INDEPENDENT EVALUATION OF THE MONETARY POLICY AND FINANCIAL STABILITY POLICY OF THE CENTRAL BANK OF CHILE

Executive Summary

September 2019

INDEPENDENT EVALUATION OF THE MONETARY POLICY AND FINANCIAL STABILITY POLICY OF THE CENTRAL BANK OF CHILE*/

Executive Summary

September 2019

*/ The Panel members are: Karnit Flug (Panel's Chair; Professor at the Hebrew University and Vice President of the Israeli Democracy Institute; Former Governor of the Bank of Israel), Guillermo Calvo (Professor at Columbia University, United States), Petra Geraats (University Senior Lecturer and Fellow, St John's College, University of Cambridge, England), Donald Kohn (Member of the Financial Policy Committee at the Bank of England and Senior Fellow at Brookings institution, United States; Former Vice Chairman of the Board of Governors of the Federal Reserve, United States), and Enrique Mendoza (Professor, University of Pennsylvania, United States).

I. INTRODUCTION

The Board of the Central Bank of Chile (BCCh) appointed this Independent Evaluation Panel (henceforth, the Panel) to evaluate the fulfillment of the BCCh's mandatory objectives as enshrined in its Basic Constitutional Act of 1989, including price stability and financial stability. The Panel was asked to review the BCCh's independence, the influence and impact of its policy actions, the suitability of its policy framework and policy tools to achieve its price and financial stability objectives, the effectiveness of its organization, procedures and policy tools for both monetary and financial stability, and the quality of its communications. In all these areas the Panel was also asked to make recommendations for potential improvements. The Panel did not evaluate specific policy decisions of the BCCh, instead, focusing on the overall record and the framework, tools, and processes and procedures for making decisions.

The Panel had a kick-off meeting with the BCCh counterparty team in January 2019 in New York City, United States; a set of meetings in Santiago during the third week of March 2019 with BCCh Board Members, officials and staff, with former BCCh Governors, Board Members and officials, with officials from other regulatory institutions, including the *Financial Market Commission* (CMF) Board, with academics and with the Minister of Finance; and another set of meetings to discuss the preliminary draft of the report with BCCh officials in July 2019. The Panel also attended one of the meetings between the BCCh Board and staff in preparation of the March 2019 Monetary Policy Report, and the Board's monetary policy meeting on 18 July 2019. The Panel had access to all relevant materials published by the BCCh and enjoyed excellent cooperation and support from BCCh staff and officials.

The Panel's work benefited from recent previous evaluations of various aspects of the BCCh's monetary and financial framework and policies: an *"Evaluation of the Central Bank of Chile forecasting and Policy Analysis System for Inflation-Forecast Targeting"* conducted in 2018 by a team of the International Monetary Fund (IMF) headed by Douglas Laxton; the *"Evaluation of the Central Bank of Chile's Financial Stability Report"* conducted by Dale Gray of the IMF in June 2017; and *"Central Bank of Chile's Monetary Policy Decision-making Process, Communication and Transparency: Review and Recommendations"* conducted by Andreas Claussen from the Swedish Riksbank in December 2017.

The Panel wishes to thank Governor Mario Marcel, Board Members and staff of the Central Bank of Chile for their full cooperation, the very productive discussions, and for their great hospitality.

II. EXECUTIVE SUMMARY—ASSESSMENT AND MAIN RECOMMENDATIONS

GENERAL

We found the BCCh to be a high quality and very professional central bank. Its analysis and policy conduct meet high standards, comparable to those of inflation targeting central banks in advanced economies. The legal framework governing the BCCh ensures that it enjoys full independence in its conduct of monetary policy.

The conduct of monetary policy in Chile over the last 20 years within a flexible inflation (forecast) targeting regime and a floating exchange rate has served the country well. Chile's macro/monetary policy management has been exemplary for emerging markets standards, and it has been able to keep medium-term inflation expectations anchored at around 3 percent.

The BCCh also has responsibility for financial stability, which it shares with other authorities. The Chilean financial system has avoided major financial disruption in the period since 1982, indicating that the BCCh has met its financial stability mandate. But roles and responsibilities are shifting after recent approval of a new banking law, and the BCCh and the other authorities are in the process of adapting to this new environment.

Our recommendations are aimed at further enhancing the ability of the BCCh to react to stress or crisis situations, continuing to improve its analytical tools, further improving its communication, especially in conveying the uncertainty around future developments and policy, and ensuring it has the ability to apply macro-prudential tools as needed. We also call for a very high level of cooperation to be established with the financial supervisors in order to successfully implement new regulations in support of financial stability.

It is important that the BCCh focuses on performing its role according to its legal mandate and avoid taking on assignments outside its mandate, in particular, duties that do not fit within the BCCh price and financial stability mandates. Such a "mission creep" should be avoided, as it may overburden the Bank and divert its resources and attention from its core duties.

Some of our recommendations can be implemented relatively quickly and involve decisions and changes that can be taken by the BCCh alone. Other recommendations involve collaboration with other institutions, developing new practices, tools and modes of operation, and new or improved data sources; naturally, these may take longer to implement.

MONETARY POLICY

a. Inflation target and policy horizon

The Panel's assessment is that the ±1 percent target range has not played a meaningful role in policy management and, given the volatility of headline inflation, it has been outside this range for a substantial proportion of the last decade (about 40%). *Thus, we would suggest eliminating the range and focusing communication on the 3% target.*

Given the solid credibility of the BCCh, t*he Panel recommends using some flexibility regarding the horizon at which inflation needs to be brought to the 3% target and extending it when this would benefit the Chilean economy.* Any extension of the two-year policy horizon, when decided upon, needs to be communicated and explained.

The BCCh has recently increased the horizon of its macroeconomic projections to three years. In line with this, *the Panel recommends that the BCCh extends the horizon for expectations of inflation and the monetary policy rate in the Economic Expectations Survey (EES) and the Financial Traders Survey (FTS) to three years.* These longer-term expectations also provide very useful information when exploring an extension of the policy horizon in response to specific shocks.

b. Monetary policy process

The monetary policy process is broadly consistent with how monetary policy is made at other leading central banks and seems structurally sound.

Still, the Panel's impression and that of many outside observers is that models play too large a role in the forecasts compared to judgment. It is also possible that the judgment is not revealed or discussed sufficiently with the Board or the public. This is especially the case when the underlying forces shaping the trajectory of the economy and inflation are in the process of changing, but have not yet been incorporated into the models, as has been the case in Chile recently with immigration. This may also result in a tendency to stick to the baseline scenario forecasts and a reluctance to deviate from them when faced with new information that has not yet been incorporated into the assumptions and models. In such cases, *the Board needs to apply judgment more actively to avoid unnecessary delays in internalizing these changes into the forecasts and into the policy response.*

Thus, *the Panel recommends that the BCCh review its relative reliance on judgment and models, especially in circumstances of structural changes in the economy or other sources of unexplained deviations of economic outcomes from model results. Incorporating judgment and updating models quickly will help to internalize these changes in the policy response.*

Whatever the relative reliance on models and judgment, the BCCh should be clearer and more transparent about the judgments that were made.

The monetary policy process embodies a strong desire to reach consensus on the Board. Consensus can enter at two stages: first when the staff is deciding on and presenting its forecast to the Board; and second when the Board is deciding on its forecast and associated policy decision.

The staff forecast is reported to the Board through the Chief Economist and Monetary Policy Division (MPD) Director. In order to stimulate discussion at the Board it is important for the Board to understand which the difficult key judgments were made in putting together the staff forecast, why they were made, and what analysis underlay alternatives that were rejected. *The Panel recommends that the Chief Economist consider how to routinize presenting such material to the Board.*

Current and former Board Members stressed that the Board has a strong tendency to operate by consensus. In fact, dissents are relatively rare. Consensus and unanimity allow that the BCCh to "speak with one voice" so that the public and market participants will not be confused by disparate messages. However, monetary policy decisions are difficult, and good policy is aided by having diverse views represented at the table. *The Panel recommends that the Board consider how to allow the public to have a broader picture of the diverse views by Board Members, including whether the implicit hurdle for dissent has been set too high.*

c. Monetary policy analytical tools and analysis

The MPD uses two main models to support the inflation-targeting framework: MEP (a small, reduced-form model)[1] and XMAS (a large New-Keynesian dynamic stochastic general equilibrium [DSGE] model)[2]. The IMF's evaluation of the models conducted in 2018 concluded that they perform well for forecasting overall, with similar accuracy as the models used in other central banks that follow a similar approach (*e.g.* the Bank of Canada). The XMAS model is a state-of-the-art, large-scale New-Keynesian DSGE model which includes an endogenous commodity sector and takes into account the role of copper prices as a driving force of Chilean business cycles. While the XMAS model is state-of-the-art, it has the same important limitations of similar DSGE models exposed by the 2008-9 Global Financial Crisis, namely they do not provide a role for financial transmission to be part of economic fluctuations, and in particular to account for the possibility of financial crises or sudden stops. This is a limitation common to the standard DSGE models used by central banks worldwide, and the BCCh like its peers is working to address it by *incorporating financial intermediation and financial frictions into the model. This ongoing project should be made a high priority given its fundamental importance for providing the BCCh policymaking process with analysis of policy changes that capture crucial interactions between the real economy, nominal variables, and the financial sector.*

There are important technical issues with the determination of net foreign asset dynamics in the XMAS model that are important to examine. *The Panel recommends considering the limitations resulting from these issues and using those limitations as a basis to motivate further development of satellite models.*

Copper production and the copper-oil terms of trade are important drivers of economic activity and inflation in Chile, as the analysis done with the XMAS model shows. Yet the MEP model still does not incorporate them. *The Panel recommends incorporating copper prices and the Terms of Trade (ToT) into the MEP model along the lines of the recommendation made in the IMF report (2018).*

1/ BCCh (2003), *"Modelos Macroeconómicos y Proyecciones del Banco Central de Chile 2003,"* Central Bank of Chile.

2/ García, B., S. Guarda, M. Kirchner, and R. Tranamil (2019), "*XMas: An Extended Model for Analysis and Simulations*," Working Paper 833, Central Bank of Chile.

The new macro financial model is likely to be of central importance for the management of the counter-cyclical capital buffer (CCyB) and other macroprudential policies, and for the coordination between monetary and financial policies. *Hence, work on this project needs to be given high priority and an explicit timetable with specific targets for completion.*

The macro financial model should also borrow from the XMAS model important features that are relevant for the Chilean economy, particularly the modeling of copper production and the effects of terms of trade working via copper and oil prices.

Considering that the informal labor market is relatively important in Chile, the Bank should give high priority to the ongoing plans to incorporate the informal labor sector into the models used for policy decisions.

d. Monetary policy in practice

In the last 20 years the BCCh followed an inflation targeting policy that relied strongly on managing a policy interest rate under a regime of floating exchange rates. This succeeded in getting rid of double-digit inflation rates and anchoring medium-term inflation expectations to around 3 percent. This outcome has also been a consequence of strict fiscal discipline based on fiscal rules, the deepening of financial markets, sound financial regulation and supervision, and unprecedented global deflationary conditions.

e. Policy tools for times of stress

Innovative policies mitigated some, though not all, of the effect of the 2008-9 Global Financial Crisis on Chile. But the epicenter of that crisis was in the United States, not in emerging market economies; moreover, interest rates were at a fairly elevated level going into the crisis period. *The Panel believes the BCCh needs to consider the adequacy of its tools to counter shocks, including sudden stops, that arise closer to home, especially when interest rates could well be considerably lower and highly likely to hit the effective lower bound if the economy and financial system are hit with adverse shocks.*

Under the constitution the BCCh is not allowed to finance the government, and thus cannot make outright purchases of government bonds. This ban implies that there is a need to ensure that the BCCh has alternative policy tools to deal with economic weakness in these circumstances. In the last crisis, the BCCh used a term liquidity facility (*Facilidad de Liquidez a Plazo;* FLAP) to inject liquidity into the banking system and reinforce its message that interest rates would be kept near zero for an extended period. It also temporarily broadened the collateral pool to include term deposits by banks. It has recently incorporated into regular monetary operations the use of government bonds as collateral. In addition, it could use assets in banks' balance sheets as collateral for term repo operations. Furthermore, it could make outright purchases of foreign exchange (FX interventions, increasing international reserves). To eventually engage in "quantitative easing" (QE) to increase the monetary base and money supply and reduce term and risk premia, the BCCh can buy back its own debt held by the private sector. However, the stock of BCCh debt is declining, thus it may not be sufficient as potential future QE on a large scale. This means a larger role for fiscal policy in time of stress, for which appropriate policy space should be granted.

In addition, the BancoEstado played a key role in crisis mitigation by providing credit during the crisis. *The government should consider clarifying the framework for utilizing BancoEstado in these circumstances in the future and ensuring that BancoEstado has sufficient capital to play the desired role. This should be facilitated by the adoption of Basel III standards according to the new General Banking Law (GBL).*

The BCCh needs to periodically update its assessment of the adequate level of FX reserves based on severe (e.g. sudden stop) scenarios. This assessment should take account of the usability of the foreign exchange in the *Economic and Social Stabilization Fund* as well as other sources of foreign liquidity in hand of the private sector. The *Financial Stability Council* (FSC) could play a role in coordinating actions during stress periods.

In the (few) occasions in which the BCCh has intervened in FX markets in recent years, the total amount of the foreign exchange intervention was made public in advance, including the mechanics of the program. This, in principle, rules out, for instance, large discretionary and surprising sales of foreign exchange that could be optimal under sudden stops. *Thus, the Panel recommends that the BCCh retain flexibility on the mode and tactics of FX intervention and clarify to the public that it has this flexibility.*

f. Monetary policy communications

Overall, the BCCh has shown a large increase in monetary policy transparency during the last two decades based on the Dincer, Eichengreen, and Geraats (2019)[3] index and its score has largely been above the average for inflation targeters.

The recent improvements in procedural and policy transparency implemented since 2018 have further raised its score. In particular, the new format of the policy statement is more informative, including individual voting records and forward guidance. It also provides a far better explanation of the policy decisions than previously. *The Panel recommends that the Monetary Policy Meeting statement is released during financial market trading hours, so that the Bank can monitor the market reaction to its policy announcement and its effect on market expectations inferred from financial asset prices.*

The forecasts are an important element of the policy analysis and the policy statement routinely refers to them, but they are currently published with a delay of one to three days in the Monetary Policy Report. The summary of the latter includes the key macroeconomic forecasts and the fan charts for inflation but not for GDP growth. *The Panel recommends that the summary of the* Monetary Policy Report *is released together with the policy statement and that the summary includes a fan chart for the quarterly GDP forecasts in addition to the inflation fan charts, and that the latter show the 3% inflation target.* It would be desirable for the entire Report to be published on the same day as the monetary policy decision. Subsequently, the Governor should present the Monetary Policy Report before the Senate.

[3]/ Dincer, N., B. Eichengreen, and P. Geraats (2019), *Transparency of Monetary Policy in the Postcrisis World*, in D.G. Mayes, P.L. Siklos, and J.-E. Sturm (Editors), *The Oxford Handbook of the Economics of Central Banking*, Oxford University Press.

The Monetary Policy Report analyzes external and domestic macroeconomic and financial developments that are relevant for monetary policymaking. Furthermore, it provides the Bank's macroeconomic forecasts, including medium-term projections for inflation and GDP growth with a horizon that has recently been extended to three years. *The Panel recommends that the* Monetary Policy Report *provides more transparency about the working assumptions used for the medium-term macroeconomic projections in the baseline scenario, including one or two tables with the precise (numeric) assumptions for all key variables over the projection horizon.*

The BCCh has recently started to provide more information about specific risks to the baseline projections. *The Panel recommends that the* Monetary Policy Report *contains a more detailed analysis of the key risks to the baseline projections. This should include where possible an explicit quantitative analysis of the effects on the medium-term projections for GDP growth and inflation under alternative scenarios.*

The changes in the baseline projections are reviewed once a year in the Monetary Policy Report, but without assessing their forecast performance. *The Panel recommends that the BCCh improves upon its annual report to Congress on changes in the macroeconomic scenario by providing an explicit review of the forecast errors for its medium-term macroeconomic projections, including a comparison to those for private sector surveys and market expectations based on financial assets prices.*

The Monetary Policy Report can be quite hard to read, including the summary. *The Panel recommends making the* Monetary Policy Report *more accessible, especially its summary, including a description of the Bank's monetary policy framework, a digest at the start of each chapter and a complete glossary at the end of the* Monetary Policy Report.

The Monetary Policy Meeting minutes suggest that the BCCh's monetary policy decisions are based on careful deliberation and that the discussion is of high quality. They tend to reveal the reasoning of Board Members in quite some detail, and provide invaluable insights into their perspectives and considerations. They clearly show differences in opinion among Board Members. In these respects, the Monetary Policy Meeting minutes appear more transparent and less 'sanitized' than those of some other inflation-targeting central banks, including the Bank of England.

Board Members regularly give presentations, including of the Monetary Policy Report. *The Panel recommends that the Board puts greater emphasis on the communication of uncertainty in its presentations, especially with respect to its macroeconomic projections, including using (simplified) fan charts.*

The BCCh also reaches out using social media, *but the Panel recommends that the BCCh improves its social media messages related to monetary policy, including accessible, snappy explanations of monetary policy rate decisions and using social media to help educate the public about its key objectives and decisions.*

The Panel welcomes recent improvements to the BCCh's forward guidance, which now routinely provides a qualitative conditional statement regarding the future policy direction. In addition, the state-contingent forward guidance that the BCCh has started to provide for alternative scenarios gives additional useful information about the BCCh's reaction function.

FINANCIAL STABILITY

a. Regulatory framework and governance (decision-making process)

The responsibility for financial stability is shared by several institutions and has undergone recently legal and institutional changes. The new legal framework deepened and extended an existing regime of "co-responsibility" in which the authority—the BCCh or the CMF—issuing the regulation requires the prior agreement of the other authority for implementing certain specified and critical aspects of the Basel III and other aspects of financial regulation. This arrangement implies that each regulator can potentially yield a veto power over actions proposed by its counterpart. The CMF could veto the CCyB proposed by the BCCh and the BCCh could veto some elements of Basel III regulation. This may cause an inaction bias.

One key to the successful operation of the co-responsibility regime will be close consultation between the agencies as each authority comes to decide on what to propose. Coordination can be facilitated in the context of the FSC where the BCCh should play a more important role in setting the topics for discussion. *The Panel understands that mechanisms for consultation are being established and recommend that ways be pursued to build a close and productive relationship that will facilitate close working on the staff and decision-maker levels.*

The closer coordination and cooperation could be institutionalized by signing a M*emorandum of Understanding* (MoU) between the CMF and the BCCh. The inaction bias could also be mitigated by public disclosure of the recommendations to implement policy actions by each institution and, in the case of objections by the other institution, public disclosure of the arguments behind the objection. *Thus, the Panel recommends the timely publication of any proposed regulation or setting of a measure and its rationale alongside the response of the other agency and its rationale.*

b. Internal BCCh processes and procedures on decisions in financial stability issues

The BCCh has a sound conceptual framework for addressing financial stability risks. It uses a variety of techniques to make these judgments, including indicators, models, and bank stress tests. The Panel identified several important improvements that are needed to these techniques, especially as it adapts to its expanded responsibilities and the new regulatory structure put in place by the new GBL.

The recent reorganization of the Financial Policy Division (FPD) is a welcome change. The Director of the FPD has a similar coordinating function in the financial stability area as the Chief Economist in the monetary policy area, and the Panel suggests to formally institutionalize this position if necessary. This function can be helpful in cutting through staff "silos" and being point of accountability and a point of contact for other authorities.

Only the entire Board can make decisions for the BCCh. However, given its expanded financial stability responsibilities the Board may consider whether its decision-making process on monetary policy and financial stability would benefit from a more explicit division of labor. For example, with respect to financial stability, it might designate one or a few of its members to provide preliminary feedback to the staff and to make sure the appropriate material and choices are getting to the Board. Alternatively, there may be other ways the Board could alter its procedures to bring better structure to its financial stability deliberations and decisions.

c. Financial stability tools

The Panel recommends that the authorities put in place tools to monitor, control risk, and/or reduce severity of a crisis in the following areas:

i. Lender of last resort

An important task of central banks is the ability to act as a *lender of last resort* (LOLR) when an otherwise viable bank encounters liquidity problems. The shared responsibility of the BCCh and the CMF in protecting the financial stability of banks requires the division of labor and coordination to allow prompt and effective action when deemed appropriate. To facilitate speedy response, *a protocol needs to be drafted and kept up-to-date on the process leading to and acting as a LOLR.* Information sharing is a critical element in the decision-making process regarding LOLR.

To facilitate speedy action in times of stress *it is important to conduct exercises of LOLR and crisis management together with the* CMF *and the Ministry of Finance* (the last exercise was conducted in 2012.)

ii. Counter-cyclical capital buffer

Notwithstanding the current legal framework, it is key that the BCCh and the CMF *need to agree on the broad framework for regular consideration and timely adjustment of the CCyB.*

The Panel recommends that the BCCh utilize Chile's real bank credit gap together with other relevant information and indicators to set the activation and maximum thresholds for the CCyB (the technical issues in calibrating the CCyB are discussed in the report).

It is important that the BCCh allocate adequate resources to the development of methodology and criteria for the decision on the CCyB.

iii. Stress tests

The BCCh and the CMF s*hould cooperate closely on the concurrent stress tests of banks and the banking system.* In this regard sharing of information is of particular importance and could be formalized within an MoU. This cooperation should also consider the publication of the results of the stress tests for individual banks once a sufficiently robust design for them has been developed, and the BCCh and CMF agree on the role of these stress tests in supervision, regulation, and the implementation of macroprudential policies.

The vector autoregression (VAR) model used to construct the stress tests has elements that need further analysis. *First is to what extent the stress assumptions should incorporate some elements from the most severe financial event in Chile, which was the 1982 crisis. Second, explore ways of extending the analysis to consider possible risks for banks resulting from the growing relevance of nonbank financial intermediation that are not explicitly considered in the current stress-testing framework. Third, examine the robustness of the assumptions about timing of causality in the VAR between the real and financial sectors to consider that credit ought to affect output contemporaneously and with lags, just as output affects credit.*

iv. Resolution of systemically important banks

Orderly resolution of systemically important banking organizations would limit the adverse spillovers to the rest of the economy resulting from a failure of a systemically important institution. Thus, resolution authority is considered an essential element of internationally agreed post-crisis reforms ending too big to fail and *the Panel recommends setting up such a process.*

v. Oversight of non-bank financial institutions

In its Financial Stability Report (FSR), the BCCh catalogues the rapid growth of nonbank lenders to households. Furthermore, as capital requirements come into line with Basel III, more credit could migrate outside the banks. Thus, although the failure of one of these lenders may not yet rise to the level of a systemic event, the economy could feel the effects if problems with one lead to contagion of others. Therefore, at a minimum, the authorities should be sure *they are gathering good information about nonbank lenders and make regular systematic reviews of risks beyond the banking sector with a view to assessing whether the regulatory perimeter should be adjusted to preserve financial stability.*

vi. Credit registry

The rise of nonbank lenders to households makes it more difficult to have visibility into the total indebtedness of an individual borrower. Borrowing is tracked across banks, but not across banks and nonbanks. In its FSR, the BCCh recommends that a credit registry be created that encompasses the debt of households wherever incurred. The Panel agrees with this recommendation; *a comprehensive credit registry would contribute to financial stability by enabling lenders to better manage risks and by giving the authorities greater insight into the evolution of indebtedness and household debt service obligations.* The CMF would be the institution that should promote the establishment of a registry and define the required legislation.

vii. Authority to implement macroprudential loan-to-value and debt-to-income regulation

The CMF has authority to impose loan-to-value (LTV) regulation on residential mortgages, but its focus is on micro-prudential considerations. Housing booms and mortgage markets have been an important source of financial instability. Thus, it is important that macroprudential considerations also be taken into account in designing LTV and debt-to-income (DTI) regulation. *The Panel recommends that the BCCh proactively provide advice and recommendations when it deems* *it necessary to impose such restrictions for macroprudential purposes.* It is important for some authority to have the ability to constrain the growth of high-risk loans through limits on loan-to-income, LTV, or debt service ratios when increases in those measures are seen to pose a threat to financial stability.

d. Communication of financial stability

The separation of the publication of the Financial Stability Report from that of the Monetary Policy Report since 2018 is a significant improvement as it facilitates more focused communication and public attention for the main messages of each of the reports.

The FSR compares well to those of other central banks, and its analytical content has recently been enhanced. Nonetheless, the FSR could be more forward looking and prescriptive: for example, it does not systematically recommend ways to mitigate the risks it identified according to their severity. *The Panel recommends that Financial Stability Report should be more forward-looking and that the BCCh look for ways to more clearly convey financial stability risks and vulnerabilities in the Report. One way could be using graphic representations of the degree of vulnerability.*

The Panel welcomes the recent addition of an analytical chapter on a special topic. *The Financial Stability Report may be further strengthened by increasing the use of analytical boxes.*

e. Resources and skills

The BCCh has relatively small staff that is highly productive considering the high quality and quantity of their output and the strong performance record and the strong reputation world-wide as one of the central banks with an active research environment and high-quality research output that contributes effectively to the policy-making process. However, present and future work implies that additional staff positions are needed in the MPD and in the FSD. The proposed addition of 4-6 PhD level positions in the near future, as well as the recent reorganization of the FSD, are movements in the right direction. Considering the time, it takes to fill new positions with qualified candidates and natural turnover of current staff, the BCCh will continue to have a relatively small staff.

The BCCh should ensure that people in managerial positions have the appropriate set of skills, and the introduction of the leadership program is a step in the right direction. The BCCh should also consider an alternative non-managerial career path for researchers and other technical experts.

Given the expanded responsibilities of the BCCh it is important that the Board continues to have expertise that encompasses all its responsibilities.

PUBLIC ACCOUNTABILITY

The BCCh's website is a portal to the Bank's decisions and publications, but it can be hard to find specific information. *The Panel recommends that the BCCh significantly improves its website by making it more informative and user-friendly, including a page with an up-to-date description of its monetary policy framework, adding links to presentations and webcasts on the Monetary Policy Report web pages, and fixing the problems with the website search facility. Also, it would be desirable to improve the availability, timeliness and accuracy of key monetary policy communications in English, including the full version of the Monetary Policy Report (within two weeks, as done in the past) and the Governor's presentation of the Report before the Senate and at the press conference, including the question and answer sessions.*

Likewise, the website provides very limited information in English related to financial stability. *The Panel recommends that the BCCh significantly extends the financial policy section of its website, including a description of its definition of financial stability and financial policy framework, and adding links to presentations and webcasts on the Financial Stability Report web pages.*

The BCCh should be complimented for initiating a series of reviews, including the current evaluation of its policies and procedures for achieving both its price and financial stability objectives.

The Panel recommends that the BCCh continues to commission regular reviews of its monetary and financial policymaking, which could be covered in separate evaluations every few years.

BANCO CENTRAL DE CHILE