the characteristics of the migratory processes have been very different. In any case, it can be expected that as the immigration flow is accommodated, a gradual increase in capital accumulation and productivity will be observed.

Thus, we estimate that the trend growth of the Chilean economy is between 3.25% and 3.75% for the period 2019-2028 (Table 1). This estimate compares with the 3.0% to 3.5% range that we considered before. It is important to note that the use of a range reflects the uncertainty regarding several of the factors that have been mentioned. In particular, this projection considers that the total factor productivity of the non-mining sector will grow 1% in the next ten years. However, there is uncertainty in light of this variable's volatility of recent years.

### **II.4.** Potential GDP

The updating of trend GDP is important for determining the potential GDP of the economy. Regarding the latter, we estimate that in the period 2019-2021 it will be around 3.4% (around 3.2% was the previous estimate), somewhat below its trend growth (Table 2). In this judgment, the initial fall in productivity is combined with

the increase in the labor force and the expected lags in the adequacy of the capital stock in response to this phenomenon.

The updating of potential growth, together with the performance of the economy in the first quarter, drive the activity gap level (-0.7 percentage points) to be wider than previously considered (Figure 6). It is important to note that, with respect to last December, the estimated level of the activity gap is greater in the beginning—the first quarter of 2019—, but also throughout the projection horizon. Although first-quarter activity figures play a role in the former, in the latter the fundamental factor is the potential growth update. The baseline scenario assumes that the gap will gradually close along the projection horizon, although at a slower pace than previously expected due to the magnitude of the adaptation process that the economy will have to go through in the face of the migratory shock.

## II.5. The neutral MPR

About the neutral policy rate, I think a couple of conceptual clarifications are in order. The neutral MPR is defined as the rate that is consistent with a GDP in its equilibrium (trend) level and an inflation rate in the 3% target. All this, once the effects of transitory shocks in the economy have dissipated. For this reason, the neutral MPR is inherently associated with the long term, while the effective MPR gradually converges, in the absence of further disturbances moving the economy away from its trend level. Hence, the neutral MPR to which we refer is understood as a trend neutral rate. For operational effects, monetary policy is considered expansionary whenever the actual MPR is below the neutral MPR, and contractionary the other way around, i.e., the actual MPR is higher than the neutral MPR. This is why keeping an updated estimate of this measure of neutral interest rate is relevant for both monetary policy implementation and communication of future orientation.

In the past few years we have seen several developments in the macroeconomic scenario that could have affected the level of the neutral MPR. Among them, we can mention the fall of external interest rates and the higher growth of both trend and potential GDP driven by the massive immigration of recent years I just mentioned. Moreover, the Bank has developed and expanded the use of new methodologies to estimate the neutral rate, following the practice of other central banks and the need to reconcile the different changes presented by the economy.

Our set of estimates yields neutral interest rates of the order of 1% in real terms. Taking into account the range of values and the uncertainty surrounding this calculation, we consider that the neutral MPR lies within the 3.75 to 4.25% range, that is, 25 basis points below the range we expected until March, partly reflecting the drop in interest rates around the globe (Figure 7).

## III. Baseline projection scenario

The convergence of inflation to the 3% target is subject to a baseline projection scenario that features the following characteristics.

## III.1. Activity and demand

On one hand, as I mentioned, it considers that the activity gap will close throughout the projection horizon, a period in which the economy will accumulate growth above its potential. This is consistent with GDP growing in 2019 between 2.75% and 3.5%. This range is below the range we expected in March, mainly reflecting the effects of the negative surprise of activity in the first quarter. Actually, this projection assumes that the economy will resume higher rates of annual expansion in the second half of this year. For 2020 and 2021, higher growth rates are foreseen, between 3% and 4% in both years (Table 3).

On the expenditure side, compared with March, the biggest adjustments are seen in gross fixed capital formation (GFCF), a component that, instead of growing 6.2% this year as projected, will grow only 4.5%. This revision owes to a great extent to the poor first-quarter performance of the machinery and equipment component. This weakness has continued, according to partial second-quarter data. It must be noted that this occurs in the context of high inventory buildup towards the end of 2018 and the increased uncertainty surrounding the external scenario.

In any case, the other part of investment—construction and other works—has remained dynamic and forward going forward signs are still positive. On one hand, related stock market data point to a favorable development. On the other, the large-scale investment projects that are currently in progress—especially in mining—do not register delays and have been unfolding according to plan. Along the same lines, the various surveys of investment projects have not seen any downward and continue to foresee larger amounts for 2019-2020, compared with the amounts invested in the period 2017-2018 (Figure 8).

Turning to concessions, the authorities have announced a significant increase in them as from 2020, in particular in hospitals, roads and airports. Add to this the announced approval of a set of complementary works that will be executed in 2019 and 2020. The information of the *Association of Engineering Consulting Firms* (AIC) for the first quarter of 2019 shows that detail engineering—which covers projects scheduled for one or two years ahead—shows high annual growth rates. In terms of housing investment, although it began the year with a zero contribution to construction GDP, sales remain high and the outlook reflected in the May *Business Perceptions Report* is positive. In any case, the *Monthly Entrepreneurs Confidence Index* (IMCE) for the construction sector posted a decline most recently but is still higher tan its all-time average.

In the medium term, various elements suggest that investment will regain strength. For the time being, the lower basis for comparison that the adjustment will leave in its 2019 growth will help to raise the 2020 record, the year for which the baseline scenario estimates a 5.1% growth in GFCF. The capital-to-GDP ratio has remained low in recent years (under 22% in real terms), with productive investment—excluding mining and housing—that practically grew zero in the 2016-2018 period. Plus, that the strong immigration of recent years reduced the capital/labor ratio. Absorbing this greater workforce requires adjusting the capital stock, so that, absent a more significant change in the vision about productivity, and/or the various costs associated with the formalities of investment projects, it should resume its former dynamism.

The domestic conditions to finance this greater investment are favorable: local interest rates have remained low (Figure 9), something that will be reinforced with the decision of the last Monetary Policy Meeting. In the same way, external financing conditions have remained favorable and, in fact, the interest rates of US Treasury bonds are also low. All this occurs in a context of no imbalances in the local financial system, no elements hindering the flow of financing, and a bounded fiscal deficit.

All in all, the first-quarter evolution of investment puts a note of caution in case the slowdown proves more persistent, especially because of the higher uncertainty abroad. For now, this has reduced asset prices and, with it, the incentives to invest. There is also the currency depreciation that could reduce the acquisition of imported capital goods imports. The behavior of inventories also poses a risk on the dynamics of investment. Already by the end of 2018 there had been an inventory buildup that at the time was believed would turn into investment, but that did not happen and, on the contrary, in the first quarter accumulated further. This, in a context in which, according to the IMCE, the percentage of respondents in wholesale trade who judge their inventories as unwanted has risen, and in which the interviewees for the *Business Perceptions Report* in companies that trade in machinery and equipment report sales below expectations, particularly in the northernmost regions.

Consumption, meanwhile, has behaved as expected and the baseline scenario estimates that, after growing 3.1% in 2019, will grow an average of 3.5% in the next two years. Accordingly, the projection for this expenditure

component remains virtually unchanged from the March Report estimates. The higher growth rates foreseen for 2020 and 2021 are consistent with the economy speeding up growth.

The labor market has given more positive signals regarding employment, as can be seen from in the INE figures, the administrative records and the information obtained for the *Business Perceptions Report*. Imports of consumer goods have remained high (with the exception of automobiles) and the expectations of the trade sector remain optimistic, as indicated by the IMCE. All of this in a context in which financial conditions remain favorable, due to both the persistence of low interest rates and good credit lending conditions.

It is important to warn against the temptation of trying to extract information on the behavior of private consumption from indicators of retail activity. Although this practice can provide some information, there are differences between both variables that confuse the reading. First, consumption is a component of demand, while retail is a part of GDP, so they differ in their measurement, magnitude and components. Second, retail sales indicators are one of the sources on which household consumption is calculated in the National Accounts. However, formal retail trade represents only 15% of private consumption. Third, the consumption of goods must be added up to the consumption of all services (domestic and foreign acquired), which are almost half of household consumption and are not captured in retail sales indicators. Finally, when it comes to making the GDP retail figures compatible with consumption, we must keep in mind that this retail includes not only retail (related to household consumption) but also wholesale (related to companies). All this recommends using retail data with caution, given the important differences between this sector's activity and private consumption.

### **III.2. International scenario**

Internationally, in the baseline scenario, the impulse that the Chilean economy will receive from abroad in the next two years will be lower than in the two previous years and the one we expected in March. The correction with respect to March responds to the negative developments in the external scenario in recent weeks, particularly as the escalation of the trade conflict has led to greater risk aversion, causing, among other effects, a global appreciation of the dollar and a reduction in most commodity prices, including copper. The latter is especially relevant due to its effect on the terms of trade (ToT). Thus, for the period 2019-2021 we assume that the ToT will accumulate an increase of 0.6%, which compares with the increase of 1% expected in March (Figure 10). This projection considers a copper price whose annual averages will be closer to 280 cents per pound between 2019 and 2021, and not around 290 cents per pound, as we estimated in March.

As for global growth, the baseline scenario adjusts slightly the expected expansion of our trading partners during this year, to 3.2% (3.3% in March). In this correction, a much lower performance of Latin America becomes important. We still estimate that China will grow around 6% and the US somewhat above 2% (table 4). Although our trading partners' growth is adjusted only slightly, there has been a marked deterioration in world trade growth, which is captured in the less favorable evolution that is expected for Chilean exports (Figure 11). In the baseline scenario, we project that these will lose dynamism, particularly in 2019, due to the difficulties encountered by some exporting sectors. Also because of the lower copper output, which will impact metal shipments. Within imports, the downward adjustment of consumer goods stands out, in response to the performance of car sales in the local market, but also to the decrease in the purchase of machinery and equipment (specifically trucks), which is estimated to continue beyond the first quarter. This is reflected in the current account, which will have deficits of somewhat under 3% of GDP in the projection horizon.

#### **III.3.** Working assumptions

The baseline projection scenario is made using a set of information and analysis that determine how inflation will converge to the target. This includes the expected behavior of the activity gap—which factors in potential and actual growth—, the copper price, the oil price, the dollar in the world, etcetera.

The baseline scenario also includes working assumptions for variables such as the real exchange rate, the behavior of fiscal policy and the MPR. In particular, with respect to the real exchange rate, we foresee that during the next two years it will fluctuate around its averages of the last 15 and 20 years. In the fiscal area, it is assumed that in 2019 the economy will receive a boost consistent with the approved budget. From then onwards, it is assumed that the structural deficit will follow the path of gradual descent defined by the authority. No modifications are introduced as a result of the recent announcements to streamline public investments given that, according to authorities' statements, these will be made within the limits imposed by the structural balance target. This is notwithstanding a more intense operation of automatic stabilizers as a result of divergences in the behavior of cyclical revenues.

About the MPR, the working assumption is that in the coming quarters it will stay flat and will begin a gradual normalization process during next year. Nonetheless, this is one of several alternative MPR paths compatible with achieving the target, so it must not be construed as a forecast or commitment with respect to the decisions that the Board will be making as more information is gleaned about the twists and turns of the economy.

Taking all of this into account, the baseline scenario sees CPI inflation hovering around 3% during 2020, and the CPIEFE arriving to 3% by the turn of 2021. For the end of this year CPI inflation is foreseen slightly below 3% (Figure 12).

### III.4. Risk balance

As always, the baseline scenario I just presented reflects those events most likely to occur with the information at hand at the close of this *Report*. There are risks, however, that if come true, would alter not only the macroeconomic outlook, but also the course of monetary policy.

On the external front, the balance of risks continues to be clearly biased downwards, increasing the probability of occurrence of negative events. The escalation of the trade dispute between China and the US has become the main risk and has begun to transcend other areas of these economies' relationship. Moreover, US tariff decisions have been extended to other countries and with motivations not strictly commercial. All this has aggravated fears of a sharper slowdown in trade, a deterioration in the confidence of companies and households globally and a loss of dynamism in global activity. And there is also a resurgence of the possibility of a no-deal Brexit.

Scenarios where these risks intensify could lead to an abrupt deterioration of financial conditions. In view of this, the main central banks are likely to make their monetary policies more expansionary; however, this could be insufficient to contain the loss of appetite for risk and the decreases in the prices of assets and commodities. The high level that the prices of some riskier assets have reached—in some cases matched by increased borrowing—shapes a much more complex scenario. In addition, the materialization of any of these scenarios could have a negative impact on local investment decisions and expectations.

At home, it is estimated that the balance of risks for activity is biased downward. The baseline scenario projects that, beyond the result of the first quarter, investment will see a significant recovery in the next two years, which includes both large-scale mining projects and investment from other sectors. However, there are risks derived, for example, from the greater uncertainty of the external scenario and the various costs associated with investment projects' red tape. Also, worth mentioning are the risks coming from the mining sector. Although its poor performance of recent quarters has responded in part to specific factors, there are more permanent elements, such as the lower grade of mineral ore, that could prolong this weakness.

Regarding inflation, the Board estimates that the risks are unbiased. The updating of structural parameters has a significant degree of uncertainty, particularly due to the macroeconomic effects of immigration. On the one hand, it is possible that the absorption of immigrants into the labor force is associated with a productivity fall that is more persistent, causing a lower potential growth in the projection horizon, a narrowing of the activity gap and, therefore, higher inflationary pressures. On the other hand, it can happen that the increase in the labor supply occur with greater intensity, which would push up potential GDP growth, widen the activity gap, and reduce pressures on wages and prices. It should also be considered that the negative balance of external risks has exchange-rate effects that could raise short-term inflation beyond our current estimate (Table 5).

Summing up, the evaluation of the macroeconomic scenario and its outlook, which include the updating of the structural parameters and the recent evolution of the economy, pointed to the need to recalibrate the monetary impulse. Consistent with this, we decided to cut 50 basis points off the MPR, taking it to 2.5%, in our Meeting of last Friday. We estimate that, by keeping this rate until we see clear signs of an upturn in inflation, it will be possible to ensure the convergence of inflation to the target, in a scenario where the capacity for long-term growth is strengthened by the immigrants' contribution. However, recent developments increase the downward risks, especially in the external economy, for which the Central Bank must be ready to respond.

### IV. Final remarks

Mr President, dear Senators, the MPR cut decided by the Board last Friday has been described as "surprising" or "unexpected" by the observers. Indeed, it was an adjustment that most analysts did not see coming, in either its timing or magnitude. However, it was not an unpredictable change in light of the background, analysis and communication that the Bank had been delivering in the preceding months. Moreover, it is a decision based in depth on the report that I have presented today.

Before I finish, I would like to draw your attention to the exceptional nature of the circumstances that led to this decision and its implications for the Bank's communication and actions in the future. At the beginning of this presentation, I mentioned that we have defined this decision as a "recalibration" of monetary policy, as it is an adjustment of the MPR to generate a monetary impulse compatible with the inflation target in the face of significant and consistent changes in the estimates of capacity gaps, inflation and the policy rate. This time around there has been an unusual combination of new information for all the structural parameters plus the new inflation measurement, pointing in the same direction.

Indeed, it is unusual for any economy to experience a change in the production factors of the magnitude and speed that immigration has triggered in Chile in the last three years. It is also unusual for an increase in potential growth to be accompanied by a reduction in the neutral MPR, which in this case has occurred due to the magnitude and persistence of the fall in interest rates in the world. In previous episodes of CPI basket changes, we had not seen so important corrections to the inflation measurement as this latest one.

Faced with this unusual configuration of circumstances, the Central Bank of Chile needed to be rigorous in its analysis, clear in its conclusions and quick in its response. It was helped by the research work and the updating of his models that have been progressing for some time. But once all the pieces of this puzzle have been assembled, the Board has preferred acting over postponing a decision. It is an unusual action in the face of unusual circumstances.

Central banks today are not prone to surprising the markets and ours is no exception. We do not seek surprises for the sake of them, and certainly we have not concealed anything in our communications of recent months regarding the analysis that we have conducted, nor have we distracted attention away from it. However, after accumulating evidence and reaching a downright conclusion about its implications for monetary policy, we saw few advantages and many more costs in postponing. Although our decision considered the option of waiting, signaling the possibility of this change before doing it, we believe that in the current situation taking immediate action had greater value. Not because the economy was deteriorating dramatically, but because we were convinced of the consistency of this analysis with the persistence of low inflation. In such circumstances, delaying a decision would only be a waste of time, at a cost to the economy, at a time when more, not less, certainties are required.

The adoption of the agreement at the Friday meeting had a communicational implication that surely did not escape the attention of the members of this Commission. Faced with an important decision and unforeseen by the market, it was very complex to postpone the dissemination of the background information that supported it for more than two days, until the release of the *Monetary Policy Report*. That led us to issue a statement that advanced some important data of the *Report*. I would like to be clear that this does not set a precedent for future opportunities in which the monetary policy meeting and the *Monetary Policy Report* will coincide. Any more permanent change to the strategy of monetary policy communication will be assessed in depth and we will discuss it beforehand with this Commission.

An additional dimension of the monetary policy decision of last Friday is to clearly separate the implications for the MPR of recalibrating the monetary impulse in the face of the current configuration of structural parameters and economic variables, of the responses that might be necessary in the face of the evolution of macroeconomic conditions.

As I have stressed in this presentation, the world economy is experiencing a delicate moment, where a declining phase of the cycle is combined with high policy uncertainty in the world's leading economies and where financial markets rely heavily—perhaps too much—on the will of the central banks to react to episodes of volatility. Although the world economy continues to grow, we note with concern the escalation and expansion of trade conflicts, a stagnation of international trade, deteriorating expectations and frequent episodes of market volatility.

In these circumstances, as we have pointed out before, the Chilean economy, despite its commercial and financial openness, has powerful buffers, given by the exchange rate, the depth of the domestic financial market and the anchoring of expectations. However, it also has room for robust policy responses, particularly of monetary policy. Having solved the past imbalances of the MPR helps us identify future phenomena and apply the proper responses.

On other occasions we have said that the Central Bank of Chile is prepared to face new challenges. Recent decisions include an additional element in this statement: the evidence that we have the capacity to identify important changes and react with the necessary speed. These are attributes that we have been strengthening over time and that we must hold onto in the face of new challenges.

At the same time, we must be aware that the specific scope of action of the Bank is the macroeconomy and, in particular, the control of inflation and the safeguarding of financial stability. The process of recalibration of monetary policy was triggered by the drop-in inflation measured by the CPI and the policy response boosts economic activity because it seeks to reduce gaps in activity to ensure the convergence of inflation. Estimating greater trend and potential growth was the result of an analysis of macroeconomic phenomena and it influenced the adjustment of the MPR but does not ensure all the microeconomic or institutional conditions to take advantage of all the leeway that it potentially generates. Monetary policy may provide an additional cushion against external shocks, but it cannot shield the economy completely.

For this reason, it is important that, at the end of this presentation, as in other opportunities, we understand the focus of the Board's commitment: to keep inflation low and stable, as the main contribution that the Bank makes to the well-being of Chileans. The stability that this brings to the country should facilitate the contribution of other players to the same end purpose.

Thank you.

## Figure 1

#### Annual GDP growth



Source: Central Bank of Chile.



Nominal annual exports growth



Contribution to annual GFCF growth



Source: Central Bank of Chile.



(\*) As from January 2019, the new 2018=100 annual base indexes are used, so they are not strictly comparable with earlier figures. Sources: Central Bank of Chile and National Statistics Institute (INE).



#### Figure 5

Working-age population forecasts

(million persons, 2002-2050)



## Table 1 Trend GDP growth forecast

(percent)

		Trend growth (*)	Contribution to non-mining GDP growth				
	Total GDP	Non-mining GDP	Mining GDP	TFP	Labor	Capital	
2019-2028	3.4	3.5	2.0	1.0	0.9	1.7	

(\*) Weighted mining is 11.9% of total GDP. VAT and import duties are assumed to grow a the same rate than non-mining GDP. Source: Central Bank of Chile.

# Table 2 Estimates of potential growth and activity gaps for non-mining GDP (1)

Non-mining GDP (2)		Potential (2) Statistical models (4)		Gap (2) (3)				
				Sep.'18	MEP (5)			
	Sep.18	Jun.19	Sep.18	Jun.19	average	Sep.18	Jun.19	
2016	1.6	2.0	2.2	2.4	-0.5	-0.5	-0.3	
2017	1.9	1.6	2.5	2.5	-1.1	-1.1	-1.2	
2018	4.1	3.9	3.1	3.1	-0.1	-0.1	-0.4	
2019	3.2	3.0	3.2	3.3	-0.1	-0.3	-0.7	
2020		3.7		3.4			-0.4	
2021		3.6		3.4			-0.1	

(1) For each column, the figures after the dotted line show the forecast contained in the respective Monetary Policy Report. (2) Non-mining GDP at seasonally-adjusted factor cost. (3) Average for the year (4) Log-difference between actual and potential GDP expressed as percentage. (4) Statistical models uses aerage potential levels with trivariate filter and multivariate filter. MEP model gap. Source: Central Bank of Chile.



Source: Central Bank of Chie.



(1) The 5 in 5 rate is derived from financial asset prices adjusted for term premiums. (2) Based on Holston, Laubach and Williams (2017). (3) Based on Del Negro et al. (2017), using 5-yr BCP data and assumptions for an open economy. See box V.2 in June 2019 M P Report.

Source: Central Bank of Chile.

#### Table 3 Domestic scenario

(annual change, percent)

	2018	2019 (f)		2020 (f)		2021 (f)	
		Mar.'19 Report	Jun.'19 Report	Mar.'19 Report	Jun.'19 Report	Mar.'19 Report	Jun.'19 Report
			•	· ·	•	•	
GDP	4.0	3,0-4,0	2,75-3,5	3,0-4,0	3,0-4,0	2,75-3,75	3.0-4.0
Mining GDP	5.2						
Non-mining GDP	3.9						
Domestic demand	4.7	3.7	2.9	3.5	3.8	3.3	3.5
Domestic demand (w/o inventory change)	3.9	3.9	3.4	3.7	3.9	3.5	3.5
Gross fixed capital formation	4.7	6.2	4.5	4.3	5.1	3.9	4.1
Total consumption	3.7	3.3	3.1	3.5	3.5	3.4	3.4
Goods and services exports	5.0	3.6	0.6	2.9	3.6	2.9	2.7
Goods and services imports	7.6	4.5	0.6	2.9	4.3	2.6	2.7
Current account (% of GDP)	-3.1	-2.9	-2.9	-2.7	-2.8	-2.7	-2.8
Gross national savings (% of GDP)	19.6	20.1	19.9	20.3	20.2	20.4	20.5
Nominal gross fixed capital formation (% of GDP)	21.3	21.8	21.8	22.0	22.1	22.2	22.3

(f) Forecast.

Source: Central Bank of Chile.

## Figure 8



OGPS: Survey of investment projects (\*)

# CBC: Survey of investment projects

(billions of dollars)



(\*) The bars of the 2018 surveys correspond to the months of September to December in consecutive order. The same applies to 2019, for the months of January to May.

Sources: Ministry of Economy's Sustainable project management bureau (OGPS), and Capital Goods Corporation (CBC).

Figure 9

Interest rates on bonds and commercial loans







#### Table 4

#### International baseline scenario assumptions

	Avg.	Avg.	2018 (e)	2019 (f	)	2020 (f	)	2021 (f)	
				March	June	March	June	March	June
	00 - 07	10 - 17		Report	Report	Report	Report	Report	Report
			(	annual c	hange, p	ercent)			
Terms of trade	8.2	2.0	-2,1	2.2	0.9	-0.3	0.1	-0.9	-0.3
Trading partners' GDP	3.6	3.9	3.6	3.3	3.2	3.2	3.2	3.3	3.3
World GDP at PPP	4.5	3.9	3.6	3.3	3.2	3.2	3.2	3.3	3.3
World GDP at market exchange rates	3.2	3.1	3.0	2.6	2.5	2.6	2.5	2.7	2.7
Developed economies GDP at PPP	2.4	1.8	2.2	1.6	1.6	1.5	1.5	1.6	1.6
Emerging economies' GDP at PPP	6.5	5.3	4.8	4.6	4.5	4.5	4.5	4.7	4.7
External prices (in US\$)	4.6	0.8	2.4	-1.3	-1.8	3.7	3.4	3.7	3.4
(levels)									
LME copper price (US\$cents/lb)	154	312	296	290	280	290	280	290	280
Oil price, WTI-Brent average (US\$/barrel)	43	79	68	62	64	62	62	60	59

(e) Estimate, except for commodity prices.

(f) Forecast.

Source: Central Bank of Chile.

## Figure 11

### Real exports and world GDP (1)

(contributions, percentage points; annual change, percent)



(1) Moving three-month average. (2) IMF's quarterly data.

Sources: CPB Netherlands Bureau for Economic Policy Analysis and IMF.



(1) As from January2019 the new 2018=100 annual base indexes are used, so they are not strictly comparable with earlier figures. (2) Gray area, as from the second quarter of 2019, shows forecast. Sources: Central Bank of Chile and National Statistics Institute (INE)).

#### Table 5 Risk balance and sensitivity scenarios

#### Downward biased external risks

#### \* Extension of trade war

- \* Political economic tensions
- \* Abrupt deterioration of financial conditions

#### Downward biased internal risks for activity

- \* Worse than expected performance of investment,
- \* Weaker mining industry

#### Unbiased inflationary risks

- \* Unexpected effects of immigration
- \* Impacts of a deterioration of the external scenario

#### Sensitivity scenarios

External	GDP	Inflation	MPR
Worsened external scenario	(-)	(-)	Stronger stimulus
Reduced productivity	(-)	(+)	Weaker stimulus
Increased labor participation	(+)	(-)	Stronger stimulus