



BANCO CENTRAL DE CHILE

ANNUAL
REPORT 2018

CENTRAL BANK OF CHILE



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Contact points for our stakeholders

The Central Bank's communications are published over a range of different platforms, to support the diffusion of specific content associated with reports, publications, statistics, and general information.

This approach has allowed the Bank to expand its audience beyond the traditional specialized fields, thereby improving the quality of its information flows in an effort to facilitate understanding of its policy decisions and their effect on economic processes.

To this end, the Bank manages the main corporate website, www.bcentral.cl, and four content-specific websites, namely:

- Financial Education program: www.centralentuidas.cl
- High school economics contest: www.economiamascerca.cl
- Numismatic Museum: www.museobancocentral.cl
- Banknotes and coins: www.billetesymonedas.cl

Additionally, the Central Bank manages the following social media accounts:

- Twitter: @bcentralchile; @ecomascerca; @centralentuidas
- YouTube channel: <https://www.youtube.com/user/BancoCentralChile>
- Flickr: <https://www.flickr.com/photos/bancocentraldechile>
- LinkedIn profile: <https://cl.linkedin.com/company/central-bank-of-chile>

The use of these digital platforms has strengthened the diffusion of general and specific contents, including material on the Bank's purpose and objective, its decisions, and general information. It has also contributed to improving communication between the Bank and its different stakeholder groups, in an effort to reduce information asymmetries.

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CHAPTER 1

INTRODUCTION

1. INTRODUCTION

Established in 1925 under the presidency of Arturo Alessandri Palma, the Central Bank of Chile has played an important role in the development of the country's economic history.

Since 1989, the Bank has been governed by a constitutional act that defines its primary objective as safeguarding the stability of the currency and the normal operation of the internal and external payment systems.

In the thirty years that the Bank has operated under the current legal framework, inflation has for the most part been low and stable, economic volatility has decreased, and there have been no major disruptions in the financial system. The Bank's contribution to these achievements demonstrates the concrete support that the institution provides to the country's development and the quality of life of its citizens.

The same constitutional act assigns additional functions to the Central Bank, such as regulating the quantity of money in circulation and credit in the economy; issuing banknotes and coins; regulating the financial system; generating and compiling macroeconomic statistics; managing international reserves; acting as fiscal agent; and controlling foreign exchange operations.

In 2018, a new Strategic Plan was launched, based on an extensive internal and external dialogue. The Strategic Plan is an essential management tool for aligning the Bank's efforts and resources with specific institutional priorities that reflect the new challenges facing the organization.

The Central Bank of Chile aims to perform its functions efficiently, in a framework of increasing transparency of its actions and the consistent application of criteria and policies in line with best practices.

The *Annual Report* is one of the mechanisms through which the Central Bank reports on its performance to the public. This is an important process, given that it is the citizens of Chile, through their representatives, who have entrusted the institution with fulfilling its mandates.

In accordance with the stipulations of the Basic Constitutional Act, this document describes the Bank's activities in the year, reporting on the execution of policies and programs developed in the period. It also includes the financial statements, with their respective notes and the external auditors' opinion.

The Bank has decided to strengthen the content of its annual report, in order to provide a more comprehensive account of its performance that covers the different areas and scope of its activities and that is more accessible to the general public.

The 2018 *Annual Report* represents a first step in this direction, to be expanded in 2019, adhering to the highest international standards.

1.1 LETTER FROM THE GOVERNOR

We live in an era of fast, disruptive global change. Any organization, whether public or private, must be prepared to respond to the demands of this shifting scenario.

These accelerated changes represent a particularly important challenge for public institutions, which are generally expected to be stable and predictable. At the same time, their effectiveness depends on the confidence of people and markets. In a social environment that has become more attentive and more sensitive, institutions are expected to respond quickly and effectively to any sort of contingency.

Communication is essential for navigating this complex landscape. It is a critical tool for better understanding the changing world, complementing the available information, determining future actions, and explaining the reasoning behind decisions and the scope of the expected impact.

Like any major institution, the Central Bank is challenged by the new scenario, where institutional confidence and legitimacy are put to the test daily. In response, we have developed a strategic planning process that articulates the necessary steps for facing the new challenges in the economic, technological, organizational, and communicational spheres.

The 2018–2022 Strategic Plan was developed through a consultative, participatory, and inclusive process, precisely because we understand that the Central Bank is part of society. We work for the country as a whole and depend on the people who live here. This spirit has continued to motivate the plan throughout the first year of implementation.

This annual report describes the Central Bank of Chile's performance in 2018 from a different perspective than in the past. This year, we have incorporated financial and nonfinancial information, giving them the same weight at the organizational level. This is the start of a transition toward a broader, more integrated, and more readable report, to reflect the variety of functions performed by the Bank and the diversity of perspectives from which it can be evaluated. In particular, we focus on the mission, vision, strategy, and projections that make the Central Bank sustainable over time.

We are aware that the different actors with which the Bank interacts—markets, analysts, authorities, opinion leaders, private citizens, investors, international organizations—have different perspectives of our organization and different informational needs. We have therefore set ourselves the challenge of developing more and better tools for responding to these needs, so as to reduce information asymmetries and determine how best to incorporate the concept of sustainability in the organization.

From this broader perspective, we can review some of the highlights of the Central Bank's performance in 2018.

This year, a new scheme was applied to monetary policy formulation and communication. This involved reducing the number of Monetary Policy Meetings to strengthen the analysis and decision-making process, as well as the communication of the resulting decisions. The previous sixteen press releases per year were reduced to eight, four of which accompany the publication of the *Monetary Policy Report*. In addition, the presentation of the *Monetary Policy Report* now includes a press conference and a number of presentations in different cities across the country.

The publication of the *Financial Stability Report* was separated from the *Monetary Policy Report*, with the corresponding presentation to the Senate Finance Committee. Specific diffusion activities were also added, given the importance of this topic for the market, specialists, and new audiences.

The reports were complemented with more in-depth studies on important macroeconomic and financial topics, which has contributed to extending our



horizon of analysis. This includes two new chapters in the *Financial Stability Report*, on New Information Technologies in the Financial Industry and on the Real Estate Market, as well as a supplement on the Labor Market published with the December *Monetary Policy Report*.

Thus, in a complex period of increasing global uncertainty, the Bank has been able to strengthen its position as a trusted authority for economic agents and for society at large. It has contributed, through its monetary and financial policy decisions, to reinforcing the dynamism and resilience demonstrated by the Chilean economy in 2018 and, through its analysis, reports, and statistics, to promoting a better understanding of the economic phenomena that affect people and businesses.

In the interest of complying with the highest standards of transparency, the full record of the Monetary Policy Meetings was published for the period 2000–2007.

Another important highlight was the publication of new statistical series for the securities market and foreign direct investment by region and the spliced series for the mining and nonmining Imacec and regional GDP.

The new 2017 Household Finance Survey was also released in the year. The survey is an interdisciplinary work that acknowledges the important role of households in the financial system and contributes to a better understanding of household behavior.

In the year, we worked actively on the issues of cybersecurity and operational risk in the financial industry. Our experience and knowledge have been applied to help address the problems faced by banks in the system, as well as to collaborate with bodies such as the Financial Stability Board and the National Congress.

Also in 2018, the Bank launched a Technology Observatory, as contemplated in the Strategic Plan. The aim of this initiative is to strengthen the Bank's capacity for understanding the scope of disruptive technologies in its own operations and in areas under its jurisdiction, such as financial stability and statistics.

Another important issue in 2018 was financial education, an essential tool for helping people make informed decisions that safeguard their well-being and quality of life and also supporting the stability of the financial system. In addition to our usual activities, we worked in conjunction with five ministries and seven public institutions to develop and approve of the National Financial Education Strategy. We also launched the City of Opportunities, an online course for high school teachers; 300 accredited teachers participated in the first program .

In the Treasury area, following the successful elimination of the one and five peso coins, the Bank began the gradual removal from circulation of the old 100 peso coins from the market, to reduce the coexistence of two coins with the same denomination.

While this is not an exhaustive list of the Bank's achievements in the year, it does show the extent of the steps we are taking to adapt to the challenges and uncertainty that characterize the new scenario, as well as our sense of responsibility to the entire country in fulfilling our constitutional mandate.

For 2019, we expect to continue the implementation of the Strategic Plan, completing, consolidating, and complementing some of the initiatives launched last year. Some key developments in this regard will be the full transition to the organization's new divisional structure; the evaluation of the performance of monetary and financial policy by a panel of international experts; the implementation of the new employee value proposal; and progress on the regulatory simplification process for foreign exchange operations.

With regard to the Bank's usual work, important tasks in 2019 include the revision of the structural parameters that provide the framework for monetary policy, the implementation of the new General Banking Law, the execution of the 2018 Benchmark Compilation of the National Accounts, the implementation of a new benchmark for international reserves; the full removal from circulation of the old 100 peso coins; and the implementation of a new policy on the disposal of damaged banknotes.

Finally, 2019 marks the Central Bank's thirtieth year as an autonomous institution and the culmination of the long process of paying off the subordinated debt deriving from the 1982–83 financial crisis. These milestones provide an opportunity to find inspiration in our history as we look to future challenges.

I invite you, then, to view the Central Bank of Chile from a new perspective, one that combines the annual performance report with an understanding of how the Bank's purpose and objective affect future generations.



MARIO MARCEL CULLELL
GOVERNOR
CENTRAL BANK OF CHILE

1.2 LETTER FROM THE GENERAL MANAGER

The Central Bank of Chile's Basic Constitutional Act assigns the General Manager the responsibility for the day-to-day management and oversight of the institution and specifies a series of powers and functions, in addition to instructions from the Board.

To fulfill this role, the Bank's management has, for several years, participated actively in the five-year strategic planning process so as to orient the way the Central Bank achieves its objectives and mission.

Each new Governor leads a strategic planning process that is implemented starting in the second year of his term and carries over through the first year of the next Governor's term.

Under the leadership of Governor Mario Marcel, the 2018–2022 Strategic Plan is grounded on the Bank's vision of being a trustworthy technical institution, known for its high standards in achieving its institutional objectives. These objectives, in turn, are related to the Bank's mission of safeguarding price stability and the normal operation of the internal and external payment systems.

In 2018, the organization focused its efforts on achieving its established objectives. At the same time, we started implementing the Strategic Plan so to move forward on the priorities and initiatives proposed for the Bank, while ensuring that this did not in any way change or interfere with the work we do every day.

These priorities and initiatives were established based on the identification of the key challenges the institution will face in the coming years, such as the complex global macroeconomic scenario, the integration of the financial markets, and changes in the makeup of the major global economic blocs, all of which have an effect on the orientation of monetary policy and the monitoring of financial risks. Other factors taken into account include the clear deterioration in people's confidence in some public institutions and the impact of the fast-paced technological changes throughout the world.

The Strategic Plan aims to strengthen the Bank's intellectual leadership; its understanding of and dialogue with the wider community; its corporate governance, with an eye to balancing risk tolerance and business process efficiency; its capacity to understand, manage, and incorporate technological changes; and its position as an employer of excellence. These priorities represent points for mobilizing the institution and creating greater clarity regarding the road we want to travel.

In 2018, we made concrete progress in a number of areas, including the following: the management structure necessary for facing these challenges; monetary policy diffusion and the decision-making scheme; expansion of the analysis, evaluation, and effectiveness of financial policy; comprehensive research that contributes to a better understanding of economic phenomena; an increase in statistical standards; cash management; transparency; and community relations.

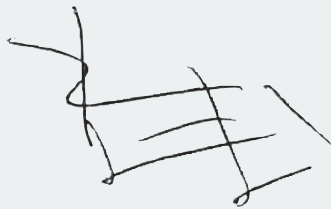


We have been able to securely face the challenges that are increasingly emerging in the area of cybersecurity, without limiting our options for adopting new technologies.

The Bank has a high-quality team, in terms of professional, technical, and personal qualifications, for achieving the Bank's public role and institutional mandate. Moreover, the team's actions are always framed in the context of the institutional values of commitment, respect, transparency, integrity, and excellence.

This *Annual Report* provides a detailed account of the Bank's performance in 2018, using a comprehensive and accessible approach. It represents a first step toward the objective of ensuring that this public accounting process is in line with the highest international standards for this type of report.

The Bank is fully aware that by meeting its objectives, it is contributing to the well-being of all Chileans. This is why we are dedicated to continuously improving the work we do. Along 2019, which is now well underway, we will redouble our efforts to adequately face the new challenges.

A handwritten signature in black ink, consisting of several overlapping loops and lines, positioned above a horizontal line.

ALEJANDRO ZURBUCHEN SILVA
GENERAL MANAGER
CENTRAL BANK OF CHILE

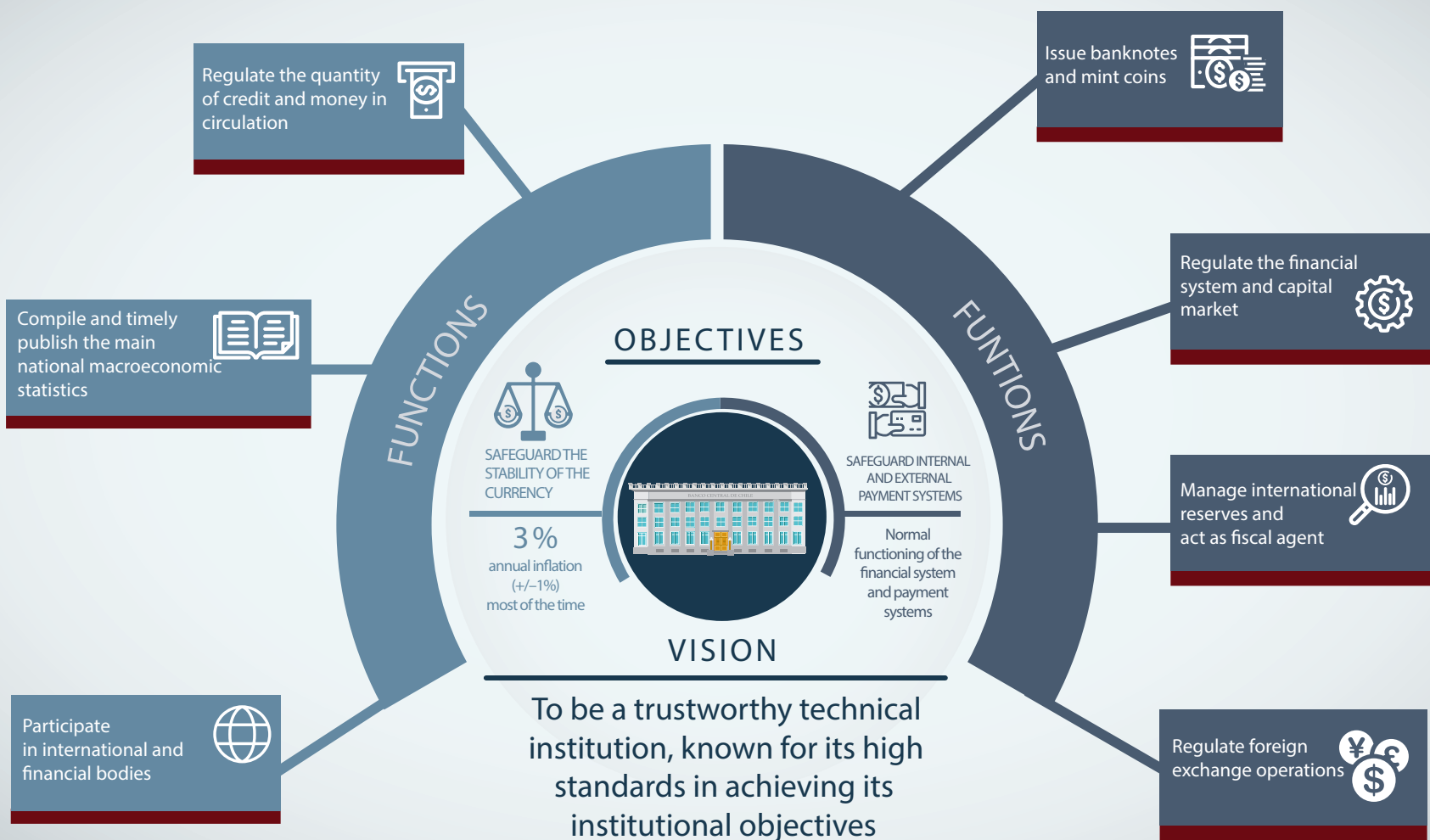


CHAPTER 2

THE CENTRAL BANK OF CHILE

2. THE CENTRAL BANK OF CHILE

The Basic Constitutional Act of the Central Bank of Chile (Law 18,840, published in 1989) grants the institution technical and equity autonomy and establishes its objectives and functions, summarized below.



The 2018–2022 Strategic Plan defines the Bank’s mission as the objectives established in its Basic Constitutional Act, in terms of price stability and the stability of the financial system. To achieve these objectives, it establishes the Bank’s vision.

2.1 Evolution of the Central Bank’s Legal Functions

Over the course of time, the Central Bank of Chile has undergone a number of changes in its role, functions, and management mechanisms.

1925

Decree Law 486 of 22 August, passed under President Arturo Alessandri Palma, created the Central Bank of Chile. The initiative was one of the projects presented that year by the Kemmerer mission, contracted by the government to restructure the Chilean monetary and financial system.

1926

The Central Bank opened its doors to the public with nominal equity of 150 million pesos, of which approximately 13% was contributed by the state, 40% by national and foreign commercial banks operating in Chile, and the remaining 47% by public subscription of shares. Its main functions were monetary.

1953

Decree with Force of Law 106 was published, replacing the previous Basic Act. Under the new law, the Central Bank was established as a permanent autonomous institution, whose fundamental objective was “to promote the orderly and progressive development of the national economy through a monetary and credit policy that, by avoiding inflationary or recessionary trends, supports the more efficient use of the country’s productive resources.”

1960

The Third Basic Act was published, maintaining the same objective for the Central Bank as the prior legislation while introducing a number of modifications. These included changing the composition and appointment of the Board Members; creating the Executive Committee, made up of the Central Bank Governor, Deputy Governor, and General Manager; and expanding the Bank’s authority to control credit.

1975

With the passing of the fourth Basic Act, the Monetary Board, a ministerial-level body, was created for the purpose of establishing monetary, credit, capital market, foreign trade, tariff, foreign currency, and saving policies, in accordance with guidelines issued by the Executive Branch. In addition, the Central Bank became an autonomous public-law institution that was managed independently from the state and was granted its own equity. This new law also expressly gave the Central Bank the power to grant loans to the General Treasury, pursuant to special laws.

TO BE A
TRUSTWORTHY
TECHNICAL
INSTITUTION,
KNOWN FOR ITS
HIGH STANDARDS
IN ACHIEVING ITS
INSTITUTIONAL
OBJECTIVES

1979

The Constitutional Act was modified to establish that under no circumstance can the Central Bank acquire, in the name of the institution, discount promissory notes or other debt instruments issued directly by the General Treasury of Chile, nor can it lend directly to firms or other public or private entities, with the exception of financial institutions.

1981

The Constitution of Chile established the constitutional status to the existence of an autonomous Central Bank. At the same time, it defined the Central Bank as a technical body with its own equity, whose composition, organization, functions, and powers must be determined via a basic constitutional act. In Article 109, the Charter establishes that the Central Bank can only conduct operations with public or private financial entities, although it cannot provide their guarantee. It further establishes that the Central Bank cannot acquire securities issued by the state, government bodies, or publicly owned companies and that it cannot finance any public expenditures, unless the National Security Council considers that the country is engaged in a foreign war or in danger of becoming so engaged.

1989

Law 18,840 was published, wherein the first article established the text of the Basic Constitutional Act of Central Bank of Chile and inaugurated the first Board of the autonomous Central Bank, chaired by Andrés Bianchi and comprising Board Members Alfonso Serrano, Roberto Zahler, Enrique Seguel, and Juan Eduardo Herrera.

That year, the Central Bank began to apply policies that led to a reduction of inflation to levels fluctuating around 3% annually.

2.2 Highlights in 2018

January

A new scheme was implemented for monetary policy decision-making and diffusion, reducing the number of Monetary Policy Meetings in the year from twelve to eight and modifying the press release on each meeting and the structure of the minutes. This is one of the first concrete applications of the 2018–2022 Strategic Plan.

The National Financial Education Strategy was approved. The Bank participated actively in the formulation of the strategy, in conjunction with representatives from five ministries and seven public institutions.

February

The withdrawal of the \$1 and \$5 peso coins from circulation was successfully concluded, together with the introduction of a rounding rule for prices. The process, which was initiated in November of the previous year, exceeded international standards for similar operations.

March

Publication began for a number of new statistical series, associated with the securities market, foreign direct investment by region, and the spliced series for the mining and nonmining Imacec and regional GDP.

The full records were published for 96 Monetary Policy Meetings held in 2000–2007, in compliance with a decision to increase public transparency and as a contribution to a study on the country's economic history.

The Board visited various cities around the country, not only to present and discuss the main contents of the *Monetary Policy Report*, but also to raise awareness on the purpose and objective of the Central Bank. During the year, there were 15 regional meetings in different cities around the country.

April

The Central Bank Governor, Mario Marcel, inaugurated the finished restoration of the building façade, which took 16 months and represented the most significant repair work since the 1940s.

May

In May, the *Financial Stability Report* was published and released independently of the *Monetary Policy Report*, in a return to the publication schedule implemented through 2009. This allowed the Bank to raise the profile of this report on financial risk monitoring and to reach new audiences.

As in years past, the Central Bank participated in the National Heritage Day. A total of 3,150 people visited the Bank, where they received a guided tour led by employees and some higher-level executives, including the Governor.

July

As a result of a joint initiative with the University of Chile and the Millennium Institute, run by the university's Mathematics and Physical Sciences Department, the Bank launched an online course entitled City of Opportunities, aimed at high school teachers throughout the country. Three hundred accredited teachers participated in the first course.

August

As one of the decisions made in the context of the Five-year Strategic Plan, a new organizational structure was designed for the Bank, with the goal of streamlining the decision-making process and empowering the different units within the Bank. The new structure increases the number of divisions from five to seven and creates a Corporate Risk Management and a specialized Cybersecurity Department.

September

At the presentation of the *Monetary Policy Report* to the full Senate in Valparaíso, the Central Bank Governor, Mario Marcel, announced that a panel of renowned world experts in central banking was being convened to evaluate the Bank's performance in terms of compliance with the mandates of its Basic Constitutional Act. The panel was appointed in December.

The Bank published the results of the new Household Finance Survey (HFS), conducted in 2017. This survey provides detailed data on Chilean households' financial position, indebtedness, assets, savings, possessions, and use of payment means.

The Bank created a Technology Observatory, to provide an efficient tool for capturing and diffusing knowledge on disruptive technologies, as well as to detect opportunities and potential impacts in specific business areas.

October

At its Monetary Policy Meeting, the Central Bank Board agreed unanimously to increase the monetary policy interest rate by 25 basis points, to 2.75%, thereby launching the process of reducing the monetary stimulus, after a long period of expansionary policy.

November

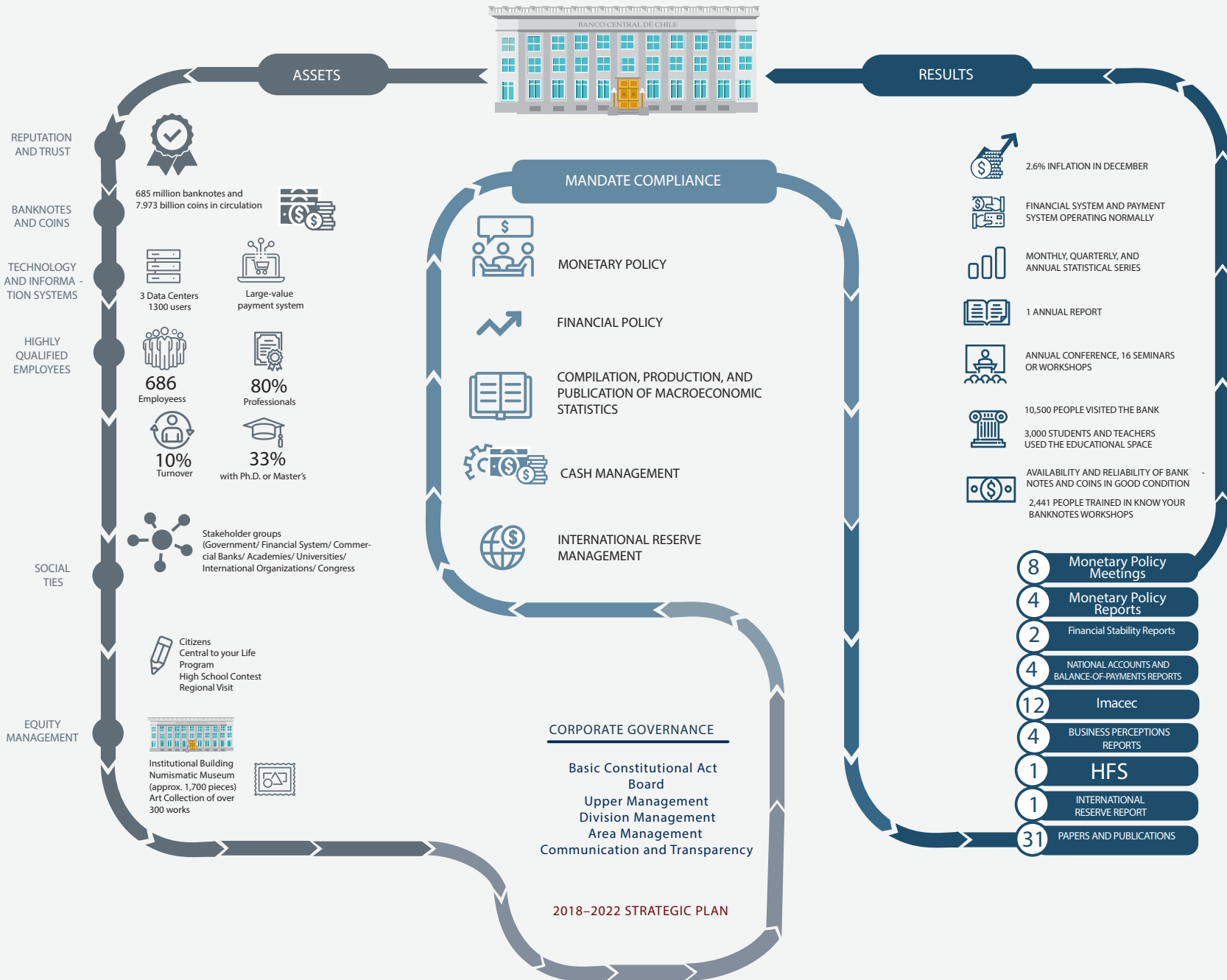
The Bank began the gradual withdrawal from circulation of the old 100 peso coins that are currently held by commercial banks and cash-in-transit companies, in order to reduce the coexistence of two coins with the same denomination.

The Financial Stability Report for the second half included a new chapter on the Residential Real Estate Sector and Financial Stability, which covers several aspects of the residential real estate market, with a focus on developments in the last decade and their implications for financial stability.

December

In conjunction with the last *Monetary Policy Report* of the year, the Bank published the supplement, *Labor Market: Stylized Facts and Macroeconomic Implications*.

2.3 Value Creation Model



INSTITUTIONAL VALUES: COMMITMENT, RESPECT, TRANSPARENCY, INTEGRITY, EXCELLENCE



CHAPTER 3

STRATEGIC DIRECTION AND MANAGEMENT



Board of the Central Bank of Chile

3. STRATEGIC DIRECTION AND MANAGEMENT

3.1 The Board

The Basic Constitutional Act that governs the Central Bank establishes its management mechanisms, giving highest authority to a Board composed of five members and chaired by the Governor.

Board Members are appointed by the President of Chile by means of an Executive Decree, with preliminary approval by a simple majority of the Senate. Once approved, the appointed person serves as a Member of the Board for a period of 10 years.

The Members of the first Board, constituted in 1989, had staggered terms. The Governor, Andrés Bianchi, was appointed for a period of two years; Juan Eduardo Herrera, four years; Enrique Seguel, six years; Roberto Zahler, eight years; and Alfonso Serrano, ten years. This structure meant that there would be a new Board Member every two years, a design that has been maintained for nearly 30 years, with the exception of Members who resigned before completing their ten-year term.

The Bank's Governor is appointed directly by the President of Chile, from among the current Board Members. The Governor holds office for five years or until his or her appointment as Board Member expires, whichever comes first. Along with chairing the Board, the Governor is responsible for representing the Central Bank on extrajudicial matters and directing institutional relations with public authorities, financial institutions, and international organizations.

The Board Members are, and have always been, experts in macroeconomics and finance, with extensive experience in academics or public service and representing a range of economic schools of thought. They must work exclusively for the Central Bank and are only allowed to participate in teaching or academic activities and nonprofit organizations.

The Central Bank operates essentially through resolutions and other agreements adopted by the Board.

The Basic Constitutional Act establishes that it is the Bank's duty to report to the President of Chile and the Senate regarding the general rules and policies it approves in exercising its powers and to advise the President, when requested, on all matters associated with the Bank's functions.

This is accomplished through regular coordination meetings with the Finance Minister, meetings with the President of Chile, and presentations of the *Monetary Policy Report* and the *Financial Stability Report* to the Senate.

The Finance Minister can attend Board Meetings or Monetary Policy Meetings and has the right to speak. He can also suspend any Board resolution, albeit for a limited period and subject to the subsequent decision by the Board.



Mario Marcel Cullell
Presidente

Governor of the Central Bank of Chile since December 2016 and
Board Member since October 2015

Mr. Marcel has a bachelor's degree in business administration from the University of Chile and a master's degree in economics from the University of Cambridge, United Kingdom.

Prior to his appointment to the Board, he served as Director of Governance Global Practice at the World Bank in Washington, D.C., in the United States; and Deputy Director for Public Governance and Territorial Development at the Organization for Economic Cooperation and Development (OECD) in Paris, France. For 13 years, he worked for the Government of Chile, where his positions included Budget Director, Chair of the General Government's Internal Audit Committee; and Chair of the Presidential Advisory Committee on Pension Reform. He is the author of over 90 publications.



Joaquín Vial Ruiz-Tagle
Deputy Governor

Deputy Governor of the Central Bank of Chile since 29 March 2018 and Board Member since 6 February 2012. Mr. Vial has a bachelor's degree in business administration and a master's degree in economics from the University of Chile, and a Ph.D. in economics from the University of Pennsylvania. He previously served as Budget Director, Executive Director of CIEPLAN, and Macroeconomic Policy Coordinator for the Finance Ministry.



Pablo García Silva
Board Member

Board Member of the Central Bank of Chile since January 2014. Mr. García holds a bachelor's degree in business administration and a master's degree in economic science from the Pontifical Catholic University of Chile and a Ph.D. in economics from the Massachusetts Institute of Technology (MIT). His prior positions include IMF Executive Director for the Southern Cone, as well as Research Division Director and Financial Policy Division Director at the Central Bank.



Rosanna Costa Costa
Board Member

Board Member of the Central Bank of Chile since January 2017. Ms. Costa has a bachelor's degree in business administration, with a minor in economics, from the Pontifical Catholic University of Chile. Her previous positions include Budget Director at the Finance Ministry and Deputy Director of the Liberty and Development Institute. She has also served on several presidential commissions and worked as an economist at the Central Bank, in the areas of national accounts, research, and monetary policy.



Alberto Naudon Dell'Oro
Board Member

Board Member of the Central Bank of Chile since March 2018. Mr. Naudon studied business administration at the Pontifical Catholic University of Chile, where he received the Raúl Iver award for graduating at the top of his class in 2000. He also holds a master's degree and Ph.D. in economics from the University of California at Los Angeles. At the time of his appointment, he was Director of the Central Bank's Research Division.

3.1.1 Functioning of the Board

The Board must hold ordinary sessions at least once a week and special meetings when called by the Governor, either of his own volition or in response to a written request by two or more Board Members.

Board resolutions must be adopted by a quorum of three Members and must have the favorable vote of the majority of those present, except in cases in which the law requires a special quorum for specific resolutions, by reason of their importance or relevance. Meetings are recorded in the minutes.

The Board Member chairing the session will cast the deciding vote in case of a tie. The Board generally holds its meetings at its offices in Santiago, but it is empowered to meet and vote on legal resolutions, regulations, or other rulings anywhere within the territory of Chile. There are also internal operating mechanisms to ensure compliance with quorum requirements, in the event that a Board Member cannot be physically present at the meeting.

In preparation for Board Meetings, the Governor convenes weekly Pre-Board Meetings, where the Members undertake an exhaustive analysis of the issues to be covered and resolutions scheduled to be submitted for approval. At these pre-meetings, staff members give comprehensive presentations on the issues and the arguments for and against the respective decisions.

In 2018 the Economic, Financial, and Statistical Committee (EFSC) was created to optimize the working relationship between the Board and the monetary policy, financial, and statistical areas of the Bank. This initiative is part of the third priority of the Bank's 2018–2022 Strategic Plan, which aims to fine-tune the institutional governance structure to streamline the decision-making and implementation processes.

3.1.2 Board Activities in 2018





Additionally, in preparation for each *Monetary Policy Report* and *Financial Stability Report*, the Board holds several meetings for coordination, analysis, and discussion, in order to outline, process, and approve the content of the reports.

Every Thursday throughout the year, the Board meets with the staff of the economic and financial areas to analyze the current national and international macroeconomic and financial scenarios. These are called Conjunctural Economic Meetings.

The rules governing the functioning of the Board are available on the Central Bank's website:

<https://www.bcentral.cl/web/guest/consejo>

3.1.3 Advisory Bodies to the Board

3.1.3.1 Audit and Compliance Committee

The Board has an advisory body for the high-level oversight and supervision of the Bank, called the Audit and Compliance Committee. The Committee reports on the effectiveness of the Bank's internal control systems and procedures; analyzes their equity and reputational effects; evaluates the reliability, integrity, and timely delivery of the information included in the financial statements; reviews the Annual Audit Plan and its execution; and makes proposals on independent auditors.

The Committee met eight times in 2018. The issues addressed at these meetings included assessing the services provided by the independent auditing firm; examining the main observations from the Internal Audit; and reviewing the Bank's internal control and risk management systems.

Committee members:

- **José Luis Cea Egaña, Chair** (since 2014).
- **Anthony Dawes Martindale** (since 2017).
- **Ramiro Mendoza Zúñiga** (since 2018).
- **Ricardo Budinich Diez** (since 2018).

3.1.3.2 Information Technology Advisory Committee (ITAC)

This Committee advises the Central Bank's Board and General Manager on issues related to information technology (IT) corporate governance, such as the definition of guidelines for the IT Strategic Plan; validation of strategic initiatives in the same area; identification of risk mitigators; and the review of the costs and benefits of IT-related initiatives.

In 2018 the ITAC met four times and also held three working sessions with the Bank's IT team. The issues addressed included information security awareness campaigns for Bank staff; cybersecurity principles and strategies; the creation of the new Cybersecurity Department; operational continuity solutions for the Bank; the technological model for implementing user initiatives; the 2019 IT project portfolio; and the implementation of cloud technology solutions.

Committee members:

- **Gonzalo Acuña Leiva** (since 2018).
- **Jaime Navon Cohen** (since 2013).
- **Alejandro Hevia Angulo** (since 2017).

3.1.3.3 Panel of Experts

Last December, the Board announced the appointment of a panel of experts, made up of five economists who will evaluate the Central Bank's performance in fulfilling the two mandates assigned by the Basic Constitutional Act, namely, price stability and financial stability.

The panel is chaired by Karnit Flug, the former Governor of the Bank of Israel, and includes professors Petra Geraats, of Cambridge University, England; Guillermo Calvo, of Columbia University, United States; Enrique Mendoza, of the University of Pennsylvania, United States; and Donald Kohn, senior fellow at the Brookings Institution and former Deputy Chairman of the Board of Governors of the U.S. Federal Reserve.

The group, which has full independence in collecting information and interviewing local and foreign experts, will concentrate specifically on the Bank's analytical framework and powers, its policy formulation process, communication, and results, with an emphasis on the last few years of operation.

The final assessment report will be presented during the Bank's rendering of accounts to the full Senate in September 2019, which also marks the Bank's 30-year anniversary as an autonomous institution.



Silvia Quintard Flehan
Comptroller and General Auditor

Alejandro Zurbuchen Silva
General Manager

Juan Pablo Araya Marco
General Counsel

3.2 Management Structure

The Basic Constitutional Act also grants the Board the authority to appoint the General Manager, the General Counsel, and the Comptroller and Auditor General, as well as to specify the responsibilities and powers of the respective positions.

The General Manager is responsible for the daily management and oversight of the Bank, based on the Board's instructions and the powers conferred thereby.

The General Counsel is essentially in charge of ensuring the legality of the Bank's agreements, resolutions, and contracts, thereby preventing the legal risks associated with its operations.

The Comptroller and Auditor General is responsible for the internal inspection and supervision of the Bank's accounts, operations, and management practices.

The Bank's upper management further includes seven division directors and two additional managers under the General Manager, in charge of operationalizing the fulfillment of the Bank's role and functions and providing necessary corporate services. This structure includes the adjustments that were approved by the Board on 16 August 2018, which were in the process of being implemented at year-end. Also at year-end 2018, there are 22 managers who report to the division directors^{1/}.

^{1/} New management positions: Technology and Administration Division (vacant), Operations Division (vacant), Economic Research Management (vacant), International Analysis Management, Engineering Management (vacant), and Corporate Risk Management (vacant).
Eliminated positions: Economic Research, Economic Analysis and Modeling, Corporate Management and Services, Logistical Services, Financial Risk Assessment and Management.

DIVISION MANAGERS



Elías Albagli Iruretagoyena
Monetary Policy Division



Solange Berstein Jáuregui
Financial Policy Division



Beltrán de Ramón Acevedo
Financial Markets Division



Michel Moure Casabianca
Institutional Affairs Division



Gloria Peña Tapia
Statistics Division

AREA MANAGERS



Matías Tapia González
Economic Research (I)



Diego Gianelli Gómez
International Analysis



Miguel Fuentes Díaz
Macroeconomic Analysis



Enrique Orellana Cifuentes
Monetary Policy Strategy
and Communication



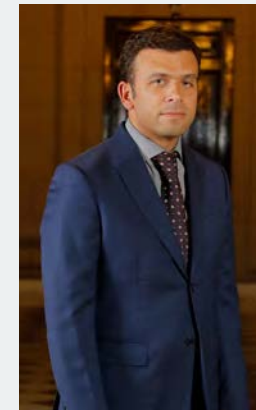
Matías Bernier Bórquez
National Markets



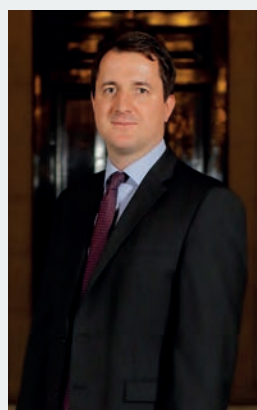
Cecilia Feliú Carrizo
Treasury



Rodrigo Alfaro Arancibia
Financial Stability



Gabriel Aparici Cardozo
Financial Infrastructure and
Regulation



Markus Kirchner
Financial Research



Francisco Ruiz Aburto
Macroeconomic Statistics



Carmen Gloria Escobar Jofré
Statistical Information

AREA MANAGERS



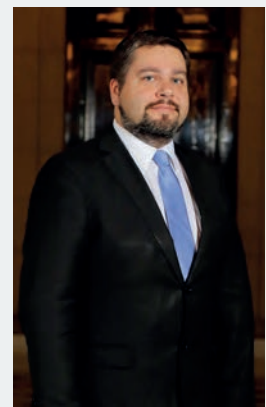
Leonardo Jadue Jadue
Technology



Marcela Pumarino Cruzat
Human Resources



Juan Carlos Piantini Cardoso
International Markets



Mauricio Álvarez Montt
**Chief Counsel of Corporate
Legal Services**



Luis Álvarez Vallejos
Communications



José Luis Pérez Alegría
Security



Carlos Escobar Alegría
Logistics Center Project



Pablo Mattar Oyarzún
**Chief Counsel of Normative
Legal Services**



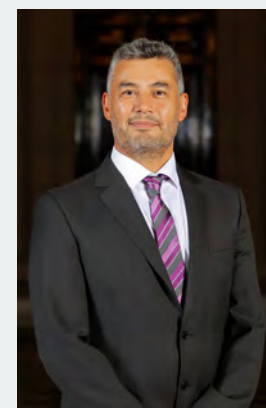
Mariela Iturriaga Valenzuela
**Payment Systems and
Operations**



Mario Ulloa López
**Accounting
Administration and
Planning**



Carolina Besa Montes
Public Affairs



David Salfate Rojas
Logistical Services (I)

3.2.1 Composition of the Board and Upper Management

In recent years, the Central Bank has been incorporating more women on its management teams, as well as highly qualified foreign professionals, as reflected in the following tables.



^{2/} Under the new structure approved in August 2018, upper management is defined as including the General Manager, the General Counsel, the Comptroller and Auditor General, the Division Directors, the Human Resources Manager, and the Corporate Risk Manager.

Nationality	Chilean	Foreign	TOTAL
Board	5	0	5
Upper management	9	0	9
Area managers	19	3	22

Age	Under 30 years	30 - 40 years	41 - 50 years	51 - 60 years	61 - 70 years	Over 70 years	TOTAL
Board			2	1	2		5
Upper management			2	6	1		9
Area managers		3	12	4	3		22

Job tenure	Less than 3 years	3-6 years	6-9 years	9-12 years	More than 12 years	TOTAL
Board	2	2	1	0	0	5
Upper management	3	1	0	1	4	9
Area managers	0	1	5	6	10	22

Pay gap	Women/Men
Board	1
Upper management	1.08
Area managers	1.12



3.2.2 Internal Control Structure

3.2.2.1 Office of the Comptroller and Auditor General

The Office of the Comptroller and Auditor General is focused on assisting the Board, Management, and the Audit and Compliance Committee, in accordance with the mandate conferred on the Auditor General by the Central Bank's Basic Constitutional Act. Through consulting and assurance activities, the office performs an independent, objective, and systematic evaluation of the design and effectiveness of the Bank's risk management, governance, internal control, and management systems. This work adds value to the Bank and supports the achievement of its institutional objectives.

In 2018, the Office of the Comptroller and Auditor General maintained its quality assurance certification by the Institute of Internal Auditors, reaffirming that the Central Bank's auditing activities "comply with international standards for the professional practice of internal auditing." The Office also maintained certification of its process, "Internal Auditing Services for the Central Bank of Chile," under ISO 9001:2015 standards.

3.2.2.2 Office of the General Counsel

The Office of the General Counsel of the Central Bank is responsible for ensuring the legality of the Bank's agreements, resolutions, and contracts and advising the Board and the various units within the Bank on legal matters, with specialized support from the corporate and normative legal services staff.

In 2018, the corporate legal services department worked, in particular, on strengthening the Bank's standards of integrity and transparency, which translated into the issuance of new rules and the modification of the Personnel Regulations, as well of the adoption of good practices and criteria for making sworn statements and the provision of legal consulting services for international reserve management and the performance of the Bank's fiscal agency functions.

The normative legal services department, in turn, concentrated on the analysis, review, and development of regulatory proposals related to the implementation and communication of monetary policy (the new scheme for Monetary Policy Meetings and the provision of information to authorities and the public); and provided legal consulting services to the Financial Policy Division, the Financial Markets Division, and the Statistics Division, which resulted in proposals to the Board on the issuance or improvement of financial regulations applicable to various areas. These included the adoption of the PFMLs in the large-value payment systems (LVPS), the implementation of the new contingency protocol for the LVPS, and improvements to the regulations governing payment cards. In addition, this department is responsible for continuously monitoring and reporting on legislative and regulatory initiatives associated with the Central Bank's institutional character and jurisdiction.

3.2.2.3 Risk management

Fulfilling the mission, vision, and strategic objectives of the Central Bank of Chile requires having in place a comprehensive risk management system, in order to minimize and contain risk. The system adopted by the Bank establishes the following key processes within its scope: preventive risk management, business continuity management, and insurance management. Furthermore, the Bank's organizational structure is based on clearly defined roles and responsibilities, with an emphasis on strategic, financial, operational, legal, and reputational risk.

In 2018, as part of the comprehensive risk management approach and in the framework of the third priority of the Central Bank's Strategic Plan—namely, to strengthen corporate governance—the Corporate Risk Management was created to identify the most significant internal and external strategic risks, while the Cybersecurity Department was established to monitor IT risks. In addition, to balance risk tolerance and business process efficiency, progress was made on defining a methodology for developing a risk appetite statement applicable to the Bank's processes, which is expected to be completed in 2019.

To consolidate the comprehensive risk management system, the Central Bank of Chile in 2018 achieved the establishment and certification of its comprehensive management system, incorporating standards such as ISO 9001:2015 Quality Management Systems: Accounting, Security, Maintenance, Services, and Procurement management processes; ISO 27001:2013 Information Security Management System: Highly Sensitive and Confidential Information; ISO 22301:2012 Business Continuity Management System: Large-Value Payment System, IT security systems, Physical Security, Electronic Security Monitoring, Telecommunications Systems, Operational Electrical Systems, Publication and Updating on the website and technical support for Critical Business Processes; and OHSAS 18001:2007 Occupational Health and Safety Management System.



3.3 Strategic Plan 2018–2022: Everybody's Project

Each new Governor of the Central Bank develops a Strategic Plan in the first year of his term, which is applied during the rest of his governorship and the first year of his successor's term. In 2017, the first year under Governor Mario Marcel, the 2018–2022 Strategic Plan was developed under the title, An everybody's Project. The plan was developed using a new mechanism, involving a consultative, participatory, and inclusive process that took into consideration the people and institutions with which the Bank regularly interacts, as well as the Bank's own staff.

The planning process included internal and external interviews with representatives of the Bank's stakeholder groups, a national opinion poll, surveys of regional and international focus groups, workshops with active participation by Bank staff, Board Members, and managers, with ongoing communication on the progress and results of the process.

Implementation began in 2018. The plan is structured around five strategic priorities, each with identified initiatives, lines of action, point people, and specific timelines. Bank management is responsible for closely following progress on the implementation.

One of the actions was the definition of a new management and process structure, aimed at streamlining decision-making, increasing process optimization, and contributing to the sustainability of the institution.

The changes were guided by three fundamental objectives: to facilitate the implementation of the initiatives contained in the 2018–2022 Strategic Plan; to strengthen leadership and direction at the management level; and to strengthen awareness and capabilities for managing the Bank's strategic risks.

The adjustments, announced in August, incorporated full representation of all the key areas of the Bank at the divisional level. Thus, the line of responsibility is headed by the General Manager, with the next tier made up of the seven division directors: Monetary Policy, Financial Policy, Financial Markets, Statistics, Administration and Technology, Operations, and Institutional Affairs.

The Corporate Risk Management, which also reports directly to the General Manager, was created to improve the organization's strategic risk management capacity.

The organizational changes required the simultaneous execution of various hiring processes in the last quarter of the year, so as to implement the new organizational structure as quickly as possible.

The strategic priorities, the associated initiatives, and progress made in 2018 are detailed in the following tables.

PRIORITY 1

STRATEGIC PRIORITY INITIATIVES

Strengthen the Bank's response capability and intellectual leadership in order to achieve the institutional objectives defined in the Basic Constitutional Act, incorporating an increasingly complex reality.

Strengthen the analytical capacity that supports the monetary policy decision process, incorporating international best practices. Develop analytical capacities for identifying, monitoring, and communicating financial risks.



PROGRESS IN 2018

- ✓ The main development of lines of actions can be summarized in three components.
 - ✓ New format for Monetary Policy Meetings: Reduction from 12 to 8; coordination with the respective *Monetary Policy Reports*; more information in press releases, including how the Board Members voted; and changes in the meeting minutes.
 - ✓ Very significant progress on the incorporation of microdata in conjunctural analysis and economic research.
 - ✓ Data-sharing agreements with the Chilean IRS and other public institutions.
 - ✓ Labor market supplement. Having this type of information available supports a deeper analysis of strategic issues for the Central Bank.
 - ✓ Development and implementation of new forecast models.
 - ✓ Structural model with immigration, for evaluating the impact of this demographic phenomenon on macroeconomic variables that affect monetary policy.
- ✓ In the area of Financial Policy:
 - ✓ Substantial changes to the *Financial Stability Report*, which is now published separately from the *Monetary Policy Report*.
 - ✓ Incorporation of thematic chapters: one on technological innovations in the first half and one on the real estate sector in the second half.
 - ✓ Development of a work schedule for updating the *Compendium of Foreign Exchange Regulations*.
 - ✓ Generation of a research agenda aligned with the established priorities of the Financial Policy area, with significant progress on implementation.

PRIORITY 2

STRATEGIC PRIORITY INITIATIVES

Strengthen the Bank's understanding of and dialogue with its wider environment through strategic communications management that identifies objectives, roles, and functions.

Design a comprehensive communication strategy for the Bank, which consolidates stakeholder relations.



PROGRESS IN 2018

- ✓ Creation of the Institutional Affairs Division, which will lead the transformation of the Bank's communication strategy and relational approach vis-à-vis its different stakeholder groups.
- ✓ The design of the comprehensive communication strategy implied several steps:
 - ✓ Defining the structure, roles, and functions of the division;
 - ✓ Determining an editorial line that guarantees the consistency of the messages issued by the organization;
 - ✓ Implementing an integrated management system for the communications platforms;
 - ✓ Creating new tools for analysis and linkages;
 - ✓ Developing the Annual Work Plan, structured around the definition of specific action axis and their associated stakeholder groups, strategic objectives, and lines of action;
 - ✓ Establishing an orientation toward reducing information asymmetries and reinforcing the positive perception of the Central Bank's purpose and objective; and
 - ✓ Changing the Intranet, one of the Bank's internal communication tools.

PRIORITY 3

STRATEGIC PRIORITY INITIATIVES

Strengthen the Bank's corporate governance so as to balance risk tolerance and business process efficiency, streamlining the decisionmaking process and facilitating innovation.

Fine-tune the institutional governance structure to streamline the decisionmaking and implementation processes.



PROGRESS IN 2018

- ✓ Changes in the management and process structures, aimed at streamlining decisionmaking, increasing process optimization, and contributing to the sustainability of the institution.
 - ✓ The changes were guided by three fundamental objectives:
 - ✓ Facilitate the implementation of the initiatives contained in the 2018–2022 Strategic Plan.
 - ✓ Strengthen leadership and direction at the management level.
 - ✓ Strengthen awareness and capabilities for managing the Bank's strategic risks.
- ✓ The adjustments incorporated full representation of all the key areas of the Bank at the divisional level.
- ✓ Structure:
 - ✓ Clear line of responsibility headed by the General Manager, with the next tier made up of the seven division directors: Monetary Policy, Financial Policy, Financial Markets, Statistics, Administration and Technology, Operations; and Institutional Affairs. Creation of the Corporate Risk Management, which also reports directly to the General Manager, to improve the organization's strategic risk management capacity.
- ✓ Hiring processes began in the last quarter of the year, so as to implement the new organizational structure as quickly as possible.
- ✓ Additional progress on this priority:
 - ✓ Identification and development of a risk appetite methodology, with the objective of generating a statement to establish the institution's risk tolerance.
 - ✓ Launch of activities necessary to increase the efficiency of the Bank's internal process.

PRIORITY 4

STRATEGIC PRIORITY INITIATIVES

Improve the Bank's capacity to understand, manage, and incorporate technological changes, in relation to both its operations and management and its institutional objectives.

Develop the internal management and regulatory capacities to handle disruptive technologies (DT) that affect the business models of the Bank and financial institutions.



PROGRESS IN 2018

- ✓ Creation and launch of the Technology Observatory, which will serve as a tool for capturing and diffusing knowledge on disruptive technologies within the Bank, coordinating the potential adoption of technologies in specific business areas, and generating national and international networks in this subject.
 - ✓ Identification and prioritization of issues for the observatory to focus on, centered on eight innovation axis.
 - ✓ Collection and organization of information within these axis, to be circulated internally.
 - ✓ Support work in the form of internal talks, strengthening and expanding our contact networks, and participation in seminars and collaborative projects.

PRIORITY 5

STRATEGIC PRIORITY INITIATIVES

Be an employer of excellence, offering a value proposition that inspires people and teams to discover and develop their full potential, in a work environment that promotes collaboration, continuous learning, and professional and personal challenges; and thus attracting and retaining the best talents.

Attract and retain talents, identifying and training motivated and committed people who represent the Bank's institutional values.

Strengthen individual leadership and management skills, in line with the organizational culture and values.



PROGRESS IN 2018

- ✓ Analysis and design of initiatives that will be launched in 2019 and later.
- ✓ Analysis of the current organizational culture and definition of the desired culture.
- ✓ Design of the Strategic Plan's talent process, to promote mobility, development, and training.
- ✓ Revision of the skills model.
- ✓ Definition of the employer brand strategy to attract young talents.
- ✓ Progress on job description and mapping for all positions within the Bank.
- ✓ Evaluation and definition of actions to strengthen the employee value proposition.
- ✓ Implementation of specific quality-of-life actions in relation to work-life balance and maternity.
- ✓ Evaluation of the current retirement program.



CHAPTER 4

MONETARY POLICY

4. MONETARY POLICY

The Mandate

One of the Central Bank's objectives, established in Section 3 of the Basic Constitutional Act, is to safeguard the stability of the currency, that is, to keep inflation low and stable.

Low, stable inflation promotes job growth and protects the income of the most vulnerable segments of society, while also creating the conditions for the economy to stay on a sustainable growth path, with full employment and, in general, progress and well-being for the population.

In exercise of the authority granted by the Basic Constitutional Act to meet this objective, in 1999 the Bank adopted an inflation-targeting monetary policy scheme and a flexible exchange rate policy.

The target established under this scheme is for annual inflation (measured as the percent change in the CPI in a 12-month period) to stay around 3% most of the time, within a range of plus or minus one percentage point. Additionally, the objective specifies that inflation should reach 3% in a horizon of 24 months.

The Central Bank's main instrument for keeping inflation in line with the target is the so-called monetary policy rate (MPR), which is set at each Monetary Policy Meeting. The Bank uses a range of operations, described below, to influence the interest rate on overnight interbank loans, so that it stays close to the MPR. This, in turn, affects the supply and demand for money. Finally, all of these factors have an impact—with a lag—on prices in the economy.

In the year, the Board held eight Monetary Policy Meetings to determine the MPR and published four *Monetary Policy Reports*. The reports contain an exhaustive analysis of the national and international macroeconomic scenario for the current year and the next two years, as well as growth and inflation forecasts for the short, medium, and long terms.

4.1 General Economic Climate in 2018

Over the course of 2018, annual inflation increased, from under 2% throughout most of the second half of 2017 to around 3% in the second half of 2018, ending the year at 2.6%.

Inflation averaged 2.1% in the first half and 2.8% in the second. The increase is explained, in part, by the more volatile components of the CPI and the depreciation of the peso. At the same time, inflation of the basket items that are more sensitive to the output gap—namely, services and nontradables—increased steadily along the year.

Core inflation—the CPI excluding food and energy prices, or CPIPE—rose from 1.6% annually in January 2018 to 2.3% in December. This is in line with the recovery of the growth rate and the clearly expansionary monetary policy.^{1/}

As mentioned, the output recovery that started in late 2017 continued in 2018, reaching an annual growth rate of 4%.

Annual GDP growth rates were lower in the second half of the year than in the first, as the economy was growing closer to potential (between 3.0 and 3.5%), the basis of comparison had increased, and the one-off factors that favored economic growth in the first half had dissipated. In particular, the mining sector recorded a strong increase in the growth rate in the first half, largely due to the low basis of comparison deriving from the strike at *La Escondida* mine in the same period of 2017.

Furthermore, there were some one-off factors in 2018 that had a negative effect on the performance of the economy, such as the number and composition of business days.

With regard to the nonmining sectors, activities associated with investment in machinery and equipment were dynamic throughout the year, while those related to investment in construction began to pick up in the latter part of 2018.

In the industrial sector, there was a recovery in some export-oriented activities. This was reflected in the increase in manufacturing shipments, which recorded the highest growth rate of the past few years.

In line with the output side, the increase in domestic spending in 2018 was led by the positive performance of investment in machinery and equipment, with strong capital goods imports. Consumption remained more dynamic than in previous years, despite a slowdown in its annual growth rate in the second half of the year. Underlying this trend, the labor market has been able to absorb the large influx of immigrants in recent years, as evident in the behavior of wages and in job statistics adjusted for this factor. Domestic financial conditions remained favorable, with low credit costs and an improvement in qualitative indicators over the course of the year.

In particular, in the second half of the year, the Bank Lending Survey carried out by the Central Bank showed a strengthening in demand in certain segments, as well as looser lending conditions for some portfolios.

With regard to external conditions that affect the Chilean economy, the world economic growth cycle peaked between late 2017 and early 2018. This was followed by a gradual slowdown, with variation among economies.

^{1/} Starting in January 2019, The National Statistics Institute began to measure the CPI using a new basket and calculation methodology, with base year 2018=100. This translates into a lower CPI for 2018 and a lower starting point for inflation as of 2019.



In the developed world, the United States recorded a better performance than its peers throughout most of 2018. This divergence was reflected in the behavior of prices, exacerbating the differences in the monetary policy stimulus. Toward the end of the year, the main central banks were communicating that they would maintain their current monetary policies for a longer period than previously expected.

In the emerging world, China gradually slowed over the course of the year, with periods of heightened fears of a sharper slowdown. In response, the authorities took measures to stimulate the economy.

In Latin America, the growth forecasts for Brazil and Argentina were revised downward in 2018, due to the development of macroeconomic vulnerabilities or idiosyncratic factors that made it difficult to adopt the necessary policies for the sustainable development of their economies.

In this context, the process of normalizing financial conditions in the developed world was absorbed by the emerging countries without any major disruptions. Although there were periods when financial conditions tightened for economies perceived as having weaker macroeconomic fundamentals, the situation eased somewhat at the end of 2018, when these economies either announced emergency measures or saw an improvement in their political evolution.

FROM JANUARY
TO SEPTEMBER,
THE INTEREST
RATE WAS 2.5%.
IT INCREASED TO
2.75% IN OCTOBER,
WHERE IT STAYED
THROUGH THE END
OF THE YEAR.

In addition, the news over the course of 2018 continued to generate uncertainty and episodes of risk aversion and volatility. The most important events included the following: (i) the trade conflict between the United States and China; (ii) the aforementioned real and expected divergence in monetary policy in the United States versus other developed countries; (iii) concerns about the United Kingdom's exit from the European Union; and (iv) doubts regarding the Chinese economy. The confluence of these developments triggered substantial fluctuations in the global financial markets over the course of the year.

In Chile, these episodes were mainly manifested in exchange rate volatility, whereas long-term interest rates and risk premiums were largely unaffected by the adjustments, in line with the stabilizing role of the floating exchange rate in the policy framework.

Over and above the aforementioned volatility, the peso depreciated in the year, from around \$600 to the dollar in early 2018 to around \$690 to the dollar at year-end.

With regard to commodity prices, oil fell on the order of 25% between the start and end of 2018, closing the year around US\$45 per barrel. In between, the oil price rose to nearly US\$70 per barrel, generating concerns about the impact on global inflation. The increase was mainly due to geopolitical tensions and a larger drawdown of oil inventories than projected.

The copper price peaked at US\$3.20 per pound mid-year. It subsequently descended, albeit with fluctuations, mainly in response to doubts about the Chinese economy and uncertainty regarding the evolution of the trade war with the United States. Late in the year, the price fluctuated between US\$2.70 and 2.90 per pound, around its estimated long-term level.

4.2 Monetary Policy

Starting in 2018, the Board of the Central Bank of Chile introduced some modifications to the monetary policy decisionmaking and communication process.

These modifications are part of the 2018–2022 Strategic Plan and are aimed at strengthening the decisionmaking process, reinforcing internal analytical capabilities, and improving the quantity, quality, and timeliness of the information reported to the public.

Starting in January, the following changes were implemented:

- I. The number of Monetary Policy Meetings was reduced from twelve to eight per year.
- II. The meeting lasts one day when it coincides with the publication of the *Monetary Policy Report* and two days when it does not, starting the afternoon before the day on which the policy decision is scheduled to be announced.

ANNUAL
INFLATION IN
DECEMBER 2018
WAS
2.6%, WHICH
IS WITHIN THE
TOLERANCE
RANGE
ESTABLISHED BY
THE CENTRAL
BANK.

III. The press release on the Monetary Policy Meeting is published at 18:00 on the second day of the meeting. It is more extensive than the previous version, covering the most important economic trends considered in the analysis, the basis for the decision adopted by the Board, and how the Members voted.

IV. The minutes from the Monetary Policy Meeting, which are published on the eleventh business day after the meeting, still provide detailed information on the issues analyzed and discussed, the monetary policy options considered, and the Board's main arguments for the monetary policy decision. They also include the background material and the main graphs presented at the meeting by the Monetary Policy Division.

V. The full record of the Monetary Policy Meetings began to be published in 2018, with a ten-year lag. This record contains more detailed information on the issues analyzed and the opinions expressed by the participants, identifying the speakers and, therefore, the opinions held. Last year, 96 full records were published, covering the Monetary Policy Meetings held between 2000 and 2007.

VI. The *Monetary Policy Report* continues to be published four times a year, early on the first day following the Monetary Policy Meeting in March, June, September, and December, when the Governor gives a press conference at the Central Bank. The *Report* is presented to the Senate immediately after publication. In 2018, the Governor, accompanied by Members of the Board, presented the *Monetary Policy Report* to the Senate Finance Committee on 2 April, 14 June, and 5 December, and to the full Senate on 5 September.

VII. The *Monetary Policy Report* is now published separately from the *Financial Stability Report*, as was the case through 2009. The *Financial Stability Report* was presented to the Senate Finance Committee on 16 May and 14 November.

With regard to monetary policy decisions, in the first half of the year, the Board continued to endorse the option of increasing the monetary stimulus, primarily because the low inflation represented a risk for convergence to the target within the policy horizon.

As the year progressed, growth continued to recover, and the risks for inflation convergence to the target declined. Thus, the Board deemed that a further reduction to the MPR was no longer plausible.

As the output gap narrowed and inflation showed signs of converging to 3%, the Board considered that the economy no longer needed such a large stimulus. Therefore, they began to study the option of increasing the MPR starting in June, and the first hike, of 25 basis points, was implemented at the October meeting. At the same time, the Board signaled that the process of reducing the monetary stimulus would continue to be gradual and cautious.

4.3 Monetary Management

To support the implementation of monetary policy, the Bank monitors market liquidity and employs the mechanisms and instruments at its disposal to ensure that the interbank interest rate—that is, the interest rate that banks charge other banks for overnight loans—remains around the monetary policy rate (MPR).

This is achieved through the short- and medium-term liquidity management schedule, which specifies the auction of Central Bank discount promissory notes (PDBC) and bonds (BCP and BCU), as well as other open market operations and standing facilities. In addition, market liquidity forecasts are revised daily and, when necessary, monetary adjustment operations are carried out to facilitate the convergence of the interbank rate to the MPR.

In 2018, there was no absolute deviation of the interbank rate from the MPR, so it was not necessary to execute any monetary adjustment operations.

The implementation of monetary policy is also linked to the Bank's debt management. This is mainly oriented toward managing the short-, medium-, and long-term liquidity in the financial system, in order to withdraw any structural liquidity surplus from the market, which can affect the Bank's operations.

As in years past, the Bank announced its annual bond auction calendar in early January, which considered scheduled debt maturities for an amount equivalent to Ch\$2.750 trillion, of which Ch\$2.000 trillion would be absorbed through Central Bank discount promissory notes (PDBC).

4.4 Debt Management

As in the past, the Central Bank accepted the role of fiscal agent in the placement of General Treasury bonds to be issued during the year. This involved auctioning peso- and UF-denominated General Treasury bond series issued in 2018 (with maturity dates of 5, 12, 20, and 30 years in each case) and reopening series issued in 2014 and 2015 for UF-denominated bonds and in 2013 and 2014 for peso bonds.

Also in its role of fiscal agent, the Bank implemented a General Treasury bond buyback program, in which additional bonds in the aforementioned series were auctioned, with other General Treasury bonds from earlier series received in payment.

The General Treasury bonds were all issued in accordance with the provisions of Article 104 of the Income Tax Law.

In accordance with both the Bank's information disclosure policy and the stipulations of the Fiscal Agency Decree, Appendix III provides more details on the Bank's management of the Economic and Social Stabilization Fund (ESSF) and the Pension Reserve Fund (PRF).

4.5 Regional Visits

With the publication of each *Monetary Policy Report*, the Bank makes an effort to coordinate presentations of the report in the different regions of the country. This is achieved through the organization of regional meetings, where one Board Member discusses the *Report*, together with complementary information relevant to the region. These presentations are attended by diverse local audiences, including participants from local businesses, academia, government, trade associations, and production spheres.

In 2018, there were 15 regional meetings, organized in conjunction with a regional university or trade association, including the Manufacturing Development Association (Sofofa), the Chilean Chamber of Construction (CChC), the Atacama Regional Development Corporation (Corproa), the Araucanía Production Development Corporation, the Maule Regional Progress Board, the University of Biobío, and the University Austral of Chile.

All four the *Monetary Policy Reports* were presented by the Central Bank Governor at a seminar organized by Icare in Santiago.

March	Talca, Copiapó, Iquique and Valdivia
June	Chillán, Antofagasta, Rancagua and Coquimbo
September	Temuco, Valdivia, Calama, Concepción and Coyhaique
December	Chillán and Punta Arenas



entre ellos un escasez monetaria y una mejor
 • Estos mismos factores en 2019 y 2020, años de ajuste de la inversión
 • En lo externo, el crecimiento de las condiciones financieras
 • La inflación se ha acercado a 2% anual, previsto, dada la apertura
 • La convergencia de la actividad continúe de largo plazo.

The Deputy Governor of the Central Bank, Joaquín Vial, presented the March *Monetary Policy Report* at the seminar “The Central Bank of Chile in Regions: Copiapó,” organized by the Bank and Corproa. 23 March 2018.



Presentation by Pablo García, Board Member of the Central Bank of Chile, at the seminar “The Defining Variables of 2018,” organized by the Manufacturing Development Association (Sofopa). Concepción, 6 September 2018.



Desde el punto de vista de su impacto en la actividad interna, el balance de riesgos externo está sesgado a la baja.

Central Bank Board Member, Rosanna Costa, presented the March *Monetary Policy Report* in Iquique at the seminar “The Defining Variables of 2018,” organized by the Manufacturing Development Association (Sofopa). 23 March 2018.



Presentation by Alberto Naudon, Board Member of the Central Bank of Chile, at a seminar organized by the Valparaíso Regional Chamber of Commerce. Viña del Mar, 8 May 2018.



CAJA N° 6

CHAPTER 5

FINANCIAL POLICY

5. FINANCIAL POLICY

The Mandate

Section 3 of the Central Bank of Chile's Basic Constitutional Act establishes a second objective, that of safeguarding the normal functioning of the internal and external payment systems, which is related to the stability of the financial system.

Internal payment systems comprise the set of institutions and instruments that facilitate the realization of transactions in the economy, including the institutions that make up the national financial system and the international capital markets.

The Basic Constitutional Act grants the Central Bank the authority to regulate the financial system and the capital market. The Bank is therefore able to design and implement policies that contribute to the secure and efficient functioning of the associated market infrastructures.

These infrastructures include the payment systems, which safeguard the circulation of money in the form of cash, payment cards, electronic transfers, and bank instruments (cashier's checks, personal checks, etc.).

The Central Bank secures the normal functioning of these systems through the regulation and operation of large-value payment systems and the constant monitoring of financial risk. This includes managing the real-time gross settlement (RTGS) system and publishing the *Financial Stability Report* twice a year.

Public confidence in the payment systems is crucial for the functioning of the economy. History shows that a loss of confidence can trigger a financial crisis, which can have a severe impact not only on people with savings and deposits, but on the population at large.

Consequently, the Basic Constitutional Act empowers the Central Bank to regulate the financial system and the capital market, as well as to adopt measures aimed at protecting the stability of the financial system.

The Bank is also authorized to act as the lender of last resort, that is, to supply liquidity to institutions that are temporarily experiencing cash flow problems.

The Central Bank is a permanent advisor to the Chilean Financial Stability Board (FSB), which was created by the Finance Ministry to coordinate actions and the exchange of information between the supervisory bodies. The Board meets regularly for the preventive management of systemic financial risk.

The *Financial Stability Reports* for the first and second halves indicated that there were no significant disruptions in the Chilean financial system, including the internal and external payment systems. The payment systems, including the large-value systems, also functioned normally.

5.1 Performance in the Year

A number of important steps were made in 2018 to strengthen Central Bank's response capability and intellectual leadership in the area of financial policy.

The publication of the *Financial Stability Report* was separated from the Monetary Policy Report, together with the introduction of a separate communication strategy. The publication was further strengthened with the inclusion of new thematic chapters, one on technological innovations in the first half and one on the real estate sector in the second half.

In the regulatory area, a work schedule was established for updating the *Compendium of Foreign Exchange Regulations*, in addition to a series of other initiatives.

In 2018, a research agenda was defined in line with the priorities established for the area of Financial Policy, and significant progress was made on implementation. This agenda includes promoting the use of the Household Finance Survey (HFS) and other sources of microdata, as well as structural and semi-structural macro-financial models for risk monitoring and policy analysis.

In September, the results of the 2017 Household Finance Survey (HFS) were published. This was the fourth survey carried out at the national urban level. The HFS, which is applied every three years, is a joint project of the Financial Policy and Statistics Divisions. The objective is to provide detailed information on the financial situation of households, both currently and over time. In particular, the



Presentation of the results of the Household Finance Survey. 12 September 2018.

data include information on households' socio-demographic characteristics, labor status, possessions, use of payment means, income, debt levels, assets, and savings. The survey has 4,549 observations covering cities throughout Chile, which represents around 4.9 million urban households.

With regard to implementing the regulatory agenda, in 2018 the Bank established new liquidity management requirements for the banking industry, incorporating minimum requirements for the short-term liquidity coverage ratio (LCR) into Chapter III.B.2.1 of the *Compendium of Financial Regulations*. This is an essential requirement of the Basel III recommendations.

With respect to the general regulations applicable to large-value payment systems (LVPS), the Bank issued a new Chapter III.H of the *Compendium of Financial Regulations*, adhering to the Principles for Financial Market Infrastructures (PFMI). The new Chapter III.H.2 establishes a contingency protocol for the LVPS in Chile.

For the derivatives markets, the Bank issued a new Chapter III.D.2, which consolidates and strengthens the requirements for close-out netting of derivative transactions contracted under Master Agreements recognized by the Bank. The issue of this Chapter represents a move toward the greatest possible convergence with international standards that provide a high degree of certainty to these markets, while also preserving essential prudential safeguards.

Additionally, to move forward on the development of a more modern and transparent derivatives market, the Bank opened a public consultation on a draft of the new Chapter III.D.3 and the corresponding operating rules. This regulatory framework will establish an Integrated Derivatives Information System (IDIS), in order to increase the quantity and quality of information available on transactions in this market, following international guidelines for financial market infrastructures.

Finally, new modifications were incorporated to the regulations governing payment means, after analyzing the implementation of regulations issued in 2017.

5.2 Cybersecurity

As in previous years, cybersecurity was one of the critical issues on the Bank's 2018 agenda.

In response to cybersecurity events in the banking industry, the Central Bank undertook an in-depth review of its computer equipment and networks, in order to determine whether any of its platforms could potentially be compromised, despite the security measures currently in place.

The assessment was conducted by a prestigious international company that is a global leader in cybersecurity. While the Bank was positively evaluated in the review, the assessment will be carried out regularly, as a preventive measure.

At the same time, a Cybersecurity Committee was established, made up of managers from different units, which will be responsible for promoting and monitoring all the Bank's cybersecurity initiatives. In



In addition, a new Cybersecurity Department was created within the Technology Division, to strengthen the hiring of new professionals in this subject. The new department will be responsible for information and computer security.

Implementation was completed on the recommendations of the SWIFT Customer Security Program (CSP), which incorporates a series of technological controls and operating procedures that improve the level of security.

A project was also launched to develop a disaster recovery (DR) processing site, in addition to the two existing operating sites. This will ensure the operational continuity of the Bank's main business processes in the event of a major disaster or cyberattack at its main sites.

Finally, work continued on a series of projects to upgrade the main security tools; a cybersecurity monitoring service was incorporated; and a cyberattack prevention service was contracted.

5.3 Provision of Large-Value Payment Services

The real-time gross settlement (RTGS) system is the main large-value payment system in Chile and is managed by the Central Bank. Transactions are settled immediately and on a gross basis in the accounts of each bank, in a format that removes credit or liquidity risk, thereby contributing to the stability of the financial system.

At year-end, the number of participants in the RTGS system had fallen to 21, following the exit of two banks, *BBVA Chile* (September) and *Nación Argentina* (December), and the entry of the Bank of China (July).

In 2018, the RTGS system settled an average of 1,684 payments per day, including the Bank's own transfers, with an average daily value of Ch\$14.95 trillion (equivalent to US\$23 billion). Relative to 2017, the average daily value increased 23%, with a sharper rise in the fourth quarter. This derived from a reduction in payments processed by ComBanc, due to the reduction in counterparty limits between participants as a result of credit risk management mechanisms.

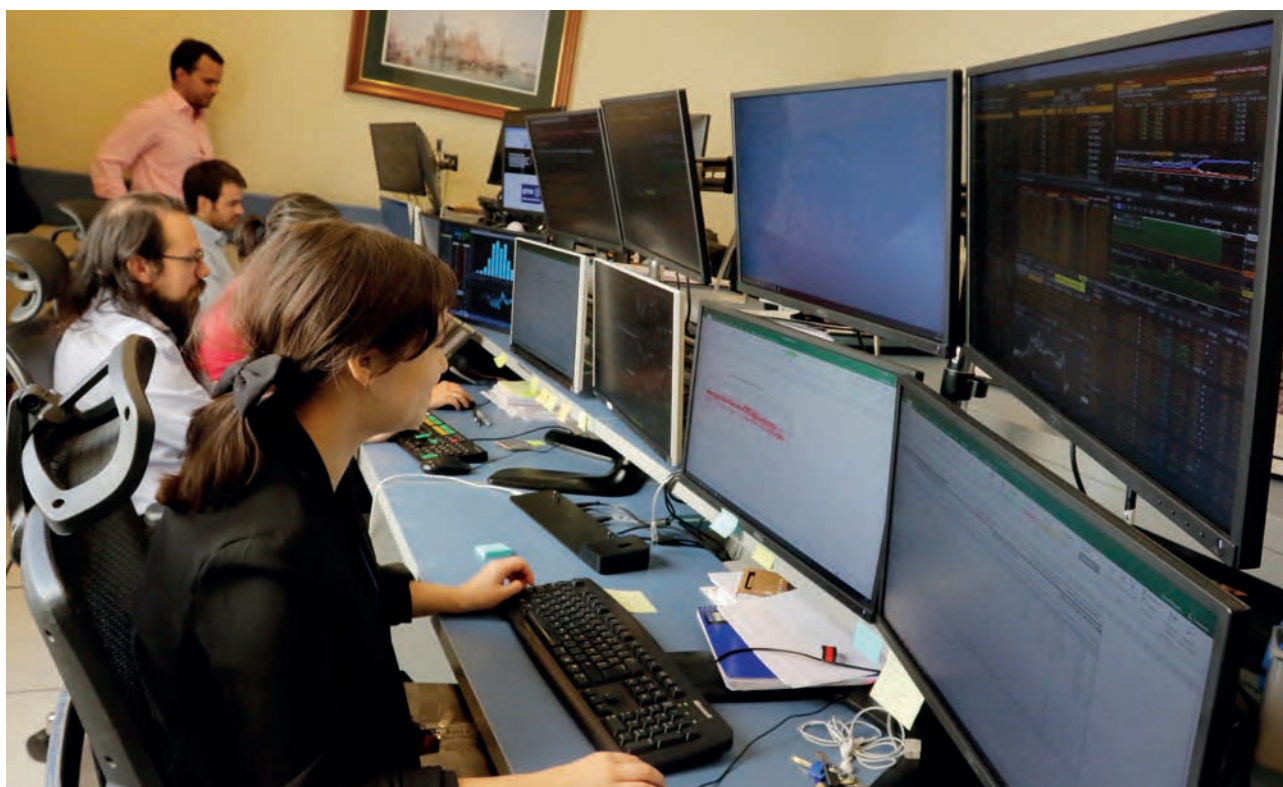
To increase the efficiency of the RTGS system, the Bank supplies liquidity throughout the day via access to an intraday credit facility, conditional on the provision of eligible collateral or guarantees pledged to the Bank. The latter includes bonds issued by the General Treasury.

In 2018, the average daily value of credit supplied through the intraday credit facility, including both types of collateral, was Ch\$1 trillion. The largest value provided by the intraday credit facility occurred on 8 October, at Ch\$2.49 trillion, the highest level since 2005.

In 2018, the availability of the RTGS system was 99.96%, while that of the open market operations system, which provides intraday liquidity, was 99.74%. The former reflects the effect of two incidents that brought the system down for a total of 53 minutes. In the case of the latter, four incidents caused total downtime of 332 minutes.

In response to the operating incidents recorded in 2018, the Bank provided temporary operating platforms in the Central Bank building for the direct operations of one of the affected banks, using physical spaces specifically designated for this type of situation (the RTGS system's contingency room). The Bank also coordinated three business continuity exercises, in conjunction with participants of the large-value payment system and financial market infrastructures, to contribute to improving the resilience of the financial system as a whole.

Finally, in August 2018, the Bank published "Contingency Protocol for Large-Value Payment Systems," the objective of which is to preserve the operational continuity of both the RTGS system and the large-value payment clearing house (CCAV) operated by ComBanc in response to critical operational events. Both operators formalized their voluntary adherence to this regulation through the signing of a joint agreement outlining the terms and conditions for its implementation.



5.4 Technology Observatory

The Bank's Strategic Plan takes into consideration the technological changes that are transforming the global economy, creating new ways of doing business, and affecting many organizations and institutions around the world, including central banks.

In 2018, the Technology Observatory was launched to provide a tool for capturing and diffusing knowledge within the Bank on disruptive technologies, coordinating the potential adoption of technologies in specific business areas, and generating national and international networks in this subject.

Issues were identified and prioritized for attention by the observatory, centered on eight innovation areas.

Information in these eight areas was collected and organized for internal circulation. The work was supported through internal talks, the strengthening and expansion of our contact networks, and participation in seminars and collaborative projects.



The Governor of the Central Bank, Mario Marcel, gave a talk on financial technologies to the staff.



CHAPTER 6

INTERNATIONAL RESERVES AND SOVEREIGN
WEALTH FUNDS

6. INTERNATIONAL RESERVES AND SOVEREIGN WEALTH FUNDS

The Mandate

International reserves are liquid foreign currency assets held by the Central Bank to support its monetary and foreign exchange policies. They are one of the instruments available to the Bank to meet its permanent objective of safeguarding the stability of the currency and the normal operation of the internal and external payment systems.

The management of these reserves aims to guarantee efficient access to international liquidity and to safeguard the financial equity of the Bank. To achieve this, the Bank acts according to the legal framework stipulated in its Basic Constitutional Act and a set of internal practices and policies that are in line with international recommendations.

The objectives of the investment policy are as follows:

- (i) To hold the reserves in highly liquid instruments, which can be called in the briefest period possible without incurring significant transaction costs;
- (ii) To invest in instruments that present limited financial risks, in order to limit the risk of incurring capital losses;
- (iii) To minimize the volatility of the value of the Bank's equity as a result of changes in the exchange rates of the investment currencies vis-à-vis the peso, so as to reduce the negative effects on the Bank's balance sheet; and
- (iv) To reduce the cost of holding the reserves at the margin, which is achieved through the inclusion of a portfolio oriented toward obtaining higher absolute returns in the long run.

Since 2007, at the request of the Finance Minister, the Bank has acted as fiscal agent in the management of all or part of the fiscal resources held in the Economic and Social Stabilization Fund (ESSF) and the Pension Reserve Fund (PRF).

As of April 2011, the Bank also manages the Strategic Contingency Fund (SCF) in the name of the General Treasury.^{1/}

The Bank submits daily, monthly, quarterly, and annual reports to the corresponding government authorities, in accordance with the stipulations of the respective Fiscal Agency Decrees and the corresponding performance guidelines. These reports include measures of performance, risk, and compliance with the specifications in the current performance guidelines.

^{1/}Details on the management of the SCF are not included in this report.

6.1 Performance in 2018

6.1.1 International Reserve Management

As of 31 December, the investment portfolio stood at US\$34.8686 billion, while the cash portfolio held US\$3.8642 billion. Taking the sum of these two portfolios plus other assets, total international reserves closed the year at US\$39.8606 billion.

This balance was US\$877.9 million higher than at year-end 2017. The increase is explained by a growth of US\$987.2 million in the cash portfolio and US\$93.1 million in the other assets portfolio, which was partially offset by a reduction in the investment portfolio of US\$202.4 million. The decrease in the investment portfolio is mainly due to a general depreciation of the investment currencies against the U.S. dollar, while the increase in the other assets portfolio derives from transactions with the IMF.

In the case of the cash portfolio, the growth is explained by an increase in foreign currency deposits, mainly dollars, held by local banks at the Central Bank.

The liquidity of the reserves was ensured by investing in a portfolio of short-term deposits with international commercial banks and fixed-income instruments traded on highly liquid secondary markets. On 31 December 2018, time deposits and resources held in current accounts represented 11.7% of international reserves; short-term securities, 20.8%; bonds, 64.7%; and other assets, 2.8%.

To safeguard the Bank's equity, the invested resources are managed under policies and controls designed to limit financial and operational risk, which are approved by the Board.

Credit risk is controlled through limits on issuers, instruments, intermediaries, and custodians. As of 31 December, 77% of reserves (excluding other assets) were invested in AAA-rated instruments issued by banks, sovereigns, foreign financial institutions, and supranationals. The remaining 23% was invested in instruments with a credit rating between A- and AA+, mainly in the sovereign sector.

The Bank held sufficient foreign exchange reserves to meet potential and predictable foreign currency liquidity needs.

The Bank performed the duties of fiscal agent, designated by the Government of Chile through Finance Ministry.

Market risk is contained through the diversification of investment currencies, instruments, and maturities, taking into account the impact of decisions regarding these parameters on the Bank's balance sheet.

At year-end, 65.3% of total reserves was held in instruments denominated in U.S. dollars, 15.1% in euros, 4.1% in Canadian dollars, 3.6% in Australian dollars, and the remaining 11.9% in other currencies. The average duration of the investment portfolio was around 21 months.

Operational risk was managed through the separation of functions and responsibilities and the application of internal and external controls. A portion of the investment portfolio was managed by two external managers, namely, BlackRock Institutional Trust Company N.A. and Amundi Asset Management.

These firms came on board in February and October 2016, respectively, with a mandate of US\$500 million each. Both firms managed a long-term global government fixed-income mandate, with a structure equivalent to the internally managed diversification portfolio.

The total return obtained from international reserve management in 2018 was 1.70% measured in currency of origin (not considering changes in the portfolio currencies) and -0.35% measured in dollars.

The return on fixed-income instruments in local currency was offset by the negative exchange rate effect of measuring returns using the U.S. dollar as the base currency. This is due to the appreciation of the dollar against the other currencies in which the international reserves are invested.

The differential return relative to the benchmark (which is used to guide and evaluate investment performance) was -2.6 basis points.

Appendix II presents a more detailed report, in accordance with institutional policy on the provision of information on the management of international reserves.

6.1.2 General Treasury Fund Management

In the period, the ESSF investment guidelines approved in 2015 remained in effect. On 13 December 2018, the Bank accepted new investment guidelines for the PRF, which include a new strategic asset allocation. Also in 2018, the Bank accepted new custody guidelines for the ESSF and the PRF.

In 2018, the Bank implemented a passive management approach to the fiscal fund portfolios. The investment objective was to obtain monthly returns in line with the benchmarks, within the risk parameters defined by the Finance Ministry in the investment guidelines. At the same time, the Bank applied the same principles and standards to managing the General Treasury funds that it uses for its international reserves.

The market risk of the ESSF and PRF portfolios, relative to the market risk implicit in the benchmark portfolios established by the Finance Ministry, was primarily controlled through risk budgets (associated with a given ex ante tracking error). Credit risk was mainly controlled through limits on issuers and intermediaries. At year-end 2018, the market value of the ESSF was US\$14.1338 billion, of which US\$13.2043 billion was managed directly by the Bank.^{2/} In the period, there was a withdrawal from ESSF of US\$354.6 million, which was executed by the Bank as fiscal agent.^{3/} At year-end, the market value of the PRF was US\$9.6632 billion, of which US\$6.0541 billion was managed directly by the fiscal agent.^{4/} In 2018, withdrawals from the PRF totaled US\$261.5 million and were executed by the Bank.^{5/}

In 2018, the Bank continued to use the services of a global custodian, which also measured the performance, risk, and benchmark compliance of the management of the funds, in accordance with the standards and parameters outlined in the investment guidelines.

In 2018, the absolute return measured in dollars on the funds managed by the Bank was 0.21% for the ESSF and -1.60% for the PRF.^{6/} The differential return attributable to the Bank's management, relative to the benchmark portfolios established by the Finance Ministry, was 8.8 and 10.4 basis points, respectively, for the ESSF and PRF portfolios managed by the Bank.

With regard to fiscal agency fees,^{7/} the costs of managing the funds were charged to the General Treasury. In 2018, the annual charges for the ESSF and PRF were 0.9 and 1.8 basis points, respectively, of the total resources under the direct management of the Bank.

^{2/} The remaining ESSF resources are managed by external portfolio managers under an equity mandate.

^{3/} The withdrawal, on 27 September 2018, was used to finance part of the annual contribution to the PRF.

^{4/} The remaining PRF resources are managed by external portfolio managers under corporate bond and equity mandates.

^{5/} The total withdrawal is the sum of a net withdrawal of US\$31.6 million on 27 September 2018 and a withdrawal of US\$229.8 million on 13 December 2018.

^{6/} Both figures were obtained using the time-weighted rate of return (TWRR) methodology, which delivers a rate of return adjusted for the impact of possible contributions (of capital or generated by the securities lending program) and withdrawals (of capital or associated with payments to third parties). This methodology thus isolates the management result from the effect of changes that are exogenous to the size of the portfolio, thereby allowing a comparison of the portfolio management and the benchmark performance.

^{7/} The annual fiscal agency fees for the ESSF and PRF are associated with direct expenses and costs incurred by the Bank in the management of the funds and does not consider other expenses, such as those associated with the external portfolio managers or the custodian.



As in past years, the Central Bank accepted the role of fiscal agent in the placement of Treasury bonds to be issued during the year. This involved auctioning peso- and UF-denominated Treasury bond series issued in 2018 (with maturity dates of 5, 12, 20, and 30 years in each case) and the reopening of series issued in 2014 and 2015 for UF-denominated bonds and in 2013 and 2014 for peso bonds.

Also in its role of fiscal agent, the Bank implemented a Treasury bond buyback program, in which additional bonds in the aforementioned series were auctioned, with other Treasury bonds from earlier series received in payment.

The Treasury bonds were all issued in accordance with the provisions of Article 104 of the Income Tax Law.

In accordance with both the Bank's information disclosure policy and the stipulations of the Fiscal Agency Decree, Appendix III provides more details on the Bank's management of the ESSF and the PRF.



CHAPTER 7

MACROECONOMIC STATISTICS

7. MACROECONOMIC STATISTICS

The Mandate

The Central Bank's duties include the timely publication of the main national macroeconomic statistics, including monetary and foreign exchange statistics, the balance of payments, the national accounts, and other comprehensive economic and social accounting systems.

The Bank processes and publishes daily, weekly, quarterly, and annual statistics, including the calculation of the National Accounts, the Balance of Payments, indexation indicators such as the *unidad de fomento* (an inflation-indexed unit of account), the foreign exchange market, interest rates, monetary aggregates, international reserves, the trade balance, the securities markets, and external debt, among others.

The Bank also undertakes and coordinates statistical research and analysis, always incorporating the highest international standards.

The Bank publishes the Economic Activity Index (Imacec) monthly. Quarterly publications include the National Accounts, which reflect the evolution of gross domestic product (GDP), and the Balance of Payments, which reflects the trade of goods, services, and transfers to and from abroad.

All the statistical reports are published on an established schedule, contributing to macroeconomic analysis and decisionmaking of public and private agents in the country.

7.1 Performance in 2018

The Bank continued to carry out its macroeconomic statistics revision and publication program: National Accounts, Balance of Payments and International Investment Position, Monetary and Financial Statistics, and Foreign Exchange Statistics.

In response to initiatives promoted by international organizations, the Bank published the first Securities Market Statistics report on 23 March 2018. The objective is to contribute to a better interpretation of agents' role in financial intermediation, as well as to correctly incorporate debt instruments in the macroeconomic aggregates. The report provides a comprehensive overview of the stock of public and private bonds, notes, and other negotiable financial instruments, with a breakdown by sector, issue market, original and residual maturity, and debt service. Holders of securities are also classified by sector.

The report presents quarterly data going back to the first quarter of 2013. It is published with a lag of 75 days from the cutoff date for the most recent statistics.

In 2018, work began on the 2018 Benchmark Compilation (BC-2018), which provides the basis for revising the National Accounts estimates. The project considers the implementation of new international methodological recommendations and innovations in matters of data sources and estimation methods. It will also take into account new phenomena associated with the digital and globalized economy.

In this context, a study on agriculture and fruit cultivation was tendered and awarded to collect basic information for estimating value added in these sectors, as these data are not usually available.

Work also began on planning and defining the technical aspects of a price survey for measuring sales margins by product, in a joint project with the National Statistics Institute (INE).

The BC-2018 will be published in the fourth quarter of 2021, and the historical series, reconciled with the new measurement framework, will be released in March 2022.

To provide historical time series compatible with the BC-2013, the Bank published the spliced Imacec and regional GDP data on 26 April 2018.

In the case of the Imacec, the spliced series provides monthly economic activity series from 1996 to 2008, with a breakdown by mining and nonmining sectors. For regional GDP, the spliced series increased the coverage of regional statistics disaggregated by sector for the 2008–2012 period, with an annual frequency, measured in current prices and volume.

The Bank implemented an annual plan for evaluating the quality of the statistics compiled by the Statistics Division, following an assessment in 2017 by the Statistics Department of the Bank of Portugal with regard to compliance with best practices in statistics.

Progress was made on the Microdata: Integration, Development, and Exploitation (MIDE) project, whose objective is to achieve a more efficient and centralized management of the Bank's microdatabases, improving their organization, increasing privacy protection, and incorporating the use of specialized software available internationally.

In addition, processes were modernized to allow continuous data loading and automated standardization, revision, comparison, and analysis. This reduces the time required for the full process and ensures the completeness and historical consistency of the databases involved.

In accordance with the demand for new financial infrastructures, the Statistics Division continued to move forward on the creation of an Integrated Derivatives Information System (IDIS), which will serve as a trade repository for recording derivative transactions.

In line with the principle of separation of functions within the Bank and the correct assignment of processes, in October 2018 the Statistics Division began to calculate the interbank interest rate, that is, the daily weighted average interest rate on overnight loans between banks. Until September, this task was performed by the Financial Markets Division.

As part of the international relations program, the Statistics Division takes part in expert working groups sponsored by different international organizations, such as the Bank for International Settlements (BIS), the Organization for Economic Cooperation and Development (OECD) and the United Nations. In August 2018, the Bank became a formal member of the International Network of Exchanging Experiences on Statistical Handling of Granular Data (INEXDA), created to facilitate the use of anonymized granular data.

The Bank also renewed its participation as co-chair of the CEMLA Financial Information Forum (FIF), together with Mexico and Peru.

In August, Chile was appointed to the Executive Committee of the Irving Fisher Committee (IFC) of the BIS, starting on 1 January 2019. This committee shares experiences on monitoring developments related to data, analytical methods, their value relative to “traditional” statistics, and the risks associated with their use, depending on the precision of the information.



Users Meeting

Domestically, the Statistics Division continued to strengthen its relationship with academics, economists, and market analysts through the Users Committee. The objective of this Committee is to improve communication and feedback on the statistics that are regularly compiled by the Division, including the methods used and diffusion policies, and on current statistics projects, in the framework of the Central Bank's strategic planning.

The Committee met three times in 2018, with an average attendance of around 15 guests. The issues addressed included the diffusion of the 2017 Household Finance Survey, as well as the main results of research projects on measures of heterogeneity in the Chilean economy and the value of land zoned for residential use.

Finally, the use of the Bank's statistical apps continued to grow, albeit with changes in user preferences. In line with the frequency of the data, the Daily Indicators page continued to be the most used, with almost six million visits in the year (measured via Google Analytics). In second place, the Statistical Database for mobile devices more than doubled the number of visits, from just over 675,000 in 2017 to 1.6 million in 2018. The traditional Statistical Database, in turn, received over 660,000 visits.

The use of the Web Service, implemented through the Statistical Database, allows the direct mass transmission of data to personal or business computers. There are currently around 200 firms (and people) that actively use this service.

In January 2018, the Board voted to end the daily calculation and publication of the reference exchange rate (*dólar acuerdo*) and the associated currency basket. This decision reflects the fact that the reference exchange rate is no longer used by the Bank, for either its balance sheet or its financial statements.



CHAPTER 8

COMMUNICATION AND TRANSPARENCY

8. COMMUNICATION AND TRANSPARENCY

One of the priorities of the 2018–2022 Strategic Plan is to strengthen the Bank’s understanding of and dialogue with the wider community through strategic communications management. Therefore, one of the first decisions adopted in this area was the creation of the Institutional Affairs Division, which is in charge of the Communications Area, the Public Affairs Management, and the Information Access and International Relations units.

This structure has allowed the Bank to address the challenge of developing an integrated management of its various communication platforms and tools, not only to project a consistent public image, but also to listen to and engage with its different stakeholder groups.

At the same time, the institution maintains a firm commitment to active and passive transparency, as evidenced in its compliance with the obligations imposed by the Constitution and legislation. In fact, the Board has adopted resolutions that go even further in the direction of transparency than required by law.

Communication is fundamental for the functioning of an autonomous public institution, and it is one of the foundations for achieving the objectives established in the Bank’s Basic Constitutional Act. The tools and actions designed for disseminating this communication aim to facilitate equitable and timely access to information, thereby contributing to the formation of expectations on the part of economic agents who react to the Bank’s decisions.

One of the main platforms is the Bank’s website, which is where all the decisions adopted by the Central Bank are first released. Once they are published on the website, a series of complementary actions is set in motion to heighten the impact on different audiences. These include a mass mailing to the media, press conferences, interviews, public presentations, and the publication of support messages on social media.

The primary goal of every diffusion campaign is to reduce information asymmetries. This is achieved by amplifying the messages so they reach not only industry specialists, but also informed audiences and the general public.

For example, monetary policy decisions are reported at 6:00 p.m. on the final day of each Monetary Policy Meeting, via the publication of a press release on the website and the electronic mailing of the same communication to all the media outlets.

In the case of the *Monetary Policy Report* and the *Financial Stability Report*, following the presentation to the Senate, the Governor holds a press conference to present the main highlights and answer questions from journalists on the content of the reports. The press conference is streamed online, and the full video is uploaded in the Bank’s YouTube channel. Subsequently, the Bank coordinates a set of additional actions, such as interviews with Board Members by the written and audiovisual press and presentations at conferences and seminars both in Santiago and in other regions of the country, which are attended by authorities, analysts, academics, businesspeople, executives, union representatives, and university students.

The main messages are also published on social media, and all press inquiries are answered promptly.

The Bank also releases extensive statistical information on economic activity and the balance of payments, as well as expectations surveys and qualitative research. All of this information is widely diffused via the same communication channels.

In 2018, the Central Bank was mentioned around 12,000 times in the national media, which breaks down as follows: 46.9% digital news sites; 21.2% Santiago print media; 14.2% radio programs; 9.2% television news programs; and 8.6% regional print media. This includes press notes generated directly by the Bank, as well as news items that mention the Bank's decisions, data, or even its management model.

The Central Bank's Communications Policy stipulates that no media outlet will receive exclusive information on the Bank's decisions or macroeconomic, financial, or statistical reports that have market repercussions, thereby upholding the principle of equitable provision of information. The only exceptions to this policy are interviews and public education campaigns.

8.1 Community Relations

An institution's reputation is determined by the set of perceptions and understanding held by its stakeholder groups with regard to the institution's work. It is the result of the organization's behavior over time, based on the fulfillment of its commitments with those groups, on the one hand, and the image that these audiences have developed based on the factors that they consider most important, on the other. Consequently, the Bank, as a technical body, has prioritized actions aimed at establishing closer relations with the larger community, as part of its communication strategy. This is evident in the set of initiatives developed over the course of the year.

In 2018, activities related to financial education, extension, and cultural outreach provided opportunities to engage with different stakeholder groups, which complemented the coordination of other actions related to transparency and public relations.

8.2 Financial Education

For the Central Bank, financial and economic education is an essential tool for empowering people to make informed decisions that safeguard their well-being and quality of life, while also contributing to the stability of the financial system.

8.2.1 Central to Your Life

Since 2004, the Bank has been developing a series of actions oriented toward financial education, largely focused on the community of students and teachers, so as to contribute to financial empowerment.

The initiatives in this area are organized through the community outreach program, Central to Your Life, which explains economic concepts and processes in a simple and approachable manner. It is hoped that through the program, people will be able to make more informed decisions, which should in turn contribute to improving their quality of life.

Central to Your Life (www.centralentuvida.cl) is the platform for organizing the Bank's various financial education initiatives, including the online course, City of Opportunities; the high school contest, Economics Up Close; workshops for teachers; and the Central Bank tour program.

QUIÉNES SOMOS | PARTICIPA | INFORMATE | APRENDE

Inscríbete en la II versión del curso de Educación Económica y Financiera "La Ciudad de las Oportunidades"
 Iniciativa dirigida a docentes de enseñanza media y estudiantes de pedagogía.

Bienvenido a Central en tu Vida
 Bienvenido a Central en tu Vida, aquí encontrarás toda la información sobre las distintas acciones que desarrolla el programa de acercamiento a la comunidad del Banco Central de Chile, que busca que las personas aprendan más sobre economía y lo que hace el Banco Central, de manera fácil, entretenida y en un lenguaje claro y sencillo. Este programa tiene como objetivo explicar, de una manera cercana, conceptos y procesos económicos que habitualmente se consideran muy complejos. Así, las personas tomarán decisiones mejor informadas, lo que contribuirá a mejorar su calidad de vida.
 Te invitamos a navegar y aprender en el sitio, porque entender economía es... Central en tu Vida

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BCE Central.cl **Economía + cerca** **VISITAS EDUCATIVAS** **MUSEO NUMISMÁTICO** **Síguenos en:**

Online Course: City of Opportunities



Launch: 4 July 2018

Target audience: high school teachers around the country.

Developed in conjunction with the Millennium Institute for Market Imperfections and Public Policy (MIPP) of the Mathematics and Physical Sciences Faculty at the University of Chile.

Duration: approximately 4 months.



The course, which is taken online, is organized into five modules covering material such as basic microeconomic concepts, money and the banking system, personal finance, and the role of the Central Bank.

As a final project, the teachers designed and taught a class for their students, thereby contributing to the financial education of thousands of students around the country.



High School Contest: Economics Up Close



Launch: 6 April 2018, 14th year.

Target audience: high school students and teachers around the country.

Judges:

- Central Bank Governor, Mario Marcel.
- Finance Minister, Felipe Larraín.
- Education Minister, Marcela Cubillos.
- Bank Superintendent, Mario Farren.
- Central Bank Financial Policy Division Manager, Solange Berstein.
- Executive Secretary, Education Quality Agency, Carlos Henríquez.
- National Youth Institute Director, Mirko Salfate.
- Technical Secretary, Advisory Commission for Financial Inclusion, Ignacia Martínez.
- Journalist, Mega TV, Roberto Saa.



Each year, this contest challenges teachers and students to answer a question on financial education, presented in a three-minute video. In 2018, the question was, How does the autonomy of the Central Bank of Chile contribute to keeping inflation low and stable?

Awards are given for the three best videos in two age categories, based on public voting on the Bank's website and the judges' decision.

The winners this year were as follows:

Freshmen and sophomores:

First place: Alianza Francesa de Vitacura Second place: Escuela Técnico Profesional de Copiapó

Third place: Colegio Sagrados Corazones de Viña del Mar. Most votes: Escuela Técnico Profesional de Copiapó.

Juniors and seniors:

First place: Liceo Industrial de San Miguel Agustín Edwards Ross de San Joaquín.

Second place: Kingstown School de Viña del Mar.

Third place: Liceo Comercial Diego Portales de Rancagua. Most votes: Kingstown School de Viña del Mar.





Launch of the online course, " City of Opportunities"



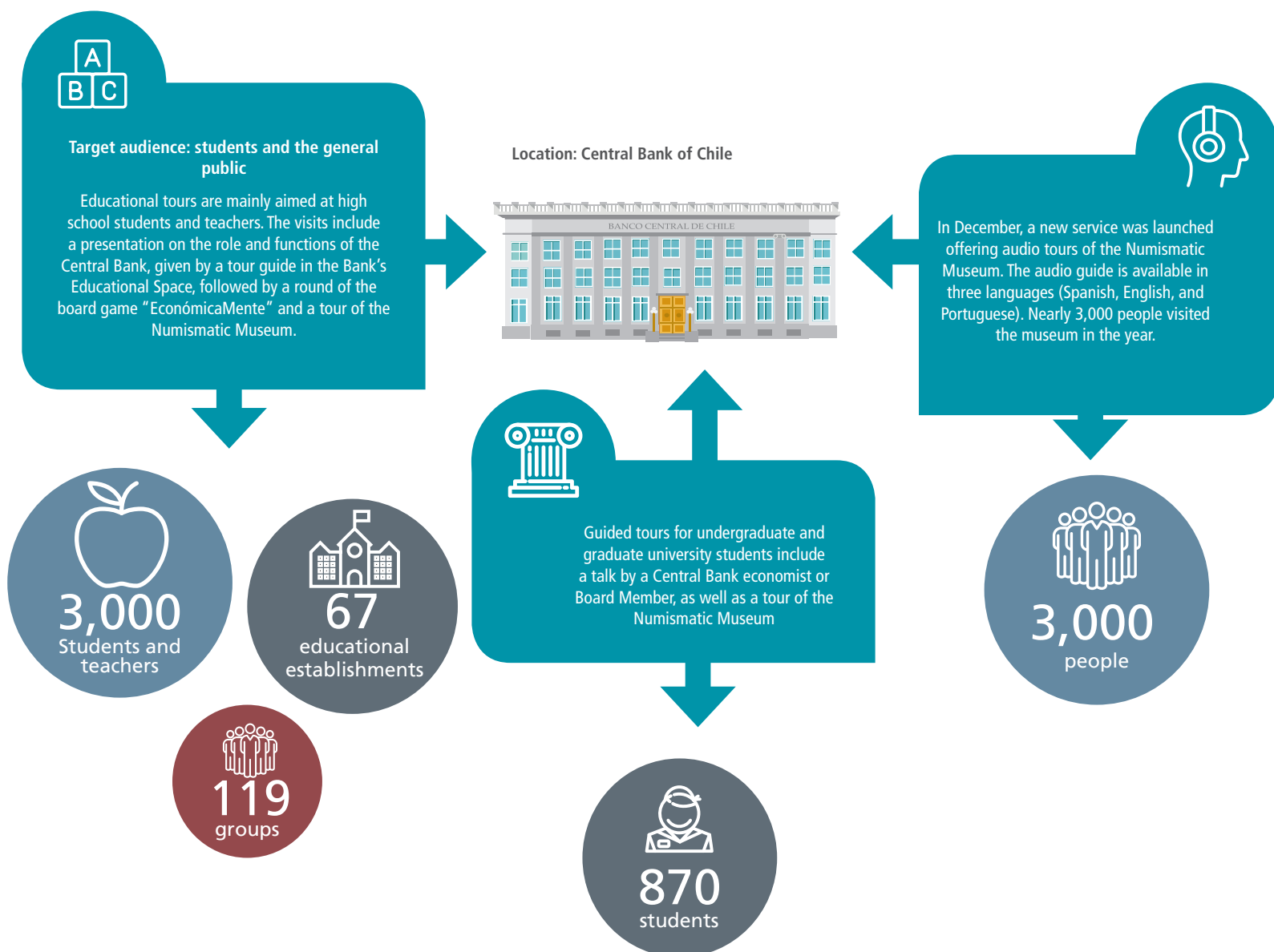
Award ceremony for the online course " City of Opportunities"



Award ceremony for the "Economics Up Close" contest

8.2.2 Tour Program

The Central Bank also opens its doors to the public. The tour program is available all year.





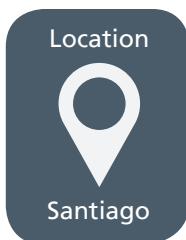
8.2.3 Financial Education Fair

October was Financial Education Month, which was organized jointly this year, for the first time, by the Bank, the Finance Ministry, the Financial Market Commission, the National Consumer Service (Sernac), the Superintendence of Banks (SBIF), the Superintendence of Pensions (SP), and *ChileCompra*.

During the month, the organizers held a series of activities, culminating with the Financial Education Fair. The fair was held on *Paseo Bandera*, a pedestrian street in the center of Santiago, where stands were erected for interacting with the public. Participants received pamphlets on issues related to personal finances. The Bank distributed educational material and held a contest based on questions from the "EconómicaMente" Board game.



Financial Education Fair. 30 October 2018.



8.2.4 Global Money Week

As in years past, the Bank participated in Global Money Week in 2018. This initiative, organized by Child and Youth Finance International, raises awareness on the importance of financial literacy among children and youth around the world.

14 March

Seminar on Financial Education among Chilean Youth: Evidence and Challenges

Developed by the *University of Chile* and the *University of La Frontera* and organized by the Central Bank, in the framework of the National Financial Education Strategy, the seminar provided a space for discussing the state of financial education for Chilean youth and main challenges pending area.

IN JULY, THE CENTRAL BANK RECEIVED THE 2018 GLOBAL INCLUSION AWARD FROM CHILD AND YOUTH FINANCE INTERNATIONAL. THE AWARD IS TESTIMONY TO THE BANK'S WORK IN STRENGTHENING THE FINANCIAL EDUCATION AND INCLUSION OF CHILEAN YOUTH THROUGH THE "CENTRAL TO YOUR LIFE" PROGRAM AND THE ASSOCIATED EDUCATIONAL AND OUTREACH INITIATIVES

15 March

School visit

Central Bank Governor Mario Marcel welcomed a group of students from the Ramón Barros Luco Electro-Technical Industrial School from the community of *La Cisterna*. In his talk, he stressed the importance of learning about saving and sustainable money management in order to be able to make good financial and economic decisions in life.



8.2.5 Teacher Workshops

On 31 July 2018, the Bank signed a collaboration agreement with the Education Quality Agency, aimed at broadening the scope of the financial education initiatives developed by the Bank for the school community, by accessing the Agency's links throughout Chile.

During the year, the two organizations jointly organized four face-to-face teacher training workshops in *Santiago*, *Puerto Montt*, and *Puerto Natales*. The workshops were attended by 120 teachers and included the design of infographs on economic concepts to be distributed on digital platforms.



8.2.6 Macroeconomic Statistics Workshops

In 2018 the Central Bank continued its program to promote the use and understanding of the statistics compiled by the Bank.

In May, an all-day workshop was held in *Punta Arenas*, covering the main concepts, methodology, and results of the balance of payments, national accounts, monetary statistics, and foreign exchange statistics.

Additionally, presentations on the results of the 2017 Household Finance Survey were held in *Valparaíso* and *Talca* and on foreign exchange statistics in *Santiago*.



8.2.7 Journalist Training Seminar

The tenth annual training seminar for journalists was held in 2018, organized in conjunction with the Chilean Chapter of the Inter-American Association of Economic and Financial Journalists (AIPEF). The objective of the seminar is to contribute to the professional development of journalists interested in expanding or deepening their knowledge on economic issues related to the Bank's work.

This year, the series included seven workshops held between June and November, led by Board Members and Central Bank staff. The workshops covered a range of topics, including macroeconomic policy, financial stability, technological innovation in the financial industry, and the institutional national accounts.

The training sessions were attended by 62 journalists from different communications media, including national and international news agencies, newspapers, radio broadcasters, magazines, online media, communications agencies, public organizations, and private businesses.

8.2.8 Know Your Banknotes Program

Target



general public, retailers, and police officers

Location



Central Bank and regions



8.2.8.1 Face-to-Face Workshops

This was the twelfth year that the Bank presented its training workshops, Know Your Banknotes, a diffusion program created by the Treasury Management. The free workshops are open to the general public, with the goal of disseminating the general characteristics of the banknotes in circulation and their security features, so as to maintain and strengthen the integrity of this payment means and to reinforce people's confidence in the payment system.

In 2018, the face-to-face workshops were attended by 2,441 people, mainly cashiers from the retail sector, wholesalers, and commercial banks, as well as student cashiers in training at technical institutes and the general public. Workshops were held in *Santiago* and in the cities of *Antofagasta*, *Talca*, *Curicó*, and *Concepción*. This year, the program included participation by the casinos, which generally handle a lot of cash.

8.2.8.2 Materials for Diffusion

In the year, 31,700 informational products were distributed, including brochures and pamphlets containing information on the banknotes' security features and their features to facilitate identification by the visually impaired. The Bank also released a new pamphlet on what to do if you receive a damaged banknote, primarily targeted at small businesses.

8.2.8.3 Training for Trainers

As part of the “Know Your Banknotes” initiative, the Bank continued its “Training for Trainers” Program, which has greatly expanded the scope of diffusion on banknote security features. This program allows businesses and institutions to train their own staff to give workshops to company employees or students, using materials and special training provided by the Central Bank. The initiative, which was launched in 2014, had agreements with 44 businesses as of December 2018, including technical training institutes for student cashiers throughout Chile.

8.2.8.4 Police Training Workshops

The Bank also continued its training program for the national police institutions (*Carabineros de Chile* and *Policía de Investigaciones de Chile*), which was launched in 2013 with the objective of facilitating police interaction with citizens in relation to the recognition of legal banknotes. In 2018, there were 30 national workshops and three seminars for forensic experts, reaching a total of 2,068 officers.

8.2.8.5 Informational Campaigns

Due to the increase in the number of cash transactions at certain times of the year, the Bank works with the national police force to implement informational campaigns aimed at reinforcing the messages of the Know Your Banknotes program.

During the Independence Day holidays in September 2018, an initiative was coordinated with the *Carabineros de Chile*, wherein officers visited shopping areas to explain the banknote security features, demonstrate how to verify the authenticity of banknotes, and hand out print materials. The campaign was widely covered by the media. The *Carabineros de Chile* then replicated the campaign at the national level.

In December, a similar campaign was coordinated in conjunction with the Investigative Police of Chile for the year-end holidays.

The Bank’s work with police officers, the Know Your Banknotes Program, and the ongoing exchange of technical knowledge with other central banks are all part of the regular duties undertaken by the Central Bank as guarantor of the integrity of the cash-related means of payment.

8.3 Cultural Outreach

As has become tradition, the Bank participated in National Heritage Day, an initiative promoted by the National Monuments Council of Chile since 1999 as an opportunity for people to learn more about the country’s cultural, historical, and architectural heritage.



The Central Bank of Chile opened its doors to the public on National Heritage Day. 27 May 2018.

In 2018, the two-day event took place over the weekend of 26–27 May, when over 3,150 people visited the Bank. The tour of the Central Bank building started at the main entrance on Agustinas 1180 and included the Governor's office, the Board Room, and the Numismatic Museum.

8.4 Transparency

The Bank adheres to the principle of transparency in the exercise of its public functions, as stipulated in Article 8 of the Chilean Constitution, the provisions of the institution's Basic Constitutional Act, and transparency legislation that expressly includes the Central Bank of Chile. The latter includes Law 20,285 of 2009, on public access to information; Law 20,730 on 2014, on lobbying and special interest representation; and Law 20,880 of 2016, on probity in public service.

In 2018, the Bank continued to comply fully with regulations aimed at increasing the transparency of public institutions.

8.4.1 Access to information

In 2018 the Bank implemented a project to improve its platform for handling requests for access to information, under the framework of Law 20,285.

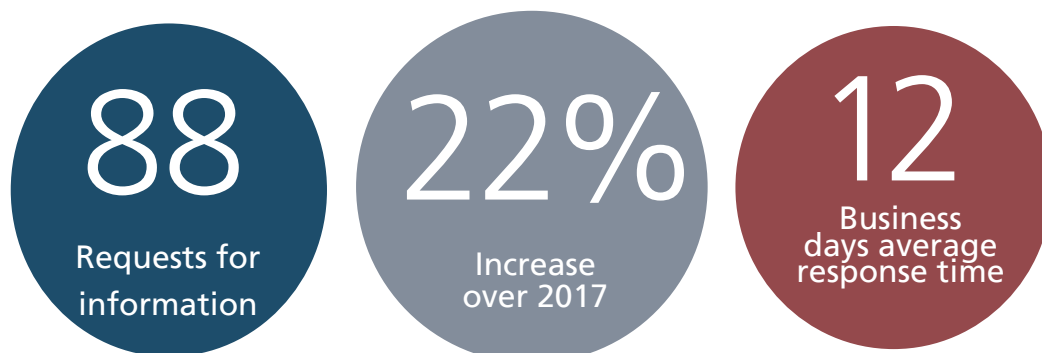
The main changes to the platform include the introduction of an easy-to-use electronic form, consistent with good practices for institutions and agencies required to comply with transparency legislation.

The Bank is also working on a project to strengthen other channels of communication with the public, through the development of an integrated platform for managing queries and other public interactions related to the Bank's functions, services, and actions. The objectives include identifying the most important areas of public interest and providing timely responses in line with the communication guidelines established by the Bank for its different stakeholder groups.

In the year, the Bank received a total of 88 requests for information (22% more than in 2017).

Of the total, 74% of the requests were submitted via the transparency section of the Bank's website. The average response time was 12 business days from the date the request was received, which is well below the maximum of 20 business days established in the respective legislation.

Since the law entered into effect, no complaints have been filed against the Bank in the Santiago Court of Appeals, in accordance with the provisions of Sections 65 bis and 69 of the Bank's Basic Constitutional Act.



8.4.2 Law on Lobbying

The Law on Lobbying is applicable to the Central Bank of Chile, and it establishes that the Governor, the Deputy Governor, and the other Board Members are subject to the obligations stipulated therein. The law further establishes that the legal obligations can be extended to other functionaries via Board Resolution, if their duties, responsibilities, or position within the Bank require that they be subject to the regulatory guidelines, if they possess substantial decisionmaking power, or if they are in a position of significant influence over others who do.

To date, 43 Central Bank authorities are subject to this law. The full list of their names and positions is available on the Bank's website.

In 2018, the Central Bank authorities subject to the law had 207 meetings with lobbyists or special interest representatives, 99 business trips, and 116 donations or gifts received. All of these figures represent a reduction since 2017. For example, meetings decreased 7%; business trips, 10%.

All of this information was published on the Central Bank's website, in the transparency and probity section, and on the Infolobby website of the Chilean Transparency Council, as specified in the Agreement signed on 25 May 2015.



8.4.3 Law on Probity

This law regulates the obligation of public authorities and functionaries to publicly declare their interests and equity. This obligation is applicable to the Board Members and General Manager of the Central Bank of Chile, in accordance with the terms established by the Law on Probity and the provisions on the declaration of conflicts of interest, personal interests, and equity of Section 14 of the Bank's Basic Constitutional Act.

The current conflict-of-interest statements submitted by the Bank's authorities in 2018 are published on the institution's website, in the transparency and probity section, and on the Transparency Council's website (www.Infoprobidad.cl).



Christine Lagarde, Managing Director of the International Monetary Fund, and Mario Marcel, Governor of the Central Bank of Chile.

8.5 International Relations

Section 38 of the Basic Constitutional Act authorizes the Central Bank to participate in and work with international or foreign financial bodies, either independently or in representation of the Government of Chile. This entails an extensive schedule of activities over the course of the year, requiring the presence of Central Bank authorities and executives in international meetings. It is also necessary to participate in coordination mechanisms with other central banks, as well as seminars and meetings for the discussion of cross-border financial and macroeconomic issues, which contribute to better decisions in these matters.

In 2018, the Bank maintained both its regular international activities and a wide range of additional activities. The former included the bimonthly and annual meetings of governors of members of the Bank for International Settlements (BIS); the BIS meeting of alternate governors; the spring and annual meetings of the International Monetary Fund (IMF) and the World Bank; the annual meeting of the Inter-American Development Bank (IDB); the meeting of central bank governors of South America (formerly *Mercosur* and associated countries); the Meeting of Central Bank Governors of CEMLA and of the CEMLA Committee of Alternates; and the meetings of the Institute of International Finance (IIF).

Additional activities in which the Bank participated included international seminars, conferences, and meetings held both in and outside Chile, official visits from foreign authorities, missions from international organizations, and technical visits by delegations from other central banks and institutions.

In Chile, these activities included the IMF Article IV mission and a visit by Robert Engle, professor at the NYU Stern School and the winner of the 2003 Nobel Memorial Prize in Economic Sciences.

The official visits by foreign authorities featured the Governor of the People's Bank of China, Yi Gang, who was accompanied by the General Director of the International Department; the Director of the International Department's G20 Division; and the Representative of the Caribbean Region, all from the same institution. The Governors of the Central Bank of Chile and the People's Bank of China signed an agency agreement for investing in the interbank bond market in China.

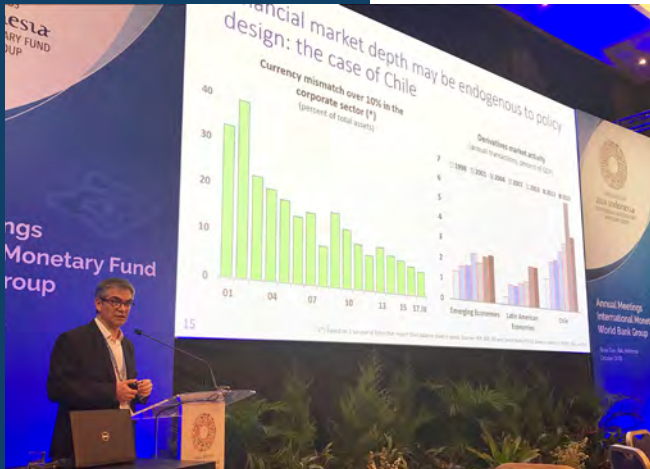


The Governor of the Central Bank of Chile, Mario Marcel, and the Governor of the Bank Popular de China, Yi Yang, at the signing ceremony for an agreement between the two institutions.



In the context of international cooperation, the Bank continued to prioritize staff exchange programs with other central banks. After signing a cooperation agreement in November 2017, the Central Bank of Chile and the Bank of Spain coordinated an exchange for their communication staff.

In other activities, the Governor of the Bank participated as a panelist for a round table organized by the School of International and Public Affairs (SIPA) at Columbia University in New York; was a panelist at the High-Level Conference organized by the IMF and the Swiss National Bank in Zurich; gave a talk to students of the Blavatnik School of Government at the University of Oxford, followed by a presentation at the Official Monetary and Financial Institute Forum (OMFIF) in London; gave a presentation for Chile Day in London, followed by a talk at the London School of Economics, with the participation of renowned economists Charles Goodhart and Ricardo Reiss; and participated as a speaker during the first session of the seminar on Navigating Normalization, held in Bangkok, Thailand, on the 75th anniversary of the Bank of Thailand and organized in conjunction with the OMFIF.



8.6 Seminars, Workshops, and Conferences

To support decision-making in relation to carrying out its mandate, the Central Bank aims to always be at the forefront of knowledge on all the issues related to its work, including monetary policy, financial policy, statistics, international and local fund management, cash management, technology, and corporate management.

To this end, the Bank organizes or participates in a wide range of seminars, conferences, and specialized workshops throughout the year, as well as specific courses attended by the Bank management and staff.

Below is a sample of the activities carried out in 2018.



Seminars and Conferences

- ✓ FinTech and Financial Stability, organized by the Financial Policy Division, in conjunction with the Inter-American Development Bank (IDB).
- ✓ Financial Fragility Modeling and Applications, organized by the Financial Stability Area. The course was taught in two modules by Professor Dimitrios Tsomocos, of the University of Oxford's Said Business School.
- ✓ The Information Systems Management and CEMLA organized the IV Seminar on Information Security Management, with participants from the Bahamas, Bolivia, Brazil, Colombia, Costa Rica, El Salvador, France, Guatemala, Haiti, Honduras, Mexico, Panama, Paraguay, Peru, Spain, Surinam, and Uruguay.
- ✓ The Central Bank's XXII Annual Conference, entitled Changing Inflation Dynamics, Evolving Monetary Policy, was arranged by Professor Jordi Galí, of CREI and the Pompeu Fabra University; Professor Gonzalo Castex, of the University of New South Wales; and representatives of the Central Bank of Chile.

Workshops



- ✓ Household Finance Surveys and Policy Implications, organized by the Financial Research Management. The keynote speaker was Professor Michael Haliassos, of the Goethe University in Frankfurt, who was accompanied by representatives of the European Central Bank, Bundesbank, the Central Bank of Uruguay, and other organizations.
- ✓ Monetary and Fiscal History of Latin America, organized by the Economic Research Management of the Research Division, in conjunction with the Becker Friedman Institute. The keynote speaker was Professor Lars Peter Hansen, of the University of Chicago.
- ✓ Joint Stress Testing Exercise—BIS CCA CGDFS Study Group on Stress Testing, organized by the Financial Stability Management in conjunction with the Bank for International Settlements (BIS). The workshop featured the presentation of the final results of the joint stress test carried out by members of the BIS Consultative Council for the Americas (CCA) and Uruguay.
- ✓ Santiago Macroeconomics, organized by the Economic Research Management of the Research Division, in conjunction with the Pontifical Catholic University of Chile (PUC—Chile).

Presenters included Felipe Saffie (University of Maryland); Martin Uribe (Columbia University); Edouard Schaal (CREI, Pompeu Fabra University); Caio Machado, Alejandro Vicondoa, and Javier Turen (PUC—Chile); and representatives of the Federal Reserve Bank of Philadelphia, the Federal Reserve Bank of St. Louis, the Central Bank of Brazil, and the Central Bank of Chile.

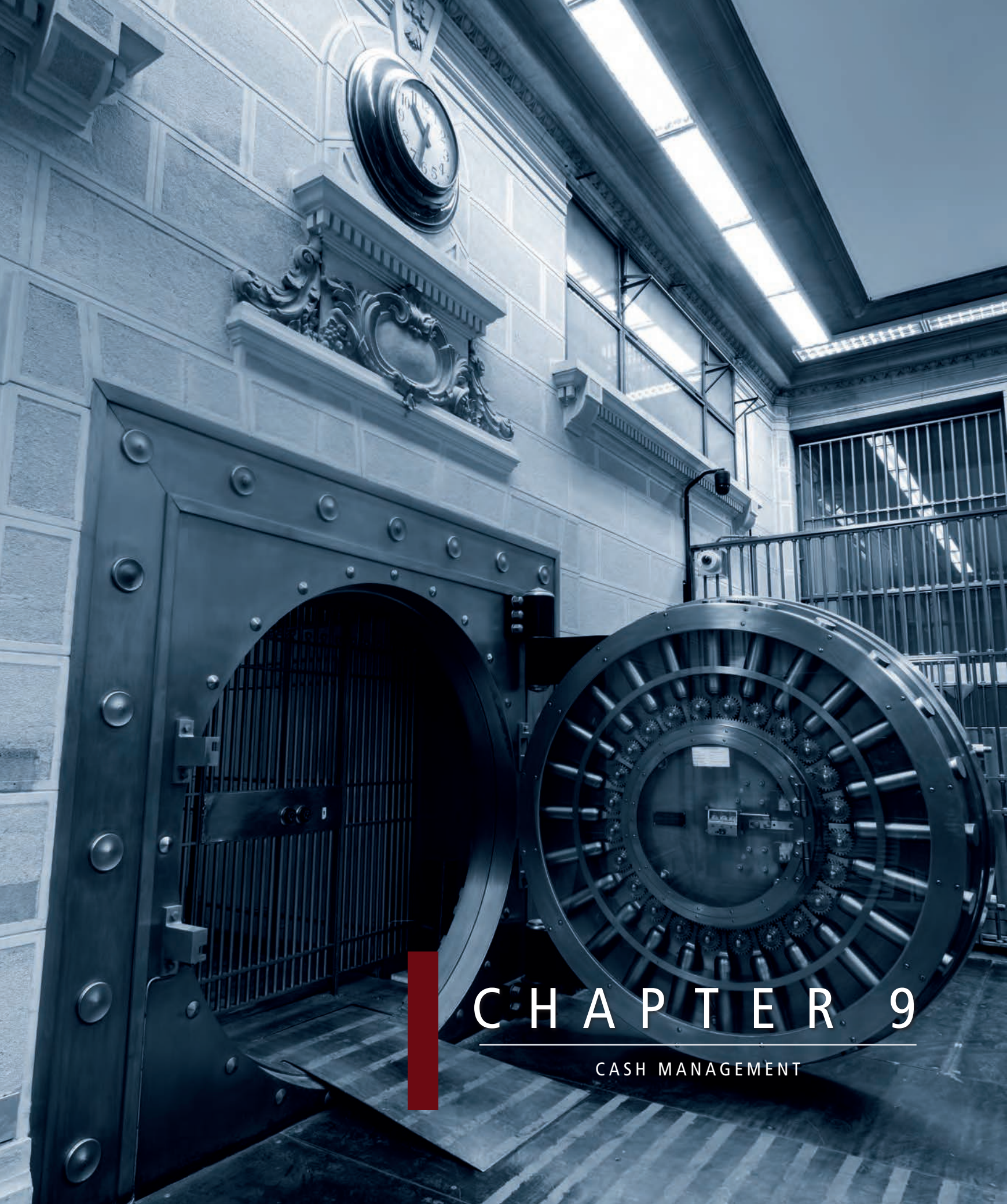
Courses

- ✓ Stochastic Calculation Applied to Economics and Finance, organized by the Financial Stability Management. The course was taught in three modules by Professor Jaime Casassús, of the Pontifical Catholic University of Chile
- ✓ Dynamic Factor Models, organized by the Economic Research Area. The course was taught in three modules by Professor Mark Watson of Princeton University.
- ✓ Quantile Econometrics, organized by the Financial Stability Management. The course was taught in four modules by Professor Iván Fernández-Val, of Boston University.
- ✓ Macroeconomics of Financial Markets, organized by the Financial Research Management. The course was taught in three modules by Professor Guillermo Ordóñez, of the University of Pennsylvania.

Meetings



- ✓ FSB-SCAV Analytical Group on Vulnerabilities meeting, organized by the Financial Policy Division in conjunction with the Financial Stability Board (FSB). The meeting was attended by representatives from the central banks of Argentina, Australia, England, Brazil, France, Germany, Mexico, Japan, Switzerland, and others; the International Monetary Fund; the World Bank; the Bank for International Settlements; and the Organization for Economic Cooperation and Development (OECD).
- ✓ Sixty-second Meeting of the Members of the Aladi Reciprocal Payment and Credit Agreement of the Aladi Consultative Committee on Financial and Monetary Affairs, organized by the Operations and Payment Systems Management. The meeting was attended by representatives of the central banks that are members of the Reciprocal Payment Agreement: Argentina, Bolivia, Brazil, Chile, Colombia, Dominican Republic, Mexico, Paraguay, Peru, Uruguay, and Venezuela.
- ✓ IX Meeting of Open Market Operations, organized jointly with CEMLA. Participants included representatives of the central banks of Brazil, Bolivia, Chile, Colombia, Costa Rica, Spain, Philippines, Guatemala, Honduras, India, Mexico, Nicaragua, Paraguay, the United States, and Venezuela, as well as the European Central Bank.
- ✓ Business Meeting for the IMF Southern Cone chair and the World Bank, organized by the Office of the General Manager and the International Relations Section. Participants included representatives from all the members of this jurisdiction: Argentina, Bolivia, Chile, Paraguay, Peru, and Uruguay.



CHAPTER 9

CASH MANAGEMENT

9. CASH MANAGEMENT

The Mandate

In line with the Central Bank's second objective, namely, to guarantee the normal functioning of the internal payments system, the institution must ensure the efficient management of the cash cycle.

Since its creation in 1925, the Bank has held the sole legal authority to issue banknotes and coins. There are currently five banknote denominations in Chile (1,000, 2,000, 5,000, 10,000, and 20,000 pesos) and four coin denominations (10, 50, 100, and 500 pesos). The one and five peso coins were withdrawn from circulation in November 2017.

The Bank is required to remove from circulation any damaged or mutilated banknotes and coins, which are destroyed under a strict security and accounting control process.

As in many countries, cash continues to be the primary means of payment in recent years in terms of personal preferences. Consequently, the Bank must guarantee the timely supply of secure and trustworthy currency. This requires managing complex logistics, including international tenders for the manufacture of banknotes and coins and a highly secure storage and distribution system.

It is also critical to uphold public confidence in the currency. The Bank therefore implements a continuous information and training program aimed at preventing counterfeiting, via educational programs on the recognition of security features incorporated in the banknotes.

Commercial banks play an essential role in the cash cycle, given that they are the only intermediaries between the Central Bank and end users, whether these are private citizens, small business, or large corporations.

9.1. Operating Results

- ✓ Banknotes and coins issued increased 5.6% in annual terms, nearly two percentage points more than in 2017 (3.7%).
- ✓ The quantity of banknotes in circulation^{1/} grew 1.9%, around the same rate as in 2017 (2.2%).
- ✓ This translated into an additional 18.5 million banknotes circulating in the economy.

In 2018, the Bank satisfied virtually all the demand for cash from commercial banks, which in turn covered major distribution channels via automatic teller machines.

^{1/} Excluding "miscellaneous banknotes," comprising bills from the old family of denominations, \$100 and \$50 pesos.



- ✓ In the case of coins, the number of units issued grew 3.9%, which is lower than in 2017 (7.2%).^{2/} This implied an increase of 300 million coins in circulation.
- ✓ As of December 2018, the total quantity issued and in circulation was 986.4 million banknotes and 7.9726 billion coins.
- ✓ As in past years, the \$10,000 bill accounts for the largest share of banknotes in circulation, at 36.3%.
- ✓ The \$20,000 bill continued to increase its share, reaching 23.9%, while \$1,000 bill decreased relative to 2017, accounting for 27.4% of the total at year-end 2018.
- ✓ With regard to coins, the \$10 is the most requested by commercial banks, with a total of 240 million coins delivered by the Central Bank over the course of 2018.
- ✓ To satisfy the demand for cash in 2018, the Bank distributed new banknotes and coins to the commercial banks, which were produced under existing contracts that were awarded following an international tender process. The banknotes issued in the year were printed in Germany, Malta, and Sweden; the coins were minted in Chile and the Netherlands.

In 2018, the Bank continued to implement a passive withdrawal of \$1 and \$5 coins from circulation.^{3/} This involved the regular removal of coins accumulated by the commercial banks, a process that will continue indefinitely. This process has been adjusted to reflect international experience in this type of process, as the Bank's first step was to acquire relevant experience in the dynamics of withdrawing coins from circulation.

^{2/} Excluding \$5, \$1, and "other coins," where the latter category comprises previously issued centavos and escudos that have not been returned to the Bank. Also excludes commemorative coins issued by the Bank in denominations of \$10,000 and \$2,000.

^{3/} In accordance with the provisions of Law 20,956 on Productivity, which entered into effect in November 2017, the \$1 and \$5 coins ceased to be minted on that date and the process of removing them from circulation began, in conjunction with the introduction of a rounding rule for prices.



9.2 Withdrawal of the old 100 peso coins

In accordance with acquired experience and to facilitate the functionality of the coins in circulation for both the general public and coin machines, on 2 November 2018 the Bank began withdrawing from circulation the \$100 coins issued from 1981 to 2001, removing those that are currently held by commercial banks and cash-in-transit companies. The goal is to gradually eliminate the coexistence of two coins in circulation that have the same face value, but completely different physical characteristics.

In late 2019, the Bank expects to complete the final sale of the metals from the \$1, \$5, and old \$100 coins withdrawn from circulation, following a tender process open to national and international firms.

9.3 National Survey on Cash Use and Preferences

Since 2012, the Central Bank of Chile has carried out an uninterrupted annual National Survey on Cash Use and Preferences, to contribute to the knowledge and monitoring of the population's use and preferences with regard to banknotes and coins.



Then-Chairman of Banco Estado, Enrique Marshall, reports to the Central Bank Governor, Mario Marcel, on the process of withdrawing the one and five peso coins from circulation. 28 February 2018.

For the 2018 survey, the information was collected in person, using a closed-ended questionnaire, for a random sample^{4/} of 1,115 people^{5/} at the national urban level. The field work was carried out in October and November 2018 by a market research firm.

The survey was broken down by topic, including “Cash as a means of payment,” “Use of banknotes and coins,” “Quality,” and “Security.” The main findings from the 2018 survey are as follows:

i. Cash is still the preferred means of payment in Chile. Fully 77% of the people surveyed stated that they regularly use banknotes and coins for payment.^{6/}

ii. Other means of payment are also widely used by the sample population, in particular debit cards. In the survey, 79% indicated that they use some form of debit transactions

(a checking account, an electronic checking account, or an electronic checking account with the state-owned bank, *BancoEstado*, called *Cuenta RUT*), while 29% have nonbank credit cards and 26% have bank credit cards.

iii. In terms of frequency of use, 44% of the people surveyed stated that they regularly use debit cards, while only 8% and 6% regularly use bank and nonbank credit cards, respectively.

iv. Cash is most commonly used as a means of payment at small businesses, open-air markets, and kiosks, where 88% to 98% of the people surveyed pay for their purchases with banknotes and coins.

^{4/} The sample unit is private citizens over 18 years of age in a given household, located in geographical areas in the main cities of the country. The survey also uses quotas for population segments based on age, sex, and socioeconomic level, which are weighted ex post.

^{5/} Prior to 2016, the survey covered a sample of 800 individuals. The sample size was increased in 2016, due to a methodological change aimed at ensuring a geographically representative sample.

^{6/} That is, 77% answered “Always” or “Almost always” to the question, How often do you use [means of payment]?

FIGURE 9.1
HOW OFTEN DO YOU USE THE FOLLOWING MEANS OF PAYMENT?

Answer: "Always or almost always"

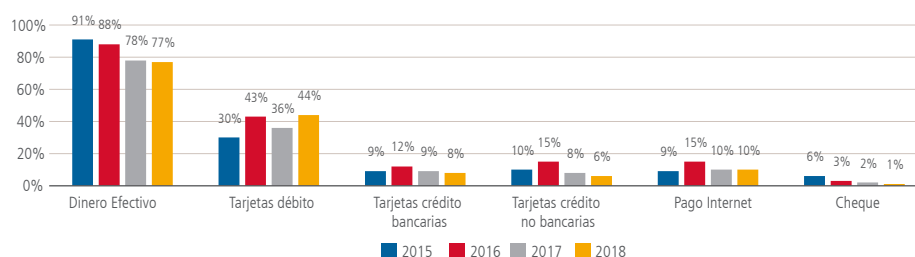
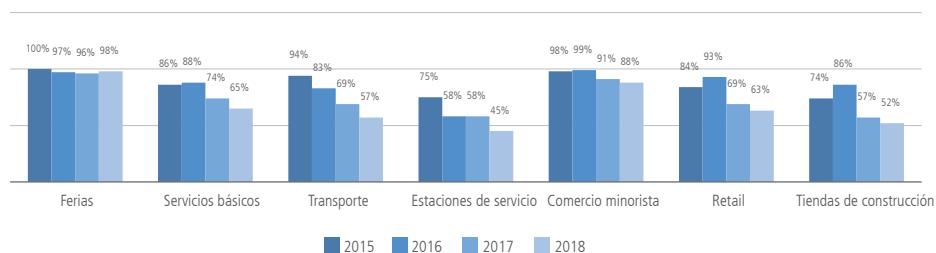


FIGURE 9.2
CASH USE BY SECTOR



When controlling for the size of the transaction, the survey finds that cash is most commonly used for small amounts. Thus, 91% of the sample prefers to use cash for transactions of \$5,000 pesos or less, whereas only 39% prefers cash for transactions of \$50,000 pesos or more.

9.4 Logistics Center Project

In 2018, the Treasury Management continued to work actively on the development and construction of its new facilities, in the framework of the Logistics Center Project. This initiative aims to improve the Bank's cash management processes, by increasing the efficiency of logistical operations and storage.

A site was purchased in the *El Montijo* Industrial Park, in the *Renca* neighborhood of the Santiago Metropolitan Region, and consultant studies were contracted and consulted on project logistics, security, structural engineering, soil mechanics, and strategic communications.

In 2018, the main consulting jobs continued to advance, and requests for information were sent to international suppliers of the necessary specialized equipment. Additionally, the basic engineering services were tendered and contracted, and the tender process was started for the main equipment for the Center.



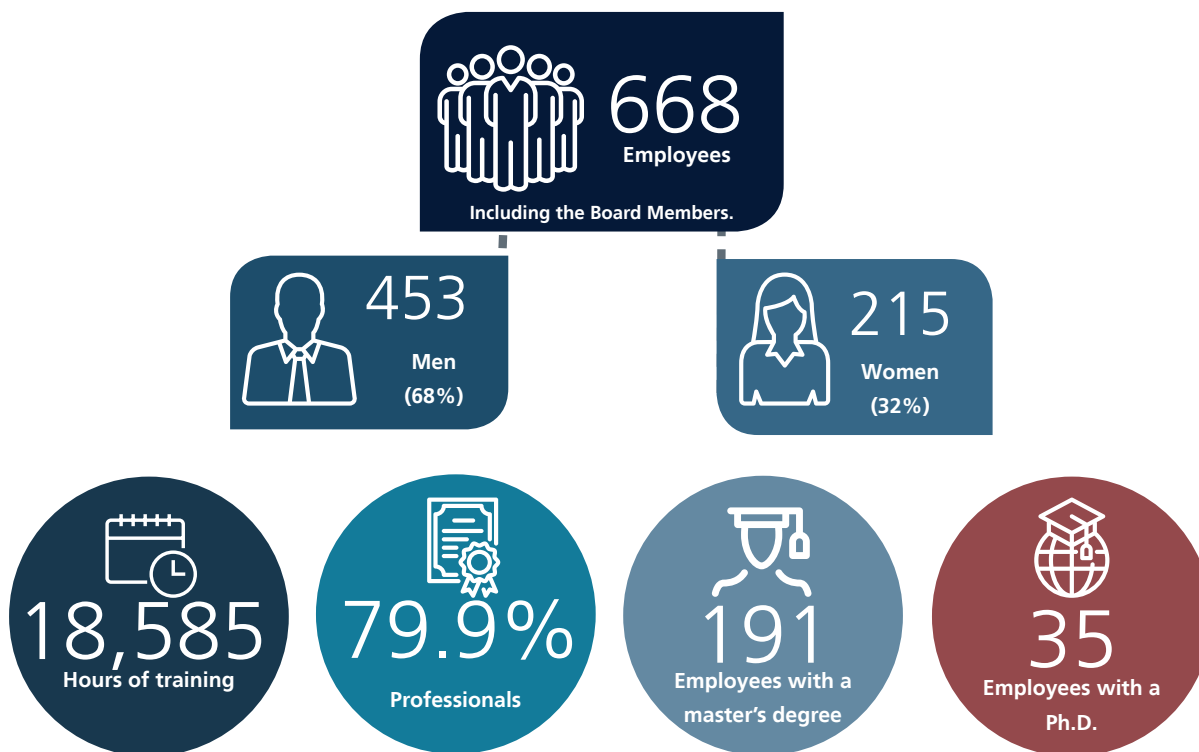
CHAPTER 10

PERSONNEL

10. PERSONNEL

10.1 Be part of the Central Bank

The Bank is committed to offering an employee value proposition that inspires people to grow and develop their full potential, in a collaborative environment of team work, continuous learning, and professional and personal challenges, so as to attract and retain the best talent, aligned with the Bank's strategic objectives and organizational values.



One of the Bank's established strategic objectives, to support the fulfillment of its mission, is to attract and hire high-quality employees, to keep them motivated and committed to achieving the institutional objectives and values, and to provide a culture of work-life balance.

In 2018, the Bank's recruiting and hiring procedures were redefined and validated, to ensure traceability, transparency, and equal opportunity for everyone who applies for a position.

At year-end, 97% of the Bank's employees had a permanent contract, which supports team stability as well as individual quality of life.

Employees by type of contract and gender

Type of contract	Women		Men		Total	
	2017	2018	2017	2018	2017	2018
Permanent	205	211	438	433	643	644
Short-term	9	4	14	20	23	24
Total	214	215	452	453	666	668

Employees by Position and Gender

Type of position 2018	Women	% Women	Men	% Men	Total
Executive	7	23	23	77	30
Management	13	31	29	69	42
Professional	156	34	300	66	456
Secretarial	17	100	0	0	17
Administrative	22	26	62	74	84
Service		0	8	100	8
Security		0	31	100	31
Total	215	32	453	68	668

10.2 Gender Equality

The Bank maintains an almost stable gender ratio of 30-70 between women and men regardless of age range.

The salary differential between men and women with a current contract at year-end was estimated at 2% in favor of women. This demonstrates the Bank's policy of equal pay for men and women with the same education level and job responsibilities.

The following table shows new job contracts broken down by gender.

Job contracts	2017	2018	Total
Women	19	23	42
Men	43	53	96
Total	62	76	138

Thus, the Bank's employee turnover rate was 10.6%, evidence of high stability and talent retention.

Revision of the Skills Model

In 2018, the Bank's skills model was updated to align with the Strategic Plan, cultural challenges, and new social conditions emerging in the work environment.

10.3 Culture and Leadership Management Project

In the year, the culture and leadership management project was launched to determine the leadership style and culture that the Bank needs in order to better implement the challenges laid out in the 2018–2022 Strategic Plan.

The project started with an assessment of the current culture based on a participative process encompassing all the Bank's employees. This provided the basis for defining the desired culture, together with initiatives for achieving it, to be implemented in the 2019–2022 period.

The cultural assessment revealed that excellence and ethical values are the characteristics that are most representative of the Bank's culture, and that efforts should focus on strengthening education and development, individual autonomy, risk tolerance, and collaboration between areas.

10.4 Training to Be the Best

In the year, a broad range of training and education activities were implemented for the Bank's employees.

The Bank implemented 171 training activities, for a total of 18,585 hours reaching 581 employees.

Bank-wide training

Training workshops were held for non-management professionals across the Bank, to build skills in self-management and assertive communication

Self-management workshops

Four self-management workshops, attended by 74 people, explored concepts such as accountability, proactivity, and prioritization.

Assertive communication workshops

Four assertive communication workshops, attended by 57 people, highlighted the importance and impact of communication.

English program

152 employees participated in the English program, an increase of 48% over 2017.

To address the constant technological challenges that are the norm in today's world and to promote continued education and development within the organization, a Data Science Fair was held at the Bank, in collaboration with the Statistics Division.

Seven national universities participated, to discuss graduate programs in this subject.

Over 70 Bank employees attended the fair, and eight applied for a scholarship for one of these programs.

10.5 Ethics and Values

In conjunction with the Office of the General Counsel, a program was implemented to work on ethical and value issues at the Bank, through membership in the Fundación Generación Empresarial, a Chilean nonprofit organization dedicated to promoting business ethics. The program consisted in training sessions for all the Bank's staff, developed with support from export consultants. Activities included the following:

Talks on sexual harassment, which were attended by 125 people from different units and positions within the Bank.

Invitations to round table discussions on ethical dilemmas in the work world.

Survey entitled "Barometer of Business Values and Ethics," with the participation of 64% of the Bank, which covered issues such as how people experience different values, the effectiveness of reporting channels, and knowledge of regulations.

10.6 Work Climate Survey

A work climate survey entitled "Pulse of the Organization" was conducted during the year, with the voluntary participation of 70% of the Bank's areas. This is an abbreviated version of the survey used in past years, and it showed the same results as in 2017: 73.4% positive assessment.

In 2018 a leadership skills program was implemented, featuring workshops on feedback, effective interviewing, difficult conversations, organization and planning, and the preparation of skill development plans.

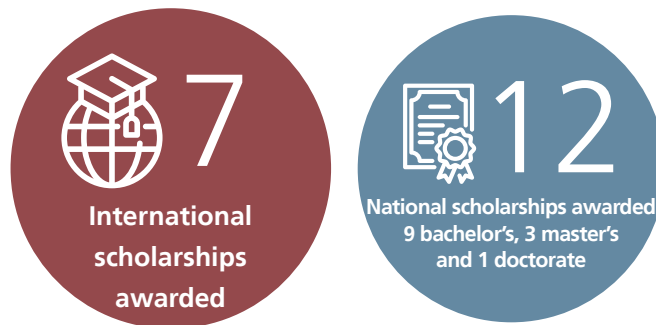
Fully 81% of managers participated in at least one workshop (108 of 133). Managers also received ongoing mentoring and occasional coaching support for specific cases. As a result, the 2018 climate survey saw an increase of 11 percentage points on questions related to direct managers, relative to 2017.

10.7 Work-Life Balance

In line with good practices, the Bank created a pilot plan for reconciling work and personal life. This includes the possibility of telecommuting and opting for flexible schedules when the position allows.

At the same time, to facilitate family life, the Bank implemented actions like the gradual return to work after the birth of a child and early leave during pregnancy.

10.8 Scholarships for Bank Staff



It is in the Bank's interest to have employees with an excellent educational background. A proposal was therefore developed to improve the international scholarship process, which will go into effect in 2019. The goal is to simplify the process, making it easier to use and more transparent. With regard to national scholarships, employees can now apply for part-time doctorate programs at local universities.



10.9 Labor Relationships

The Central Bank Labor Union was founded in 1970, and it is still the only employee union at the institution. Currently, 82% of employees with a contract are members.

The syndicate plays an active role in the daily lives of workers, providing broad-ranging support in areas such as legal advice, well-being, collective negotiations, and scholarships for employees' children.

Syndicate membership	Number of employees	% of total
Yes	549	82
No	119	18
Total	668	100



CHAPTER 11

SUPPLIERS AND CONTRACTORS

11. SUPPLIERS AND CONTRACTORS

11.1 Procurement and Contracting Policy

The Procurement and Contracting Policy of the Central Bank of Chile establishes the conditions and processes for purchasing goods and contracting services from external suppliers.

The planning and execution of these processes must ensure compliance with the principles of transparency, equal opportunity for suppliers, strict adherence to the bidding terms, absence of arbitrary discrimination, efficiency, objectivity, and publicity.

Relations with suppliers and contractors are centralized in the Procurement Department, so as to promote open and collective interactions with all suppliers and thus to guarantee broad participation in transparent and clear processes.

The Central Bank has improved its processes, requiring that all suppliers—both internally and externally—emphasize sustainability in the services they provide. It is in the Bank's interest to generate the least environmental, economic, and social impact. Suppliers are therefore required to ensure the following:

- Removal of debris and waste by a company that will dispose of the materials in a facility authorized by the health authority.
- The use of environmentally friendly, nontoxic chemical inputs in the provision of cleaning, gardening, and food services.
- Verification of the payment of social security benefits through certification by the Ministry of the Interior (F30-1).
- Verification of the contractor's affiliation with a mutual insurance company, as well as the presence of a risk prevention expert in the case of higher-risk activities.

The Procurement and Contracting Policy was updated and published in the period.

11.2 Contracts in 2018

The Bank's operations necessitate the use of specialized suppliers for a range of different products and services. Furthermore, the Bank is subject to the provisions in its Basic Constitutional Act governing the periodic release of information on the fulfillment of its public duties.

In this context, this report discloses the main administrative contracts signed by the Bank in 2018 for an amount over Ch\$180 million, which are related to the supply of goods and services that allow the institution to operate normally (table 11.1).

TABLE 11.1

Contracts written in 2018
(above Ch\$180 million over the life of the contract)

N°	Supplier	Purpose	Effective	Ending
3663	MagoChic Aseo Industrial S.A. (1)	General and administrative services	15-Jan-18	14-Jan-23
3695	Rentas Inmobiliarias S.A. (2)	Office and parking rental	02-Mar-18	02-Jun-20
3698	Prosegur Chile S.A. (3)	Security services	01-Apr-18	01-Apr-21
3699	Prosegur Chile S.A. (3)	Security services	01-Apr-18	01-Apr-21
3703	Comercial ByF SpA (2)	Infrastructure maintenance services	20-Apr-18	30-Apr-19
3707	Constructora BEC Ltda. (2)	Infrastructure maintenance services	20-Apr-18	30-Apr-19
3709	AMV Ingeniería y Mantención S.A. (2)	Infrastructure maintenance services	20-Apr-18	31-Dec-19
3726	Atcom Outsourcing S.A. (1)	Information and technology services	15-Jun-18	15-Jun-19
3743	Néstor Zamora Neira Ingeniería y Construcción EIRL (2)	Infrastructure maintenance services	11-Jun-18	30-Nov-20
3815	Morita Gourmet SpA (1)	Bank staff services	19-Nov-18	26-Dec-19
3823	Hitachi Vantara (Chile) Limitada. (2)	Information and technology services	03-Dec-18	18-Mar-19

(1) One-year contract, renewable for up to four additional one-year periods.

(2) Short-term contract.

(3) Three-year contract, renewable for up to two additional three-year periods.

Source: Central Bank of Chile.

Given the nature of collaborative work, synergies are built with suppliers who annually provide consultant services, surveys, research, and seminars (table 11.2).

TABLE 11.2

Expenditures on Consulting, Surveys, Research, and Seminars (1)
(Ch\$ million of 2018)

N°	2014	2015	2016	2017	2018
Consulting, surveys, research, and seminars	2,614.9	2,243.7	2,645.9	2,308.8	2,077.4
Consulting (2)	1,039.0	1,154.8	1,704.8	1,184.1	1,207.9
Surveys and research (3)	1,150.9	631.8	615.5	773.5	524.0
Seminars	425.0	457.1	325.6	351.2	345.5

(1) The average CPI was used to update older figures to 2018 pesos (base year 2013).

(2) The increase in 2016 relative to earlier years is largely explained by consulting services associated with the Logistics Center project.

(3) The lower expense in 2015–2018 is largely explained by the Household Finance Survey and the 2013 benchmark compilation, which are carried out every 3 and 5 years, respectively, and which coincided in 2014.

Source: Central Bank of Chile.



CHAPTER 12

ENVIRONMENTAL RESPONSIBILITY

12. ENVIRONMENTAL RESPONSIBILITY

The day-to-day operations of the Central Bank are not exempt from the generation of waste and emissions, which could be a source of pollution, such as the use of batteries in power generators or the retirement of computer equipment, or not a source of pollution, such as the waste generated by the destruction of damaged banknotes.

The Bank is aware that its operations have an environmental impact and therefore takes the following precautions:

- ✓ **Ensure normative compliance.**
- ✓ **Identify, prevent, and control the impacts caused by its operations.**
- ✓ **Adapt processes to meet internal sustainability guidelines.**
- ✓ **Improve stakeholder relations.**

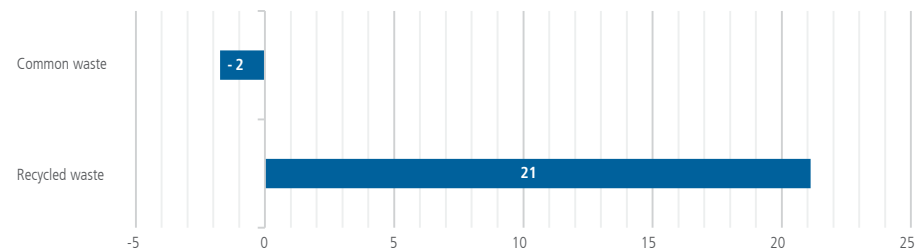
The three main areas of environmental management at the Bank are the following:

- ✓ **Waste management**
- ✓ **Emissions reduction**
- ✓ **Energy efficiency**

12.1 Waste Management

NON-HAZARDOUS WASTE (Tons)

(% change, relative to 2017)



In the last two years, the Bank has implemented a number of initiatives aimed at reducing the total waste generated annually and increasing the quantity of waste that is recycled. As a result, the share of waste destined for recycling increased 21%, from 31.17 tons in 2017 to 37.75 tons in 2018.

Recycled waste increased 21% between 2017 and 2018.

This improvement is the result of the active stance adopted by the Bank, in line with the National Waste Policy for 2018–2030. In 2018, The Bank organized recycling campaigns at its offices and increased research into alternative uses for the materials deriving from the destruction of damaged banknotes, such as conversion into fuel or raw materials for various production processes.

In 2019, the Bank will implement concrete programs for recycling both cotton and polymer banknotes that are destroyed due to deterioration.

Power generator batteries and electronic waste such as tonners, and cartridges are considered hazardous waste. For their disposal, the Bank has contracts with specialized waste management firms.

Other waste, such as retired computer equipment, is sold off once a year at a public auction. The useful life of the waste materials is thus extended through reuse by people who buy the equipment at auction.

12.2 Emissions Reduction

The Bank recognizes the importance of monitoring its atmospheric emissions, which are mainly generated by air conditioners and power generators. Air pollution has many consequences for human, animal, and plant health, as well as the potential to contribute to climate change. Air quality remains a top priority in the country's environmental management, and the Bank hopes to make a positive contribution.

Over the next two years, the Bank plans to renovate both the water heating system and the backup electrical system for the building located on *Agustinas* Street in Santiago, in order to contribute to the reduction of atmospheric emissions.

Additionally, within the Bank's investment portfolio, there is an interest in investing in projects or assets that reduce CO2 and other pollutants.

Innovating in transportation

In 2018, the vehicle fleet was evaluated for the incorporation of electric and hybrid alternatives. In addition, the policy on the allocation and use of institutional vehicles will be modified in 2019, in order to reduce the size of the fleet.



12.3 Restoration of the Central Bank Façade

In April 2018 a ceremony was held to mark the completion of the total remodeling of the façade of the Central Bank building. The work spanned 16 months and constituted the most extensive building maintenance project undertaken since the 1940s. It also coincided with the Bank's 90th anniversary at its current location.

The conservation work included the complete repair of the building façade on *Agustinas* and *Morandé* streets, with improvements to the wainscoting, stucco, and ornamentation and the reparation of cracks and other structural damage that posed a potential risk to pedestrians. The companies involved in the restoration were *Construcciones Moguerza* and *Tandem Limitada* (architecture, heritage, and restoration) and MPP (technical building inspection).

The restoration included meticulous work by a team of experts to recover the bronze front door—one of the most important pieces in the building architecture—and the lighting fixtures in the Bank's main entryway.

Other features include the installation of a new lighting system, to highlight the columns, cornices, and balustrade, and the name of the Central Bank at a height of approximately 30 meters.



Over 16 months, ending in April 2018, the façade of the main building was completely restored, in the biggest building maintenance project since the 1940s.

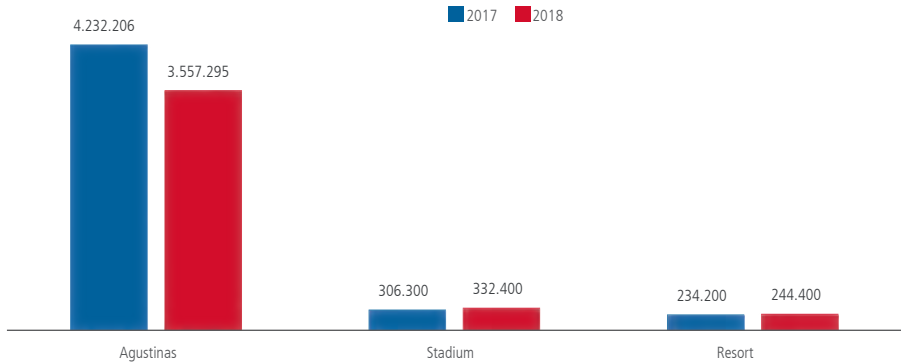
12.4 Energy Efficiency

Over the last two years, the Bank has monitored energy consumption at its facilities, in order to measure the results of its initiatives to promote the efficient use of energy and resources.

The biggest reductions have been achieved at the main building on *Agustinas* Street; the Constitution Plaza building, located on *Morandé* Street; and the warehouse on *Cumming* Street. The total energy savings between 2017 and 2018 was 674,911 KWH of electricity.

With these and other actions to improve environmental efficiency, the Bank invested approximately Ch\$1,715,390.00 in 2018.

ELECTRICITY CONSUMPTION (KWh)



Includes premises at the Plaza Constition, Agustinas, and Warehouse in Cumming buildings.

12.5 Sustainable Infrastructure Projects

- ✓ **Replacement of temperature control systems**
 In all Bank buildings to help reduce energy consumption.
- ✓ **Modernization of central heating and air-conditioning systems**
 To promote more efficient energy use and increase energy savings.
- ✓ **Pilot plan to upgrade lighting system**
 Development of a pilot plan using motion sensors to control lighting.
- ✓ **Infrastructure improvements**
 Energy savings, efficient water use, and better insulation.
- ✓ **Modernization of the elevators**
 Project to modernize the elevators using new technologies that are faster and use less energy.
- ✓ **Accessibility**
 Improved access for people with reduced mobility.
- ✓ **Solar panels**
 Evaluation of a project to install solar panels within five years (2018–2022) to prioritize the use of renewable energy, generate electricity at Bank buildings, and possibly contribute electricity to the public power system.

The Central Bank of Chile has also implemented programs to reduce the impact of its operations:

✓ **Reduction in paper use**

Reduction in printing.

Decrease in the number of printers.

Replacement of printers with energy-efficient models.

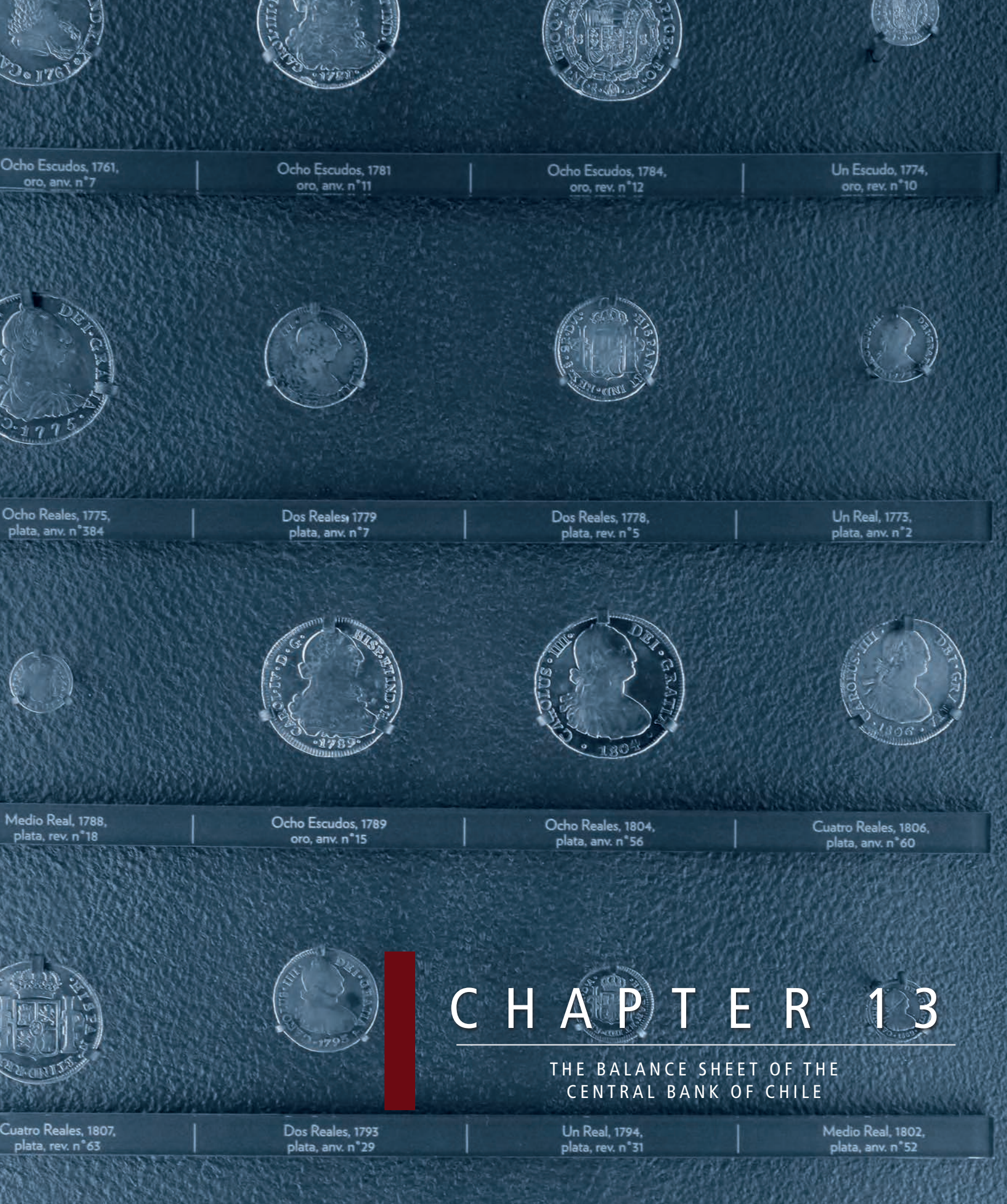
✓ **Reduction in energy use**

Automatic shutdown of PCs at the end of the work day.

Reduction in the number of lights in hallways and wherever feasible.

Shut-off of air conditioning after regular business hours.

Elimination of all electrical appliances or equipment that are not the property of the Bank (electric kettles, radios, toasters, shoe polishers, etc.).



Ocho Escudos, 1761,
oro, anv. n°7

Ocho Escudos, 1781
oro, anv. n°11

Ocho Escudos, 1784,
oro, rev. n°12

Un Escudo, 1774,
oro, rev. n°10

Ocho Reales, 1775,
plata, anv. n°384

Dos Reales, 1779
plata, anv. n°7

Dos Reales, 1778,
plata, rev. n°5

Un Real, 1773,
plata, anv. n°2

Medio Real, 1788,
plata, rev. n°18

Ocho Escudos, 1789
oro, anv. n°15

Ocho Reales, 1804,
plata, anv. n°56

Cuatro Reales, 1806,
plata, anv. n°60

Cuatro Reales, 1807,
plata, rev. n°63

Dos Reales, 1793
plata, anv. n°29

Un Real, 1794,
plata, rev. n°31

Medio Real, 1802,
plata, anv. n°52

CHAPTER 13

THE BALANCE SHEET OF THE
CENTRAL BANK OF CHILE

13. THE BALANCE SHEET OF THE CENTRAL BANK OF CHILE

13.1 Balance Sheet Levels and Structure¹

The behavior of the economy and the policies adopted by the Central Bank of Chile affect the size and composition of the Bank's balance sheet, which in turn affects the trend in earnings and losses. Thus, the debt in the form of Central Bank promissory notes on the liability side is largely explained by the need to finance the rescue of the financial system following the crisis in the first half of the 1980s and by the need to sterilize the monetary effects of the accumulation of international reserves in the 1990s and, more recently, in 2008 and 2011.

TABLE 13.1
THE CENTRAL BANK'S BALANCE SHEET

(balance in billions of pesos and % of GDP, as of 31 December of each year)

	2017		2018		Rate of return (%) ⁽¹⁾			
	Balance	%GDP	Balance	%GDP	Interest	Δ value	Interest	Δ value
Assets	24,998	13.9	28,509	14.9	1.3	-4.3	1.6	9.1
International reserves	23,983	13.3	27,731	14.5	1.2	-4.4	1.6	9.3
Other public sector assets (7)	310	0.2	317	0.2	1.6	1.7	1.1	2.8
Subordinated debt	231	0.1	89	0.0	5.0	2.2	5.5	3.8
Monetary policy instruments (2)	303	0.2	161	0.1	1.5	0.0	2.2	0.0
Other	171	0.1	213	0.1	0.8	-10.5	1.6	-2.7
Liabilities	30,781	17.1	32,270	16.9	1.9	0.7	1.9	0.7
Monetary base	11,106	6.2	11,296	5.9	0.2	0.0	0.2	0.0
Monetary policy securities (3)	14,837	8.2	13,885	7.3	3.3	0.7	3.2	0.9
Other monetary policy liabilities (4)	2,269	1.3	3,529	1.8	2.1	0.0	1.9	0.0
Current accounts and banks' foreign currency reserves	1,437	0.8	1,795	0.9	0.0	0.3	0.0	0.5
General Treasury and other public sector deposits	318	0.2	870	0.5	1.0	0.5	3.1	1.8
Other	814	0.5	895	0.5	0.7	10.8	0.7	9.5
Equity	-5,783	-3.2	-3,760	-2.0				
Initial capital	-4,217		-5,711					
Other reserves (8)	17		64					
Net result	-1,584		1,886					
Non-financial result (5)	-96		-85					
Net interest (5)	-249		-164					
Change in value (6)	-1,239		2,136					
Capital contributions	0		0					

(1) Implicit rates are calculated based on average monthly balances and losses/gains due to interest or changes in value.

(2) Includes credit to banks guaranteed with risk-free securities (repos) and liquidity lines in domestic and foreign currency.

(3) Includes PDDBC, BCP, PRC, CERO UF, and BCU.

(4) Short-term remunerated bank deposits in domestic and foreign currency. Foreign currency deposits, except daily deposits, guarantee credits in domestic currency.

(5) The foreign currency component of these items is converted to pesos using average exchange rates.

(6) Includes price-level restatements in domestic currency and the effect of exchange rate fluctuations on assets and liabilities in foreign currency.

(7) Includes a provision for 100% of the "Sinap liquidation" asset for Ch\$1.211 trillion in 2017 and Ch\$1.308 trillion in 2018.

(8) See the Statement of Changes in Equity in the 2018 Financial Statements.

Source: Central Bank of Chile.

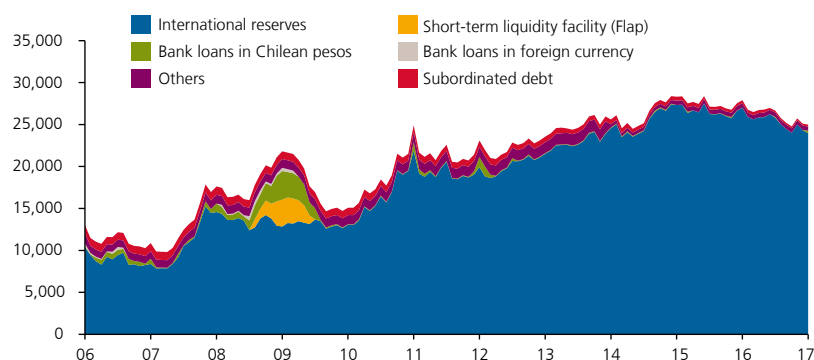
^{1/} The balance sheet is prepared in accordance with International Financial Reporting Standards (IFRS). See the Financial Statements (note 2(a)).

Measured in pesos, the size of total assets increased by Ch\$3.512 trillion in 2018 (table 13.1). Measured relative to GDP, total assets grew from 13.9 to 14.9% between 2017 and 2018. The largest increase, of Ch\$3.748 trillion, was in the foreign reserves balance. This was due to the depreciation of the peso (Ch\$2.263 trillion), interest earned (\$384 billion), and net deposits by commercial banks and the General Treasury (Ch\$1.101 trillion). Other significant changes on the asset side include decreases of Ch\$142 billion in monetary policy assets and Ch\$143 billion in subordinated debt due to the payment of the annual quota by the *Banco de Chile*.

Liabilities (excluding equity) increased Ch\$1.489 trillion in 2018, although in relative terms they contracted from 17.1% of GDP in 2017 to 16.9% of GDP in 2018. The largest increase was recorded in other monetary policy liabilities (Ch\$1.259 trillion) due to greater use of the standing deposit facility, followed by the increases in General Treasury and other public sector deposits (Ch\$552 billion), current account balances and commercial banks' foreign currency reserves (Ch\$358 billion), and the monetary base (Ch\$190 billion). This was partially offset by decreases in monetary policy securities (Ch\$952 billion), due to maturing Central Bank bonds denominated in pesos (BCP) and UFs (BCU).

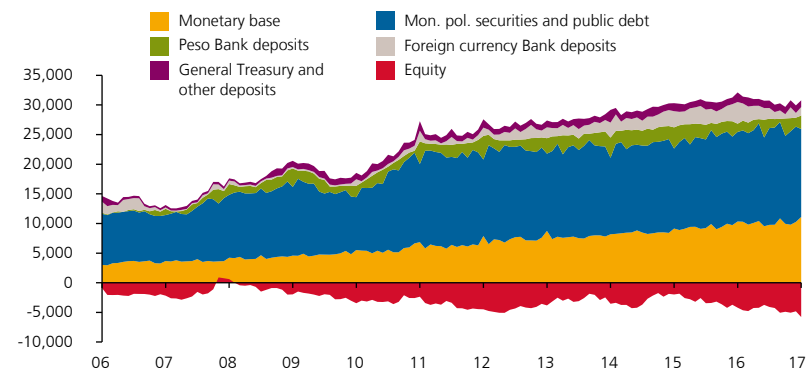
As a result, the Bank's equity deficit decreased in 2018, with a larger increase in the nominal value of assets versus liabilities (figures 13.1 and 13.2). The balance sheet carried negative equity of Ch\$3.760 trillion, reflecting initial capital of -\$5.711 trillion, other reserves of Ch\$64 billion, and a net gain in 2018 of Ch\$1.886 trillion. The latter is explained by a gain of Ch\$2.136 trillion from the monetary restatement of assets and liabilities, mainly due to the exchange rate; interest expense of Ch\$164 billion; and nonfinancial costs of Ch\$85 billion, mostly deriving from the production and distribution of currency and from personnel and administrative expenses.

FIGURE 13.1
CENTRAL BANK OF CHILE ASSETS
 (balance as of 31 December of each year, Ch\$ billion)



Source: Central Bank of Chile.

FIGURE 13.2
CENTRAL BANK OF CHILE LIABILITIES
 (balance as of 31 December of each year, Ch\$ billion)



Source: Central Bank of Chile.

13.2 Return on Assets and the Cost of Liabilities

The average return on assets, mainly reserves, is determined by the level of external interest rates on safe, highly liquid instruments. The cost of liabilities is associated with the MPR and its expected trend, which affects the placement rate for Central Bank securities. In 2018, the differential between the interest earned on assets (1.6%) and the cost of liabilities (1.9%) was negative, at 0.3%.

The average interest rate earned on international reserves rose from 1.3% in 2017 to 1.6% in 2018, due to the increase in the coupon rate on short-term instruments and a decrease in long-term rates. Locally, the interest rate on monetary policy securities decreased 10 basis points, primarily due to an increase in the share of short-term debt made up by Central Bank discount promissory notes (PDBC) and a corresponding decrease in BCU and BCP, despite the increase in the MPR.

With regard to adjustments, exchange rate fluctuations generated accounting gains in 2018, while variations in the UF (unidad de fomento, an inflation-indexed unit of account) triggered losses. As usual, the larger contributing factor was the exchange rate effect, given its impact on the value of the international reserves in pesos. Between year-end 2017 and year-end 2018, the peso depreciated against the currencies that make up the foreign exchange reserves, causing the value of the reserves to increase by 9.3% and total assets by 9.1%. At the same time, the effects of higher inflation on UF-denominated promissory notes and the lower cost of currency resulted in an adjustment of 0.7% in the value of total liabilities.

13.3 Balance Sheet Positions by Currency^{2/}

The reduction in the Bank's position denominated and payable in domestic currency is largely explained by negative interest flows and changes in the valuation of the position in domestic currency (Ch\$765 billion), primarily due to the costs of Central Bank promissory notes (Ch\$612 billion).

The position denominated and payable in foreign currency decreased US\$44 million, mainly due to interest, adjustments, and other flows associated with exchange rate losses (the depreciation of other currencies against the dollar) and lower interest earned on international reserves of US\$442 million.

13.4 Personnel and Administrative Expenses

These management-related expenses include personnel compensation and benefits; the use and consumption of goods and services; and other expenses necessary for carrying out the Bank's activities (table 13.2). On the comprehensive income statement, they are broken down as follows: (i) personnel and administrative expenses and (ii) other expenses and income. In 2018, of the total personnel and administrative expenses, personnel costs represented 64.7%; administrative expenses, 32.1%; and retirement benefits, 3.2%.

13.4.1 Personnel Expenses

Personnel expenditures were stable in real terms between 2017 and 2018. In the year, the total staff increased to 668 people, (666 in 2017). Professionals accounted for 79.9% of the total staff as of December 2018.

13.4.2 Administrative Expenses

Administrative costs recorded a real decrease of 0.5% between 2017 and 2018. This was mainly due to a reduction in general services, consulting, surveys, research, and seminars; which was partially offset by an increase in the maintenance of fixed assets and expenditures on computers and technological development.

^{2/} The positions or balances of assets less liabilities by currency can be used to evaluate equity exposure to foreign exchange risk. By disaggregating the changes into flows from (a) exchanges between balances and (b) interest and valuation changes, it is possible to more closely monitor the policies adopted by the Bank.

TABLE 13.2
PERSONNEL, ADMINISTRATIVE, AND OTHER EXPENSES

(Ch\$ million of 2018) (1)

	2014	2015	2016	2017	2018
Personnel expenses	35,244.6	37,952.4	39,205.8	39,558.6	39,171.1
Administrative expenses	17,828.1	19,550.2	19,494.7	18,594.0	18,493.1
Other expenses and (income) (2)	1,179,031.9	(78,054.0)	4,246.1	2,132.2	4,054.1
Total	1,232,104.6	(20,551.4)	62,946.6	60,284.8	61,718.3

(1) The average CPI was used to update older figures to 2018 pesos (base year 2013).

(2) In 2014 a provision was recognized for the impairment of the total value of the loan to entities that made up the National Savings and Loan System (Sinap). In 2015 this provision was reduced by the amount of the loan granted with fiscal resources.

Source: Central Bank of Chile.

13.5 External Auditors

The second paragraph of Section 76 of the Basic Constitutional Act stipulates that the Central Bank's financial statements must include an independent auditors' opinion and that the Board is to appoint the auditors from among those registered with the Superintendence of Banks and Financial Institutions (SBIF). Through Board Resolution 1,775 of 5 September 2013, The Board awarded the contract for professional auditing services to *KPMG Auditores y Consultores Ltda.* For the 2014–2016 period; the contract was automatically renewed annually in the 2017-2019 period.



APPENDICES

APPENDIX I

MAIN MONETARY AND FINANCIAL POLICY MEASURES

January

4.

The Bank reported that the Board, at its regular session on 4 January 2018, approved the Annual Debt Plan, which does not include any new bond issues in 2018.

February

1.

At its Monetary Policy Meeting, the Board of the Central Bank of Chile voted unanimously to hold the monetary policy interest rate at 2.5% in annual terms.

6.

The Board reported that starting in February 2018 the questions and frequency of the Financial Brokers Survey (FBS) will be modified to correlate with the new Monetary Policy Meeting schedule and to incorporate both international best practices and suggestions by the survey participants themselves.

With regard to the content, new questions were added on the inflation outlook for the next three months, in addition to the current questions on inflation expectations in 12 and 24 months; expectations for the MPR at the next five Monetary Policy Meetings and MPR estimates in 12 and 24 months; and estimates of the exchange rate in 7 and 28 days.

With regard to frequency, the FBS will no longer be conducted every fifteen days, but rather will be published two business days after the publication of the Monetary Policy Meeting Minutes and three business days before the Monetary Policy Meeting.

March

20.

At its monetary policy meeting, the Board of the Central Bank of Chile voted unanimously to hold the monetary policy interest rate at 2.5% in annual terms.

May

3.

At its Monetary Policy Meeting, the Board of the Central Bank of Chile voted unanimously to hold the monetary policy interest rate at 2.5% in annual terms.

The Board dictated operating rule N°9 of the *Manual of the Compendium of Financial Regulations* on the constitution of the Technical Reserve required of commercial banks, in the form of deposits at the Central Bank of Chile, in accordance with Section III of Chapter 3.1 of the *Compendium*.

June

13.

At its Monetary Policy Meeting, the Board of the Central Bank of Chile voted unanimously to hold the monetary policy interest rate at 2.5% in annual terms.

21.

Through Resolution 2156-01-180614, the Board approved the suspension of the payment, by the Central Bank of Chile, of interest on bank reserves in national currency, starting in 2019. This measure was announced on 21 July.

This initiative was effected through the repeal of Section II on the “Payment of Interest on National Currency Reserves” contained in Chapter 3.1 of the Bank’s *Compendium of Monetary and Financial Regulations*, applicable to banks and savings and loan associations that are supervised by the SBIF, governing reserve requirements on national currency deposits and other liabilities with a maturity of 30 days or more.

This resolution will allow the Bank to update a regulation that has not been modified since 1992, bringing it in line with the reduction of inflation over the last 25 years and with current international practices, wherein the vast majority of central banks do not pay interest on bank reserves. The elimination of interest payment on reserves will enter into force on 8 January 2019, with the close of the first reserve period in the calendar year.

Bank reserves are used not as an active monetary policy instrument, but rather as a passive financial stability tool. In that sense, the elimination of interest on reserves will not lead to changes in the monetary policy strategy or implementation and will have only a marginal effect on banks’ funding costs.

July

24.

At its Monetary Policy Meeting, the Board of the Central Bank of Chile voted unanimously to hold the monetary policy interest rate at 2.5% in annual terms.

September

4.

At its Monetary Policy Meeting, the Board of the Central Bank of Chile voted unanimously to hold the monetary policy interest rate at 2.5% in annual terms.

October

18.

At its Monetary Policy Meeting, the Board of the Central Bank of Chile voted unanimously to increase the monetary policy interest rate by 25 basis points, to 2.75% in annual terms.

November

30

At its regular session on 21 November 2018, the Board approved the 2019 Annual Debt Plan, which does not include any new bond issues in the year.

December

4.

At its Monetary Policy Meeting, the Board of the Central Bank of Chile voted unanimously to hold the monetary policy interest rate at 2.75% in annual terms.

APPENDIX II

INTERNATIONAL RESERVE MANAGEMENT

A. INTRODUCTION

In line with the Bank's transparency policies,^{1/} this appendix reports on the annual international reserve management. The next section B describes the investment policies and benchmark structure used in managing reserves. Section C reports on external portfolio managers. Section D summarizes the risk management policies and the results of the international reserve management.

In the first half of 2018, the Board received the results of a peer review by the Bank for International Settlements (BIS) on the Central Bank's international reserve management. The recommendations submitted by the BIS included improving some specific aspects of governance associated with reserve management, in order to increase delegation to different hierarchical levels, to more clearly establish accountability, and to expedite the decision-making process, all in line with international best practices.

Subsequently, in the second half, the Board approved changes to the investment policy, reducing the number of portfolios from three to two (one liquidity and one diversification portfolio) and adjusting the currency allocation and the duration of the financial instruments that are in the new benchmark.

B. Investment Policy and Benchmark Structure

The international reserve investment policy is centered on liquid financial assets that meet the legal requirements established for reserve management.

The policy is designed based on the impact on earnings and risk on the Central Bank's balance sheet and the characteristics of potential foreign exchange liquidity needs, oriented fundamentally toward the preservation of capital in the face of possible market fluctuations.

The management objectives of the investment policy are as follows: (i) to hold foreign exchange reserves in highly liquid instruments, which can be called in the briefest period possible without incurring significant transaction costs, so as to be able to cover residual short-term external debt if necessary; (ii) to invest in instruments that present limited financial risks, in order to limit the risk of generating capital losses; (iii) to minimize the volatility of the value of the Bank's equity as a result of changes in the exchange rates of the investment currencies vis-à-vis the peso, with the goal of reducing any negative effects on the Bank's balance sheet; and (iv) to reduce the cost of holding reserves at the margin. This last objective led to the creation of a portfolio oriented toward achieving higher absolute returns in the long run.

Total international reserves are made up of the investment portfolio plus the cash portfolio (transaction account balances held by the General Treasury, public companies, and banks) and the other assets portfolio (IMF special drawing rights, or SDRs, certified gold, and other assets). The cash portfolio is allocated to covering expected funding requirements in the short term and is the preferred source for handling the daily funding requirements deriving from withdrawals from the foreign currency accounts maintained at the Central Bank by commercial banks and the public sector.

The investment policy also allows the use of eurodollar futures and U.S. Treasury bonds with maturities of 2, 5, and 10 years, to improve the efficiency of reserve management.

^{1/} Board Resolution 1289-01-060831 of 29 August 2006.

B.1 Benchmark Structure of the Investment Portfolio

The benchmark structure of the investment portfolio establishes the basic parameters that guide the currency composition, duration, credit risk distribution, type of instrument, and the respective benchmarks used to measure performance.

The benchmark structure defines three investment portfolios: the short-term liquidity portfolio, the medium-term liquidity portfolio, and the diversification portfolio (table 1).

The short-term liquidity portfolio represents 24% of the investment portfolio, and its currency structure is 100% U.S. dollars. The benchmark contemplates Treasury bills issued by the United States, with a residual maturity of up to one year. The target duration is approximately three months. Investments can also be made in bills, bonds, discount notes, floating-rate notes, commercial papers, FIXBIS, and STRIPS^{2/}, with a residual maturity of up to one year, from eligible issuers that represent sovereign, supranational, and agency risk. Investments are also allowed in deposits with a maturity of up to three months provided that they do not exceed 10% of the portfolio. The short-term liquidity portfolio is designated, first and foremost, to be available for the potential use of foreign exchange reserves. In this portfolio, investments in currencies other than the U.S. dollar are not allowed.

The medium-term liquidity portfolio accounts for 61% of the investment portfolio, and its reference structure comprises 60% U.S. dollars, 25% euros, 7.5% Canadian dollars, and 7.5% Australian dollars. This benchmark includes sovereign securities issued by the United States, Germany, Canada, and Australia, with a residual maturity of one to five years. The target duration is approximately 25 months. Investments can be made in fixed- and floating-rate notes, nominal bonds, inflation-indexed bonds, MTIs,^{3/} and STRIPS, with no restriction on residual maturity, from eligible issuers that represent sovereign, supranational, and agency risk. The main objective of the medium-term liquidity portfolio is to cover the Central Bank's balance sheet. This portfolio allows investments in currencies that are not included in the benchmark, provided they are hedged against one of the benchmark currencies.

The diversification portfolio represents 15% of the investment portfolio, and its benchmark structure comprises 20% U.S. dollars, 20% Chinese renminbi, 20% South Korean won, 12% New Zealand dollars, 10% euros, 10% pounds sterling, 5% Swiss francs, and 3% Japanese yen. With the exception of the renminbi, this benchmark includes sovereign securities issued by the United States, South Korea, New Zealand, Germany, the United Kingdom, Switzerland, and Japan, with a residual maturity of five to ten years. In the case of the renminbi, the benchmark is associated with the deposit rate on three-month bank deposits denominated in Chinese renminbi and traded offshore. The target duration of the portfolio is approximately 55 months. Investments can also be made in any and all instruments approved under the most recent *Current Policy Manual for the Management of Foreign Exchange Reserves*, with no restrictions on terms (or residual maturity) or currencies. The diversification portfolio is managed on the basis of a risk budget. Deviations from the benchmark are limited to an average monthly ex ante tracking error of 100 basis points (bp) per year,^{4/} which cannot exceed 150 bp at any given time. The main objective of holding these assets is to increase returns at the margin so as to reduce the existing gap between the cost of the Bank's liabilities and the returns on its investments.

The investment portfolio has mechanisms for rebalancing the subportfolios to ensure that their relative size remains in line with the benchmark.

^{2/} Separate Trading of Registered Interest and Principal Securities: zero-coupon securities backed by U.S. Treasury notes and bonds.

^{3/} Medium-term Instruments: Medium-term fixed-income securities issued by the Bank for International Settlements (BIS).

^{4/} The tracking error identifies the incremental risk incurred by a portfolio, relative to the benchmark, when it takes positions outside the benchmark. For the purposes of management, limits can be imposed on this incremental risk, and these limits are known as a risk budget.

TABLE 1
BENCHMARK STRUCTURE FOR THE INTERNALLY MANAGED INVESTMENT PORTFOLIO

		Tranche (years)	% of internally managed portfolio	% of subportfolio	Duration (months)	Benchmark indices
Short-term liquidity	USD	0-1	24.7	100.0	3.0	ICE BofA ML US Treasury Bill Index
	Total		24.7	100.0	3.0	
	USD	1-3	33.9	54.0	22.7	
Medium-term liquidity		3-5	3.8	6.0	45.8	Bloomberg Barclays Global Aggregate –Treasury Bond Index (Unhedged) (EUR, only Germany)
		Total	37.7	60.0	25.0	
	EUR	1-3	14.1	22.5	22.0	
		3-5	1.6	2.5	46.7	
		Total	15.7	25.0	24.4	
	CAD	1-3	4.2	6.7	21.3	
		3-5	0.5	0.7	45.4	
		Total	4.7	7.5	23.7	
	AUD	1-3	4.2	6.7	22.3	
		3-5	0.5	0.7	41.5	
		Total	4.7	7.5	24.2	
		Total		62.7	100.0	
Diversification (Internal)	USD	5-7	2.2	17.6	66.5	Bloomberg Barclays Global Aggregate –Treasury Bond Index (Unhedged) (EUR, only Germany)
		7-10	0.3	2.4	90.7	
		Total	2.5	20.0	69.4	
	EUR	5-7	1.1	8.8	67.0	
		7-10	0.2	1.2	97.4	
		Total	1.3	10.0	70.5	
	CHF	5-7	0.6	4.4	69.9	
		7-10	0.1	0.6	94.2	
		Total	0.6	4.9	72.8	
	GBP	5-7	1.1	8.8	67.4	
		7-10	0.2	1.2	95.3	
		Total	1.3	10.0	70.7	
	JPY	5-7	0.3	2.6	68.9	
		7-10	0.0	0.3	97.7	
		Total	0.4	2.9	72.3	
	KRW	5-7	2.2	17.6	64.0	
		7-10	0.3	2.4	87.7	
		Total	2.5	20.0	66.8	
	NZD	5-7	1.3	10.6	69.7	
		7-10	0.2	1.4	85.0	
		Total	1.5	12.0	71.5	
CNH	3 months	2.5	20.0	1.5	Bloomberg CGDRC Currency Index	
	Total		12.6	100.0	56.0	
Total internally managed portfolio	Total		100.0		23.3	

Source: Central Bank of Chile.

B.2 Benchmark Structure of the Cash Portfolio

The investments in the cash portfolio match the currency and term structure of expected disbursements on the Bank's balance sheet. The currency composition of the cash portfolio is thus tied to the currency composition of expected disbursements and deposits and withdrawals in accounts held at the Central Bank by commercial banks and the public sector. The benchmark is calculated on the basis of the overnight, weekend, and time deposit rates of the reference currencies, as a function of the characteristics of expected disbursements.

B. 3 Portfolio Performance in 2018

As of 31 December 2018, the investment portfolio stood at US\$34.8686 billion, while the cash portfolio held US\$3.8642 billion. Taking the sum of these two portfolios plus other assets,^{5/} total international reserves closed the year at US\$39.8606 billion. This balance was US\$877.9 million higher than at year-end 2017. The growth is explained by an increase in the cash portfolio of US\$987.2 million and in the other assets portfolio of US\$93.1 million, which was partially offset by a decrease in the investment portfolio of US\$202.4 million. The reduction in the investment portfolio is mainly due to the depreciation of the investment currencies against the U.S. dollar, while the increase in the other assets portfolio derives from transactions with the IMF. In the case of the cash portfolio, the growth is due to an increase in foreign currency deposits, mainly U.S. dollars, held by local banks at the Central Bank.

With regard to the value of the investment portfolio, US\$8.3086 billion was in the short-term liquidity portfolio, US\$21.1401 billion was in the medium-term liquidity portfolio, US\$5.3067 billion was in diversification portfolio, and US\$6.4 million was in current accounts. At year-end, there were also investments in onshore Chinese government bonds, through investments in a BIS Investment Pool denominated in renminbi (BISIP CNY), for a total of US\$106.9 million. In addition, at year-end a share of the diversification portfolio was managed by two external managers, as described in section C of this appendix.

^{5/} The other assets portfolio is mainly composed of monetary gold and IMF special drawing rights (SDRs).

Of the US\$33.7144 billion in the internally managed portfolio,^{6/} 84.9% was invested in sovereign risk, 12.7% in supranational risk,^{7/} 0.2% in agency,^{8/} and 2.2% in bank risk. Relative to year-end 2017, there was an increase in exposure to supranational risk and a decrease in exposure to sovereign risk.

Sovereign risk includes investments in the United States (59.5%), Germany (17.4%), Canada (5.2%), Australia (4.0%), South Korea (3.0%), Japan (2.5%), Poland (1.8%), New Zealand (1.3%), France (1.1%), United Kingdom (1.0%), Spain (0.9%), Switzerland (0.8%), Ireland (0.6%), Austria (0.5%), China (0.2%), Singapore (0.2%), and Norway (0.1%). Supranational risk is made up issues by the BIS (73.1%), the European Investment Bank (19.2%), the International Bank for Reconstruction and Development (3.1%), the Inter-American Development Bank (2.2%), the International Finance Corporation (1.4%), the Asian Development Bank (0.6%), Eurofima (0.3%), and the European Bank for Reconstruction and Development (0.2%). Agency risk is concentrated in one issue from Landwirtschaftliche Rentenbank (Germany). Finally, bank risk comprises deposits denominated in U.S. dollars and Chinese renminbi, in banks in France, Switzerland, and China.

At year-end 2018, the cash portfolio stood at US\$3.8642 billion.

The currency composition of total reserves and the investment portfolio is given in tables 2a and 2b.

^{6/} The investment portfolio excluding the BIS investment pool shares and the externally managed resources.

^{7/} Supranational institutions are multilateral financial institutions, whose articles of agreement are signed by the governments of two or more countries.

^{8/} Agencies are financial institutions with specific objectives; they are fully or partially backed by the government of the country in which they are established.

TABLE 2A
COMPOSITION OF INTERNATIONAL RESERVES
(US\$ million)

Type of portfolio	Currency	2017		2018	
		Dec	%	Dec.	%
Investment portfolio		35,071.0	90.0	34,868.6	87.5
Currencies and deposits	U.S. dollar	23.3	0.1	11.9	0.0
	Euro	0.3	0.0	0.7	0.0
	Canadian dollar	0.2	0.0	0.1	0.0
	Australian dollar	1.2	0.0	0.5	0.0
	Other	810.7	2.1	762.0	1.9
Securities	U.S. dollar	22,260.3	57.1	22,140.6	55.5
	Euro	5,832.8	15.0	6,000.3	15.1
	Canadian dollar	1,662.1	4.3	1,630.4	4.1
	Australian dollar	1,679.9	4.3	1,434.6	3.6
	Other	2,800.2	7.2	2,887.6	7.2
Total	U.S. dollar	22,283.6	57.2	22,152.5	55.6
	Euro	5,833.2	15.0	6,001.0	15.1
	Canadian dollar	1,662.2	4.3	1,630.5	4.1
	Australian dollar	1,681.0	4.3	1,435.1	3.6
	Other	3,610.9	9.3	3,649.6	9.2
Cash portfolio		2,877.0	7.4	3,864.2	9.7
Currencies and deposits	U.S. dollar	2,877.0	7.4	3,864.2	9.7
Other Assets		1,034.6	2.7	1,127.7	2.8
Monetary gold	Other	10.2	0.0	10.1	0.0
IMF SDRs	Other	770.3	2.0	751.0	1.9
IMF reserve position	Other	251.1	0.6	366.6	0.9
Reciprocal credit agreements	U.S. dollar	2.1	0.0	0.0	0.0
Currencies and deposits	U.S. dollar	0.9	0.0	0.0	0.0
Total International Reserves		38,982.6	100.0	39,860.6	100.0
	U.S. dollar	25,163.6	64.6	26,016.7	65.3
	Euro	5,833.2	15.0	6,001.0	15.1
	Canadian dollar	1,662.2	4.3	1,630.5	4.1
	Australian dollar	1,681.0	4.3	1,435.1	3.6
	Other	4,642.6	11.9	4,777.4	12.0

Source: Central Bank of Chile.

TABLE 2B
INVESTMENT PORTFOLIO, BY CURRENCY
(percent, as of 31 December 2018)

Currency	Share (1)
U.S. dollar	62.9
Euro	17.1
Canadian dollar	4.8
Australian dollar	4.2
South Korean won	2.9
Chinese renminbi	3.2
New Zealand dollar	1.6
Pound sterling	1.5
Swiss franc	0.8
Japanese yen	0.5
Other (2)	0.3
Total	100.0

(1) Including currency forwards.

(2) Other currencies: Czech koruna, Danish krone, Norwegian krone, Swedish krona, Polish zloty, Singapore dollar, and Malaysian ringgit.

Source: Central Bank of Chile.

C. EXTERNAL PORTFOLIO MANAGEMENT PROGRAM

At year-end 2018, a portion of the investment portfolio was managed by two external managers: BlackRock Institutional Trust Company N.A. and Amundi Asset Management. The firms were brought on in February and October 2016, respectively, with a mandate of US\$500 million each. Both firms manage a long-term global government fixed-income mandate, with a structure equivalent to the internally managed diversification portfolio.

The external portfolio managers also manage a share of the diversification portfolio, based on the same guidelines and risk budget defined for the internally managed diversification portfolio.

The priority objectives of the external management program are twofold: (i) to provide an active benchmark for the internally managed diversification portfolio; and (ii) to add value to the international reserve portfolio.

D. RISK MANAGEMENT AND RETURNS FROM INTERNATIONAL RESERVE MANAGEMENT

D. 1 Risk Management in International Reserve Management

International reserve management includes criteria for limiting liquidity, credit, market, and operational risk.

To reduce liquidity risk, the Bank manages a portfolio composed mainly of fixed-income instruments traded in deep and highly liquid secondary markets. Investments in bank deposits are limited to the cash portfolio (primarily overnight deposits) and the short-term liquidity portfolio.

With regard to credit risk, limits are applied to bank, sovereign, supranational, and agency (external financial institution) risk, as well as to the counterparties used (table 3).

TABLE 3
COMPOSITION OF INTERNATIONAL RESERVES BY CREDIT RISK (1)(2)(3)(4)
(percent, as of 31 December 2018)

Type of credit risk	Credit rating									Total
	AAA	AA+	AA	AA-	A+	A	A-	BBB+	BBB	
Agency	0.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.2
Bank	0.2	0.0	3.7	1.1	2.1	4.6	0.4	0.0	0.0	12.1
Sovereign	65.4	0.4	5.8	0.0	2.8	1.4	0.6	0.0	0.0	76.4
Supranational	11.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	11.3
Total	77.0	0.4	9.6	1.1	4.9	5.9	1.0	0.0	0.0	100.0

(1) Bank risk is related to investment in banks' financial instruments (deposits). Sovereign risk is related to investment in instruments from sovereign states (bills, nominal bonds); it includes investments in a BIS Investment Pool denominated in CNY, associated with Chinese sovereign risk. Agency risk is associated with investment in instruments from U.S. and German government agencies (bills, nominal bonds). Supranational risk is associated with investment in instruments from an official multilateral issuer (deposits, bills, and nominal bonds).

(2) For sovereign risk, the credit rating corresponds to the average rating from Fitch, Moody's, Standard and Poor's, and Dominion Bond Rating Service.

(3) For agency, bank, and supranational risk, the credit rating corresponds to the average rating from Fitch, Moody's and Standard and Poor's.

(4) Including the cash portfolio; excluding the other assets portfolios.

Source: Central Bank of Chile.

The investment guidelines establish other criteria and restrictions as complementary measures to limit credit risk, including eligibility criteria for issuers, operations, and intermediaries and rules on the treatment of derivatives (tables 4, 5, and 6).

TABLE 4
INVESTMENT PORTFOLIO, BY CURRENCY
(US\$ million)

Financial institutions with outstanding deposits as of 31.Dec.2018 (1) (2)	
AAA, AA+, AA, AA-	<p>Oversea-Chinese Banking Corp Ltd. Royal Bank of Canada, Toronto J.P. Morgan Chase Bank The Bank of Nova Scotia, London Zürcher Kantonalbank, Zurich</p> <p>Minimum 95 Maximum 699 Category average 379</p>
A+, A, A-	<p>Banco Bilbao Vizcaya Argentaria Banco Santander SA Bred Banque Populaire, Paris Citibank NA, New York Société Générale, Paris Sumitomo Mitsui Banking Corporation, New York Sumitomo Mitsui Trust Bank Ltd., New York</p> <p>Minimum 121 Maximum 508 Category average 340</p>

(1) Includes the internally managed investment portfolio and the cash portfolio.

(2) Includes balances held in interest-bearing current accounts.

Source: Central Bank of Chile.

TABLE 5
ELIGIBLE BANKS AND PERMISSIBLE LIMITS AS OF
31 DECEMBER 2018
(US\$ million, months)

Country	Bank	Amount	Duration
Germany	Bayerische Landesbank	150	1
Germany	DekaBank Deutsche Girozentrale	500	3
Germany	DZ BANK AG Deutsche Zentral-Genossenschaftsbank	700	9
Germany	Landesbank Baden-Württemberg	150	1
Germany	Landesbank Hessen-Thüringen Girozentrale	500	3
Germany	NRW.BANK	700	9
Australia	Australia & New Zealand Banking Group Limited	700	9
Australia	Commonwealth Bank of Australia	700	9
Australia	National Australia Bank Ltd.	700	9
Australia	Westpac Banking Corporation	700	9
Belgium	Belfius Bank SA/NV	150	1
Belgium	BNP Paribas Fortis SA/NV	500	3
Belgium	ING Belgium SA/NV	500	3
Belgium	KBC Bank NV	500	3
Canada	Bank of Montreal	700	9
Canada	Canadian Imperial Bank of Commerce	700	9
Canada	National Bank of Canada	500	3
Canada	Royal Bank of Canada	700	9
Canada	The Bank of Nova Scotia	700	9
Canada	The Toronto-Dominion Bank	700	9
China	Bank of China (Hong Kong) Ltd.	500	3
China	China Construction Bank Corporation	500	3
China	Industrial and Commercial Bank of China (Asia) Ltd.	500	3
China	Industrial and Commercial Bank of China Ltd.	500	3
China	The Hongkong and Shanghai Banking Corporation Limited	700	9
South Korea	Standard Chartered Bank Korea Limited	500	3
Denmark	Danske Bank Aktieselskab	500	3
Denmark	Nykredit Bank A/S	250	3
Spain	Banco Bilbao Vizcaya Argentaria S.A.	150	1
Spain	Banco Santander S.A.	500	3
Finland	Nordea Bank Abp	700	9
France	BNP Paribas S.A.	500	3
France	Bred Banque Populaire	500	3
France	Credit Agricole Corporate and Investment Bank	500	3
France	Crédit Agricole S.A.	500	3
France	Crédit Industriel et Commercial (CIC)	500	3
France	HSBC France	700	9
France	Natixis S.A.	500	3
France	Société Générale	500	3
Netherlands	ABN AMRO Bank NV	500	3
Netherlands	Coöperatieve Rabobank UA	700	9
Netherlands	ING Bank NV	500	3
Netherlands	NV Bank Nederlandse Gemeenten	1000	12

TABLE 5
ELIGIBLE BANKS AND PERMISSIBLE LIMITS AS OF
31 DECEMBER 2018
(US\$ million, months)
continued

Country	Bank	Amount	Duration
Israel	Bank Hapoalim B.M.	500	3
Japan	Mizuho Bank Ltd.	500	3
Japan	MUFG Bank Ltd.	500	3
Japan	Sumitomo Mitsui Banking Corporation	500	3
Japan	Sumitomo Mitsui Trust Bank Ltd.	500	3
Japan	The Chiba Bank Ltd.	500	3
Japan	The Norinchukin Bank	500	3
Japan	The Shizuoka Bank Ltd.	500	3
Norway	DNB Bank ASA	700	9
Singapore	DBS Bank Ltd.	700	9
Singapore	Oversea-Chinese Banking Corp Ltd.	700	9
Singapore	United Overseas Bank Ltd.	700	9
Sweden	Skandinaviska Enskilda Banken AB (Publ) (SEB)	700	9
Sweden	Svenska Handelsbanken AB (Publ)	700	9
Sweden	Swedbank AB	700	9
Switzerland	Credit Suisse AG	500	3
Switzerland	UBS AG	700	9
Switzerland	Zürcher Kantonalbank	1000	12
United Kingdom	Bank of Scotland Plc	500	3
United Kingdom	Barclays Bank Plc	500	3
United Kingdom	Goldman Sachs International Bank	250	3
United Kingdom	HSBC Bank Plc	700	9
United Kingdom	Lloyds Bank Plc	500	3
United Kingdom	Merrill Lynch International	500	3
United Kingdom	Santander UK Plc	500	3
United Kingdom	Standard Chartered Bank	500	3
United Kingdom	UBS Limited	250	3
United States	Bank of America NA	700	9
United States	BNY Mellon National Association	500	9
United States	Citibank NA	500	3
United States	Comerica Bank	500	3
United States	Goldman Sachs Bank USA	500	3
United States	HSBC Bank USA NA	700	9
United States	J.P. Morgan Chase Bank NA	700	9
United States	Keybank National Association	150	1
United States	PNC Bank NA	500	3
United States	State Street Bank & Trust Company	700	9
United States	The Bank of New York Mellon	700	9
United States	The Northern Trust Company	700	9
United States	U.S. Bank NA	700	9
United States	Wells Fargo Bank, NA	700	9

Source: Central Bank of Chile.

TABLE 6
INTERMEDIARIES USED IN 2018

Intermediaries
ABN Amro Bank N.V., Amsterdam
ANZ Securities Inc., New York
Australia & New Zealand Banking Group Limited, Melbourne
Banco Bilbao Vizcaya Argentaria S.A., Madrid
Bank For International Settlements
Bank of Nova Scotia, New York Agency
Barclays Bank Plc
Barclays Capital Inc.
BMO Capital Markets Corp.
BNP Paribas S.A., Paris
BNP Paribas Securities Corp., New York
BNP Paribas
CIBC World Markets Corp.
Citigroup Global Markets Inc., New York
Citigroup Global Markets Limited, London
Commerzbank, France
Commonwealth bank of Australia, Sidney
Credit Agricole Corporate and Investment Bank, New York
Credit Agricole Corporate and Investment Bank, Seoul
Credit Suisse Securities (USA) LLC, New York
Daiwa Capital Markets America Inc.
Danske Markets Inc.
DBS Bank LTD, Seoul
DBS Bank LTD, Singapore
Deutsche Bank AG London Branch
Deutsche Bank Securities Inc.
DZ Bank AG Deutsche Zentral Genossenschaftsbank, Frankfurt
Goldman Sachs International Bank, London
Goldman, Sachs & Co. LLC
HSBC Bank PLC, London
HSBC Securities (USA) Inc., New York
ING Bank NV, Amsterdam
ING Bank NV, Seoul
J.P. Morgan Securities LLC., New York
Jefferies LLC
JP Morgan Securities PLC
JPMorgan Chase Bank N.A., Seoul
Landesbank Baden-Württemberg, Stuttgart
Lloyds Bank Corporate Markets PLC
Merrill Lynch International
Merrill Lynch, Pierce, Fenner & Smith Incorporated
Mizuho Securities USA LLC
Morgan Stanley & Co. International plc, London
Morgan Stanley & Co. LLC.

TABLE 6
INTERMEDIARIES USED IN 2018

continued

Intermediaries
<i>MUFG Securities Americas Inc.</i>
<i>National Australia Bank Ltd, London</i>
<i>National Bank of Canada Financial Inc., New York</i>
<i>Natixis SA, Paris</i>
<i>NatWest Markets Securities Inc.</i>
<i>Nomura International Plc, London</i>
<i>Nomura Securities International Inc., New York</i>
<i>RBC Capital Markets, LLC</i>
<i>Scotia Capital (USA) Inc</i>
<i>Shanghai Pudong Development Bank Co., Ltd.</i>
<i>Skandinaviska Enskilda Banken AB, New York</i>
<i>Société Générale, New York</i>
<i>Société Générale, Paris</i>
<i>Standard Chartered Bank, London</i>
<i>Standard Chartered Bank Korea Limited, Seoul</i>
<i>Standard Chartered Bank, Singapore</i>
<i>TD Securities (USA) LLC.</i>
<i>The Royal Bank of Scotland Plc, London (Natwest)</i>
<i>UBS AG, London</i>
<i>UBS Limited</i>
<i>UBS Limited, London</i>
<i>UBS Securities LLC, USA New York</i>
<i>Wells Fargo Securities, LLC</i>
<i>Westpac Banking Corporation, Sidney</i>
<i>Westpac Banking Corporation, Wellington</i>
<i>Zürcher Kantonalbank, Zurich</i>

Source: Central Bank of Chile.

Market risk is contained through the diversification of investment currencies, instruments, and maturities and through the measurement and control of limits on exposure to duration and currency risk described above.

The average daily value at risk (VaR)^{9/} was 1.65% in 2018 (1.58% in 2017). The average tracking error was 13.3 basis points.

^{9/} The VaR is based on a parametric model with an annualized daily horizon, a confidence level of 84% (one standard deviation), and a decay factor of 0.94.

Operational risk is controlled through the separation of functions and responsibilities at the institutional and hierarchical levels, the application of efficient controls to mitigate it, and the use of computer applications that adhere to market quality standards. Initiatives were carried out to improve the standards of operational continuity, and a contingency unit was maintained to guarantee the operational continuity of both the international reserves and the fiscal resources in the event of problems with the physical or technological infrastructure of the Central Bank building.

D.2 Return on International Reserve Management

In 2018, the total return on reserve management was 1.70% measured in the currency of origin of the investments. Measured in U.S. dollars, the return was -0.35%. The return in local currency on fixed-income instruments was exceeded by the negative exchange rate effect deriving from measuring the reserve returns in U.S. dollars. The return differential relative to the benchmark structure was -2.6 bp. For the 2007–2018 period, reserve management recorded an average return differential of 4.9 bp (table 7).

D.3 Securities Lending Program

In the period, a securities lending program was maintained with the Bank's international reserve custodians. This consists in lending instruments owned by the Bank to primary dealers, who must put up collateral equivalent to 102 or 105% of the value of the instrument being loaned, as contractually established. Primary dealers are financial institutions designated by the treasury offices of the issuing countries, for the placement and distribution of their debt securities. The contractual relationship with the lending agent—that is, the custodian—incorporates a clause stipulating that in the event of default by the debtor, the custodian will be responsible for the totality of the positions loaned, thereby transferring the risk from the debtor to the custodian bank. In addition, the custodian keeps the custodial positions in separate accounts on its balance sheet, so there is no credit risk. In 2018, this program generated income for the Bank equivalent to 0.8 bp of total foreign exchange reserves.

APPENDIX III

FISCAL FUND MANAGEMENT (ESSF AND PRF)

INTRODUCTION

As fiscal agent, the Central Bank of Chile manages resources in the name and on the account of the General Treasury. These resources are part of the Economic and Social Stabilization Fund (ESSF) and the Pension Reserve Fund (PRF).

The following sections describe the institutional context in which this fiscal agency operates. They also report on the investment policy, the fund structure, the reporting system, the management results, and the costs of managing the resources.

INSTITUTIONAL FRAMEWORK

In September 2006, Law N° 20,128 on Fiscal Responsibility created the ESSF and the PRF. Under this law, the Ministry of Finance issued Executive Decree 1383 (which was modified via Decree 1618), whereby the Central Bank is vested with the representation of the General Treasury for investing all or part of the ESSF and PRF resources, once the Bank has formally accepted the fiscal agency agreement in accordance with its Basic Constitutional Act.

Through Resolution 2130-01-180215, the Board acknowledged the new strategic asset allocation of the PRF, communicated to the Bank by the Finance Ministry in Letter 207, dated 7 February 2018.^{10/} The fund's new strategic allocation includes reductions in the share of sovereign bonds and government-related assets (from 48 to 23%), inflation-indexed sovereign bonds (from 17 to 5%), and corporate bonds (from 20 to 13%), with an increase in the share of equity (from 15 to 40%) and the incorporation of three new asset classes, namely, U.S. agency mortgage-backed securities (MBS) (6%), high-yield bonds (8%), and real estate assets (5%).

^{10/} In December 2018, through Resolution 2191-03-181213, the Board accepted the new performance guidelines associated with the investment of PRF resources, which are established in Finance Ministry Letter 2424, dated 6 December 2018.

The new investment policy also stipulates that the currency risk, vis-à-vis the Chilean peso, associated with the fixed-income assets (55%) will be hedged, under a currency hedging program.

The Board accepted the Finance Ministry's request to gradually implement the new PRF investment policy, with the support of an international consulting firm, in accordance with the indications of the transition guidelines.^{11/} The process of selecting the consulting firm was conducted by Bank, which contracted RVK Inc. in May 2018. The selection of the external managers for the U.S. agency MBS and high-yield bond asset classes was conducted between June and November 2018, as described below. In accordance with the transition guidelines, the second phase of implementing the new PRF investment guidelines encompasses the selection and contracting of external managers to manage the real estate asset portfolio and to implement the currency hedging program, a process that will begin in 2019.

INVESTMENT POLICY AND OBJECTIVES

The investment policy objectives for the fiscal portfolios and the associated risk-return profile reflect decisions made by the Finance Ministry. The Central Bank must manage the fiscal resources in accordance with the relevant decrees and performance guidelines.

The performance guidelines contain the investment criteria, which define a benchmark and place restrictions on fiscal portfolio management.

^{11/} Through Resolution 2161-02-180705, the Board accepted the transition guidelines for converging to the new PRF benchmark composition, in accordance with Finance Ministry Letter 1032, dated 19 June 2018.

The benchmark structure implicitly incorporates risk-return objectives established by the Finance Ministry. The results of the fiscal portfolio management is assessed against these benchmark portfolios.

For the ESSF portfolio managed internally by the Central Bank of Chile, the benchmark portfolio established in the performance guidelines is made up of the following asset classes: bank assets;^{12/} U.S. Treasury bills and sovereign bonds; and inflation-indexed sovereign bonds (table III.1). The bank asset and treasury bill portfolios use benchmark indices by Merrill Lynch. The sovereign bond share of the portfolio and the inflation-indexed sovereign bond portfolio are compared against selected Bloomberg Barclays currency indexes.

TABLE III.1
BENCHMARK FOR THE ESSF PORTFOLIO MANAGED BY THE CENTRAL BANK
(percent)

Asset class	Share
Bank	16.2
U.S. Treasury bills and sovereign bonds	80.0
Inflation-indexed sovereign bonds	3.8

Source: Finance Ministry.

For the PRF portfolio that is directly managed by the fiscal agent, the investment policy that was in effect in 2018 establishes a portfolio composition made up of the following asset classes: sovereign bonds and other government-related assets; and inflation-indexed sovereign bonds (table III.2)^{13/}. The associated benchmark indices are Bloomberg Barclays global indices.

^{12/} Bank deposits.

^{13/} The shares by asset class shown in table III.2 represent a transitional benchmark allocation for the PRF portfolio managed by the Bank.

TABLE III.2
BENCHMARK FOR THE PRF PORTFOLIO MANAGED BY THE CENTRAL BANK
(percent)

Asset class	Share
Sovereign bonds and government-related assets	72.1
Inflation-indexed sovereign bonds	27.9

Source: Finance Ministry.

The ESSF and PRF investment guidelines define eligible currencies, issuers, and instruments as those included in the respective benchmarks, and they exclude any and all instruments from Chilean issuers or denominated in pesos.

Under the current guidelines, the management mandate controls the main portfolio risks through risk budgets. The internally managed ESSF and PRF portfolios establish an ex ante tracking error of 50 basis points (bp) per year.

Finally, the investment guidelines for both funds establish specific rules and limits on exposure, including eligibility criteria for issuers, operations, instruments, and intermediaries and rules on the treatment of derivatives (tables III.4 and III.5 at the end of the appendix).

STRUCTURE OF FISCAL PORTFOLIOS

At year-end 2018, the market value of the ESSF and PRF portfolios managed directly by the fiscal agent was US\$13.2043 billion and US\$6.0541 billion,^{14/} respectively, which is invested in line with the benchmark composition established in the current investment guidelines (table III.3).

^{14/} The market value of the ESSF on 31 December 2018 was US\$14.1338 billion, of which US\$13.2043 billion is managed internally by the Bank, while US\$929.6 million is managed by external portfolio managers under an equity mandate. The market value of the PRF at year-end 2018 was US\$9.6632 billion, of which US\$6.0541 billion was managed internally by the Bank, while US\$3.6092 billion was managed by external portfolio managers under corporate bond and equity mandates.

TABLE III.3
PORTFOLIOS MANAGED BY THE CENTRAL BANK
(US\$ million as of 31 December 2018)

Portfolio / asset class	Market value (1)					Total	Share of total (%)
	USD	EUR	JPY	CHF	Other (2)		
ESSF							
Bank / U.S. Treasury bills and sovereign bonds	5,362.4	3,417.7	2,863.9	1,071.9	n/a	12,715.9	96.3
Inflation-indexed sovereign bonds	355.7	132.7	n/a	n/a	n/a	488.4	3.7
Total	5,718.1	3,550.4	2,863.9	1,071.9	n/a	13,204.3	100.0
PRF							
Sovereign bonds and government-related assets	1,347.1	1,176.8	1,154.8	24.8	700.6	4,404.2	72.7
Inflation-indexed sovereign bonds	676.5	374.1	7.3	0.0	592.0	1,649.9	27.3
Total	2,023.6	1,550.9	1,162.1	24.8	1,292.7	6,054.1	100.0

	Ex ante tracking error (bp)	Risk budget (bp)
ESSF	3.4	50.0
PRF	16.4	50.0

(1) These positions include currency forwards.

(2) Includes the Canadian dollar, Australian dollar, pound sterling, and other currencies.

Source: J.P. Morgan N.A.

REPORTS

The Fiscal Agency Decree and the performance guidelines define the content and frequency of the reports that the Bank must submit to the Finance Minister and the General Treasurer of Chile. As a general rule, the custodian bank, in its middle office role, provides the necessary information for preparing reports. Based on this information, the fiscal agent must report daily, monthly, quarterly, and annually on the status of the resources under management. The daily reports provide information on the market value of each portfolio, under items sorted by currency and asset class. The monthly, quarterly, and annual reports contain more detailed information on the portfolios. These reports describe changes in financial markets, discuss compliance with investment caps, provide details on the changes in the market value of each fund, and report on the absolute and differential returns obtained.

The Central Bank also measures the custodian bank's performance and compliance with the investment guidelines; and monitors and assesses the information provided by the custodian, using its own calculation methods based on systematically recorded information.

The fiscal agent must also report annually to the Finance Minister and the General Treasurer on the custodian bank's performance.

MANAGEMENT RESULTS

In 2018, the ESSF resources managed internally by the Bank generated an absolute return measured in dollars of 0.21%, which implies a positive differential return of 8.8 bp, relative to the benchmark performance, where both returns are calculated using the time-weighted rate of return (TWRR). Using the same methodology, the PRF resources managed by the Bank generated an absolute return measured in dollars of -1.60%, which implies a positive differential return of 10.4 bp relative to the benchmark performance. The depreciation of the majority of the investment currencies against the U.S. dollar had a significant effect on the absolute return of both portfolios. In the case of the ESSF portfolio ESSF managed directly by the fiscal agent, this effect was offset by interest earned in the period, while in the PRF portfolio managed internally by the Bank, interest earned did not offset the negative exchange rate effect.

EXTERNAL MANAGEMENT SELECTION PROCESSES

Through Board Resolution 2130-01-180215, the Bank acknowledged the new strategic asset allocation of the PRF and accepted the Finance Ministry's request for the Bank, as fiscal agent, to gradually implement the new PRF investment policy. In 2018, the Financial Markets Division, with support from an external consultant, carried out two selection processes for contracting external portfolio managers to implement the U.S. agency MBS and high-yield bond mandates.

Based on the assessments formulated during the two selection processes, the Finance Ministry, via Letter 2252 dated 16 November 2018, authorized the Bank to contract BNP Paribas Asset Management USA Inc. and Western Asset Management Company LLC to act as external portfolio managers for the U.S. agency MBS mandate; and BlackRock Institutional Trust Company N.A. and Nomura Corporate Research and Asset Management Inc. as external portfolio managers for the high-yield bond mandate. According to the planned schedule, the start date for investing the new mandates was set for January 2019.

COMPENSATION OF THE FISCAL AGENT

According to the stipulations of Article 9, letter (a), of the Fiscal Agency Decree, the Central Bank is entitled to charge an annual fee for the direct expenses and costs incurred in carrying out its assigned functions.

For the period from 1 January to 31 December 2018, the Finance Ministry set the annual fee at US\$1,153,146.70 for the ESSF and US\$1,115,870.80 for the PRF. These amounts are consistent with the Central Bank's Basic Constitutional Act, which stipulates that the Bank shall not finance the General Treasury. The fees paid to the fiscal agent represent 0.9 bp and 1.8 bp of the total resources managed by the Bank for the ESSF and PRF, respectively.

TABLE III.4
FINANCIAL INSTITUTIONS WITH OUTSTANDING DEPOSITS
(as of 31 December 2018)

Institution
<i>Australia & New Zealand Banking Group Limited</i>
<i>Banco Bilbao Vizcaya Argentaria S.A.</i>
<i>Banco Santander S.A.</i>
<i>Bank Hapoalim B.M.</i>
<i>Bank of China (Hong Kong), Ltd.</i>
<i>Bayerische Landesbank</i>
<i>BNP Paribas</i>
<i>Bred Banque Populaire</i>
<i>China Construction Bank Corporation</i>
<i>Coöperatieve Rabobank U.A.</i>
<i>Credit Agricole Corporate and Investment Bank</i>
<i>DBS Bank, Ltd.</i>
<i>DekaBank Deutsche Girozentrale</i>
<i>DZ Bank A.G. Deutsche Zentral-Genossenschaftsbank</i>
<i>HSBC France</i>
<i>Landesbank Baden-Württemberg</i>
<i>Mizuho Bank, Ltd.</i>
<i>National Bank of Canada</i>
<i>Natixis</i>
<i>Nykredit Bank A/S</i>
<i>Oversea-Chinese Banking Corp, Ltd.</i>
<i>Société Générale</i>
<i>Sumitomo Mitsui Banking Corporation</i>
<i>Sumitomo Mitsui Trust Bank, Ltd.</i>
<i>The Bank of Nova Scotia</i>
<i>The Chiba Bank, Ltd.</i>
<i>The Shizuoka Bank, Ltd.</i>

Source: J.P.Morgan N.A.

TABLE 5
INTERMEDIARIES USED BY THE FISCAL AGENT IN 2018

Institution
<i>ABN Amro Bank N.V., Amsterdam</i>
<i>ANZ Securities Inc., New York</i>
<i>Australia & New Zealand Banking Group Limited, Melbourne</i>
<i>Banco Bilbao Vizcaya Argentaria S.A., Madrid</i>
<i>Bank of Nova Scotia, New York Agency</i>
<i>Barclays Bank Plc.</i>
<i>Barclays Capital Inc.</i>
<i>BMO Capital Markets Corp.</i>
<i>BNP Paribas S.A., Paris</i>
<i>BNP Paribas Securities Corp., New York</i>
<i>CIBC World Markets Corp.</i>
<i>Citigroup Global Markets Inc., New York</i>
<i>Citigroup Global Markets Limited, London</i>
<i>Commerzbank, France</i>
<i>Commonwealth Bank of Australia, Sydney</i>
<i>Cooperatieve Rabobank U.A., Utrecht</i>
<i>Credit Agricole Corporate And Investment Bank (Calyon New York)</i>
<i>Credit Agricole Corporate And Investment Bank (Calyon New Seoul)</i>
<i>Credit Suisse (Head Office), Zurich</i>
<i>Credit Suisse, New York Branch</i>
<i>Daiwa Capital Markets America Inc.</i>
<i>Danske Markets Inc.</i>
<i>Dbs Bank Ltd., Seoul</i>
<i>Dbs Bank Ltd., Singapore</i>
<i>Deutsche Bank A.G., London</i>
<i>Deutsche Bank Securities Inc.</i>
<i>DZ Bank A.G. Deutsche Zentral Genossenschaftsbank, Frankfurt</i>
<i>Goldman Sachs International Bank, London</i>
<i>Goldman, Sachs & Co., Llc.</i>
<i>HSBC Bank Plc (All U.K. Offices), London</i>
<i>HSBC Securities U.S.A Inc., New York</i>
<i>ING Bank N.V., Amsterdam</i>
<i>ING Bank N.V., Seoul</i>
<i>J.P. Morgan Securities Llc., New York</i>
<i>Jefferies International Ltd., London</i>
<i>Jefferies, Llc.</i>

TABLE 5
INTERMEDIARIES USED BY THE FISCAL AGENT IN 2018
continued

Institution
<i>J.P. Morgan Securities Plc.</i>
<i>JP Morgan Chase Bank, N.A., Seoul</i>
<i>Landesbank Baden Wurttemberg, Stuttgart</i>
<i>Merrill Lynch International</i>
<i>Merrill Lynch, Pierce, Fenner & Smith Incorporated</i>
<i>Mizuho Securities USA, Llc.</i>
<i>Morgan Stanley & Co. International Plc., London</i>
<i>Morgan Stanley & Co., Llc.</i>
<i>MUFG Securities Americas Inc.</i>
<i>National Australia Bank Ltd., London</i>
<i>National Bank of Canada Financial Inc., New York</i>
<i>Natixis</i>
<i>NatWest Markets Securities Inc.</i>
<i>Nomura International Plc., London</i>
<i>Nomura Securities International Inc., New York</i>
<i>Nordea Bank AB (Publ.), Stockholm</i>
<i>RBC Capital Markets, Llc.</i>
<i>Scotia Capital (USA) Inc.</i>
<i>Skandinaviska Enskilda Banken AB, New York</i>
<i>Société Générale, New York</i>
<i>Société Générale, Paris</i>
<i>Standard Chartered Bank (All U.K. Offices), London</i>
<i>Standard Chartered Securities Korea Limited, Seoul</i>
<i>Standard Chartered Bank, Singapore</i>
<i>TD Securities (USA), Llc.</i>
<i>The Royal Bank Of Scotland Plc., London</i>
<i>UBS AG, London</i>
<i>UBS Limited, London</i>
<i>UBS Securities Llc., New York</i>
<i>Wells Fargo Securities, Llc.</i>
<i>Westpac Banking Corporation, Sydney</i>
<i>Westpac Banking Corporation, Wellington</i>
<i>Zurcher Kantonalbank, Zurich</i>

Source: Central Bank of Chile.

APPENDIX IV

COLLABORATIVE WORK

PARTICIPATION WITH OTHER INSTITUTIONS

Because the information handled by the Central Bank is fundamental for good decision-making at the national level, the institution participates on a number of commissions and councils where its opinion is needed. These are discussed below.

Commission on Price Distortions

The National Commission on Price Distortions is in charge of investigating the existence of price distortions on imported goods. It is a technical body composed of representatives from public institutions in the economic sector. Its task is to advise the President of Chile on the application of antidumping measures, countervailing duties, and safeguard measures. The Commission operates independently from the Bank, although the Technical Secretariat resides within the Bank as stipulated in Law 18,525. Its functions include gathering background information for investigations, preparing technical reports, channeling communication among the parties involved, and carrying out pertinent notifications.

The Central Bank Board appoints two members and two alternates to sit on the Commission. The members are Francisco Ruiz Aburto and Rodrigo Alfaro Arancibia; their respective alternates are Marcus Cobb Craddock and Beatriz Velásquez Ahern.

In 2018, the Technical Secretary provided support services to the Commission, which met nine times. In the period, the Commission decided to open three investigations and recommended the application of one provisional measure. At year-end, there were no measures in effect.

Chilean Copper Commission (Cochilco)

The Board is responsible for appointing two representatives to Cochilco,^{15/} who serve a two-year term.^{16/}

In 2018, Carmen Gloria Escobar Jofré and Pablo Cristián Mattar Oyarzún were appointed to replace Francisco Ruiz Aburto and Miguel Fuentes Díaz, respectively. In both cases, the term of office runs through 24 October 2020.

Competition Tribunal (TDLC)

The Competition Tribunal (*Tribunal de Defensa de la Libre Competencia*, or TDLC) is made up of five Judges and two Alternates.^{17/} The President of Chile appoints the President of the Tribunal, who must be a certified lawyer, choosing from a list of candidates provided by the Supreme Court following a public call for nominees. The Board of the Central Bank is responsible for appointing a Judge / Legal Counsel and a Judge / Economist, as well as an Alternate Judge / Economist, following a public call for nominees. The Board also provides the President of the Republic with a short list for choosing a Judge / Legal Counsel and a Judge / Economist, as well as an Alternate Judge / Legal Counsel, following a public call for nominees.

Once chosen by the competent authority, the judges are appointed via Executive Decree, issued by the Ministry of Economy, Development, and Tourism and countersigned by the Finance Minister, for a period of six years, with a staggered replacement of judges every two years.

^{15/} Pursuant to paragraph (d) of Article 4 of Decree Law 1349 of 1976.

^{16/} The appointment can be renewed, and it can also be revoked before the end of the two-year term.

^{17/} Article 6 of Statutory Decree N° 1, of 2005, issued by the Ministry of Economy, Development, and Reconstruction (DFL N° 1).

In 2018, the Board issued a public call for nominees for the appointment of two Judges. Under the Tribunal's staggered replacement schedule, the appointments of Jaime Arancibia Mattar as Judge / Legal Counsel and María de la Luz Domper Rodríguez as Judge / Economist would end on 12 May 2018.

The Board appointed Daniela Gorab Sabat as Judge / Legal Counsel and María de la Luz Domper Rodríguez as Judge / Economist. Both appointments are for terms of six years, starting on 12 May 2018, in accordance with Executive Decree 101 issued by the Ministry of Economy, Development, and Tourism on 4 July 2018.

Technical Investment Council (CTI)

The Board is authorized to appoint a member and an alternate to the Technical Investment Council, pursuant to Article 168 of Title XVI of Decree Law 3500 of 1980, on the pension system reform, and Articles 58-E and 58-H of Law 19,728, which establishes mandatory unemployment insurance.

In 2018 the Board appointed Álvaro Andrés Rojas Olmedo as member, replacing Rodrigo Andrés Cerda Norambuena, and Nicolás Gonzalo Álvarez Hernández as alternate, replacing Catherine Carolina Tornel León. Both appointments run through 10 June 2020.

Technical Commission Created under Article 6 of Law 18,480

This Technical Commission is responsible for reviewing applications for reconsideration of the input tax credit for exporters, as stipulated in Article 6 of Law 18,480, which establishes a system for refunding taxes and duties assessed on the cost of inputs for small nontraditional exports.

The members of this Commission will be proposed by the entities they represent and then appointed through a resolution issued by the Ministry of Economy, Development, and Tourism, which must be published in the *Official Gazette*. The Central Bank Board has the capacity to appoint a representative to this Commission, in accordance with the stipulations of Article 6 of the aforementioned law.

In 2018, the Board proposed to the Minister of Economy, Development, and Tourism the appointment of María Pilar Pozo Fraile, to replace Ivette Alejandra Fernández Delgado, as the Bank's representative on this Technical Commission.^{18/} María Isabel Méndez Ferrada serves as alternate.

Technical Commission Created under Article 4 of Law 18,634

This Technical Commission is responsible for reviewing applications for inclusion or exclusion on a list, established by Finance Ministry Decree, of the capital goods covered under Law 18,634, which sets up a scheme for deferred payment of customs duties, tax credits, and other tax benefits.

The Central Bank Board has the capacity to appoint a representative to this Commission, in accordance with the stipulations of Article 4 of the aforementioned law.

In November 2018, María Pilar Pozo Fraile was appointed to serve as the Bank's representative on this Technical Commission, replacing Ivette Alejandra Fernández Delgado. María Isabel Méndez Ferrada was appointed as alternate in 2015.

^{18/} On 29 January 2019, the Ministry of Economy, Development, and Tourism issued Exempt Ministerial Resolution 17, appointing María Pilar Pozo Fraile as the Bank's representative to the Law 18,480 Technical Commission. The resolution was published in the *Official Gazette* on 6 February 2019.

Advisory Commission for Financial Inclusion

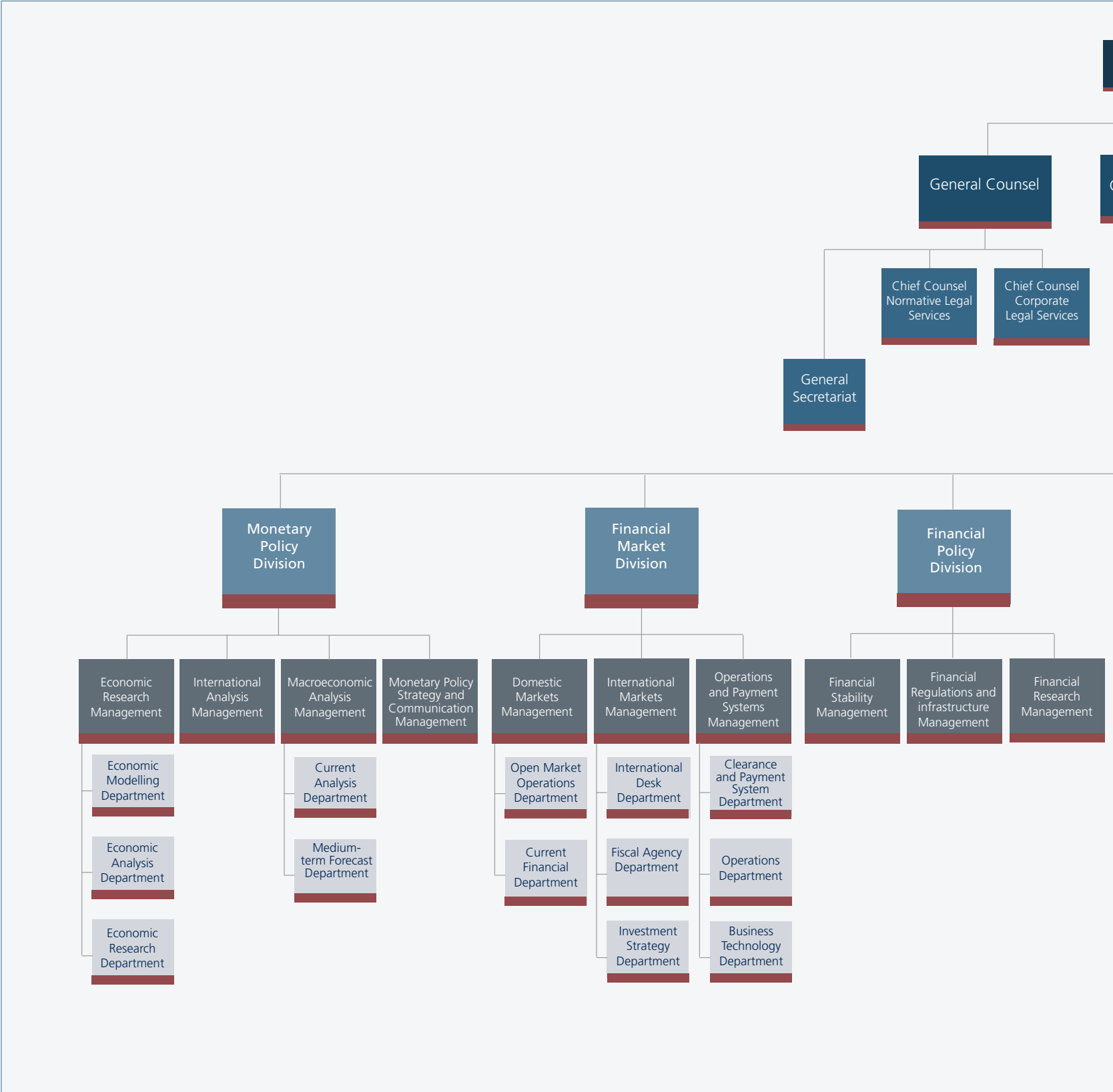
The Bank has representatives from two divisions who participate on this Advisory Commission: Corporate Affairs and Financial Stability. The meetings held over the course of the year were organized around the Commission's three key issues: financial education, access to and use of financial tools, and financial consumer protection.

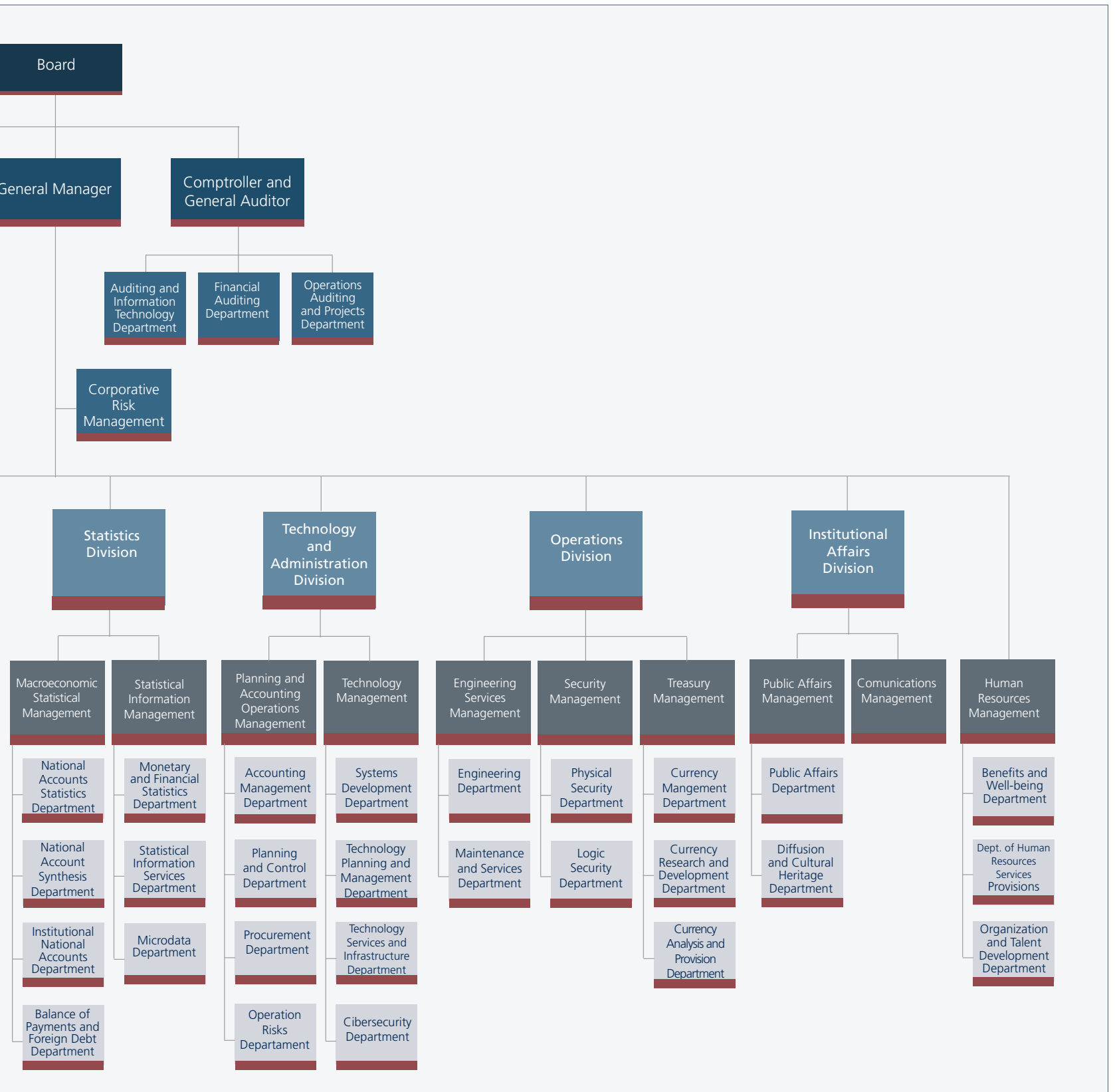
The Bank played an important role as a permanent advisor to the Advisory Commission on Financial Inclusion, which was responsible for formulating the National Financial Education Strategy, which was submitted to President Michelle Bachelet in January 2018. The objective of the National Strategy is to establish a commitment with public and private actors and civic society to achieving a better understanding of financial concepts and products, including those associated with pensions, so as to promote skills and attitudes that contribute to the well-being of families and communities, while also diffusing information on finance-related rights.

Under the coordination of the Finance Ministry, and with the Bank as a permanent advisor, the Commission includes representatives from the Ministry of Social Development, the Ministry of the Economy, the Ministry of Education, and the Ministry of Labor and Social Security. In addition, permanent invitations to participate are extended to the Superintendent of Banks and Financial Institutions, the Chairman of the Financial Market Commission, the Superintendent of Pensions, the Superintendent of Social Security, the Director of the National Consumer Service, the Director of the Social Security Institute, and the Director of the Solidarity and Social Investment Fund.

ORGANIZATIONAL CHART

As of 31 December 2018







FINANCIAL STATEMENTS

FINANCIAL STATEMENTS

AS OF DECEMBER 31, 2018 AND 2017

Statements of Financial Position as of December 31, 2018 and 2017

Assets	Note	2018 MCh\$	2017 MCh\$
Foreign assets		<u>27,892,346.3</u>	<u>24,100,688.4</u>
Reserve assets	7	<u>27,730,639.6</u>	<u>23,982,892.0</u>
Cash and cash equivalents	6	510,999.4	721,878.5
Investment portfolio	7b	26,433,660.9	22,624,191.9
Monetary gold	7c	7,055.5	6,305.8
Special drawing rights (SDR)	7d	522,497.0	473,891.0
Reserve position in the International Monetary Fund (IMF)	7e	255,006.6	154,491.6
Reciprocal loan agreements		-	1,296.8
Other assets		1,420.2	836.4
Other foreign assets:	8	<u>161,706.7</u>	<u>117,796.4</u>
Shares of and contributions to the Inter-American Development Bank (IDB)		91,538.7	80,950.4
Shares of Bank for International Settlements (BIS)	8b	70,168.0	36,846.0
Domestic assets		<u>617,048.6</u>	<u>897,143.8</u>
Domestic loans:	9	<u>160,258.1</u>	<u>302,947.8</u>
Loans to banks and financial institutions		160,258.1	302,947.8
Transactions under specific legal regulations	10	<u>400,351.1</u>	<u>536,360.6</u>
Loan for subordinated liabilities of financial institutions (Laws No. 18,401 and No. 19,396)	10a	88,567.2	231,291.0
General Treasury transfers Law No. 18,401	10b	311,783.9	305,069.6
Other assets		<u>56,439.4</u>	<u>57,835.4</u>
Property, equipment and intangible assets	11 - 12	43,378.5	37,795.4
Other securities		<u>13,060.9</u>	<u>20,040.0</u>
Total assets		<u>28,509,394.9</u>	<u>24,997,832.2</u>

Accompanying notes from 1 to 29 are an integral part of these financial statements.

Statements of Financial Position
as of December 31, 2018 and 2017

Liabilities and equity	Note	2018 MCh\$	2017 MCh\$
Foreign liabilities	13	<u>849,825.0</u>	<u>768,875.8</u>
Accounts with international organizations		58,012.6	52,250.6
Special drawing rights (SDR) allocations		791,809.5	716,583.5
Reciprocal loan agreements		2.9	41.7
Domestic liabilities		<u>31,419,899.0</u>	<u>30,012,292.9</u>
Monetary base	14	<u>11,295,937.6</u>	<u>11,105,786.6</u>
Banknotes and coins in circulation		9,475,030.3	8,970,283.8
Deposits from financial institutions (Domestic currency)		1,820,907.3	1,527,426.8
Deposits for technical reserves		-	608,076.0
Deposits and obligations	15	<u>6,219,183.6</u>	<u>4,046,317.0</u>
Deposits and obligations with General Treasury		869,433.3	317,897.9
Other deposits and obligations		5,349,750.3	3,728,419.1
Notes issued by Banco Central de Chile	16	<u>13,884,907.1</u>	<u>14,836,683.8</u>
Banco Central de Chile discountable promissory notes (PDBC)		6,449,710.0	5,100,493.5
Banco Central de Chile bonds in Chilean pesos (BCP)		3,079,209.5	3,669,482.4
Banco Central de Chile bonds in UF (BCU)		4,309,285.2	5,996,960.3
Optional indexed coupons (CERO) in UF		32,735.7	51,121.4
Indexed promissory notes payable in coupons (PRC)		13,958.9	18,618.4
Other		7.8	7.8
Other liabilities		<u>19,870.7</u>	<u>23,505.5</u>
Provisions	17	19,678.1	20,168.1
Other securities		192.6	3,337.4
Equity		<u>(3,760,329.1)</u>	<u>(5,783,336.5)</u>
Capital	18	(5,711,088.2)	(4,216,670.8)
Other reserves		64,417.6	17,101.8
Retained earnings		<u>1,886,341.5</u>	<u>(1,583,767.5)</u>
Total liabilities and equity		<u>28,509,394.9</u>	<u>24,997,832.2</u>

Accompanying notes from 1 to 29 are an integral part of these financial statements.

Statements of Comprehensive Income
for the years ended December 31, 2018 and 2017

	Note	2018 MCh\$	2017 MCh\$
Net gain from investment portfolio	19 a	<u>306,703.1</u>	<u>145,095.3</u>
Interest income (expense)		<u>384,111.5</u>	<u>246,291.5</u>
Interest income		384,132.8	246,294.4
Interest expenses		(21.3)	(2.9)
Fee and commission income (expense)		<u>(400.3)</u>	<u>47.9</u>
Fee and commission income		1,704.1	2,053.8
Fee and commission expense		(2,104.4)	(2,005.9)
Income (expense) from sale of investments		<u>(86,708.1)</u>	<u>(72,329.2)</u>
Income from sale of investments		32,531.6	76,013.5
Expense from sale of investments		(119,239.7)	(148,342.7)
Other income (expense)		<u>9,700.0</u>	<u>(28,914.9)</u>
Other net income (expense) from investments		9,700.0	(28,914.9)
Net (loss) gain from other foreign transactions	19 b	<u>(6,713.0)</u>	<u>(3,018.4)</u>
Interest expense		<u>(7,377.5)</u>	<u>(3,760.8)</u>
Interest expenses		(7,377.5)	(3,760.8)
Other income (expenses)		<u>664.5</u>	<u>742.4</u>
Net loss from domestic transactions	20	<u>(668,815.9)</u>	<u>(659,350.5)</u>
Interest and adjustment income (expense)		<u>(672,740.7)</u>	<u>(661,731.3)</u>
Interest income and adjustments		19,561.3	23,992.7
Interest expense and adjustments		(692,302.0)	(685,724.0)
Other income and expenses		<u>3,924.8</u>	<u>2,380.8</u>
Gain (loss) from foreign exchange transactions	21	<u>2,340,128.0</u>	<u>(972,497.1)</u>
Gain from foreign exchange transactions		4,976,167.2	2,097,624.5
Loss from foreign exchange transactions		(2,636,039.2)	(3,070,121.6)
Issuance, distribution and processing costs	22	<u>(23,242.4)</u>	<u>(35,125.1)</u>
Issuance, distribution and processing costs		(23,242.4)	(35,125.1)
Personnel and administrative expenses		<u>(57,664.2)</u>	<u>(56,789.5)</u>
Personnel expenses		(37,317.3)	(36,723.2)
Administrative expenses		(18,493.1)	(18,158.1)
Provision for post-employment benefits	17	(1,853.8)	(1,908.2)
Other (expenses) income		<u>(4,054.1)</u>	<u>(2,082.2)</u>
Depreciation and amortization	11-12	(2,766.0)	(2,754.0)
Taxes and contributions		(668.0)	(639.8)
Other		(620.1)	1,311.6
Profit (loss) for the year		<u>1,886,341.5</u>	<u>(1,583,767.5)</u>
Other comprehensive income		<u>115,831.3</u>	<u>6,312.6</u>
Other comprehensive (loss) income that will not be reclassified to profit or loss		<u>3,151.1</u>	<u>(55.9)</u>
Fair value adjustments to equity instruments		3,105.1	-
Actuarial (loss) gain in provision for post-employment benefits		46.0	(55.9)
Other comprehensive (loss) income that will be reclassified to profit or loss		<u>112,680.1</u>	<u>6,368.5</u>
Fair value adjustments to debt instruments		112,680.1	6,368.5
Total comprehensive income		<u>2,002,172.7</u>	<u>(1,577,454.9)</u>

Accompanying notes from 1 to 29 are an integral part of these financial statements.



STATEMENTS OF CHANGES IN EQUITY
for the years ended December 31, 2018 and 2017

	Capital MCh\$	Actuarial gain or loss reserve MCh\$	Fair value reserve MCh\$	Retained earnings MCh\$	Total equity MCh\$
Balance as of January 1, 2017	<u>(1,983,898.1)</u>	<u>81.6</u>	<u>10,707.6</u>	<u>(2,232,772.7)</u>	<u>(4,205,881.6)</u>
Total comprehensive income					
Loss for the year	-	-	-	(1,583,767.5)	(1,583,767.5)
Other comprehensive income	-	<u>(55.9)</u>	<u>6,368.5</u>	-	<u>6,312.6</u>
Total comprehensive income	-	<u>(55.9)</u>	<u>6,368.5</u>	<u>(1,583,767.5)</u>	<u>(1,577,454.9)</u>
Capitalization of 2016 deficit	<u>(2,232,772.7)</u>	-	-	<u>2,232,772.7</u>	-
Balance as of December 31, 2017	<u>(4,216,670.8)</u>	<u>25.7</u>	<u>17,076.1</u>	<u>(1,583,767.5)</u>	<u>(5,783,336.5)</u>
Balance as of January 1, 2018	<u>(4,216,670.8)</u>	<u>25.7</u>	<u>17,076.1</u>	<u>(1,583,767.5)</u>	<u>(5,783,336.5)</u>
Impact of the adoption of IFRS 9			(68,515.4)	89,350.1	20,834.7
Restated balances as of January 1, 2018	<u>(4,216,670.8)</u>	<u>25.7</u>	<u>(51,439.3)</u>	<u>(1,494,417.4)</u>	<u>(5,762,501.8)</u>
Total comprehensive income					
Profit for the year	-	-	-	1,886,341.5	1,886,341.5
Other comprehensive income	-	<u>46.0</u>	<u>115,785.2</u>	-	<u>115,831.2</u>
Total comprehensive income	-	<u>46.0</u>	<u>115,785.2</u>	<u>1,886,341.5</u>	<u>2,002,172.7</u>
Capitalization of 2017 deficit	<u>(1,494,417.4)</u>	-	-	<u>1,494,417.4</u>	-
Balance as of December 31, 2018	<u>(5,711,088.2)</u>	<u>71.7</u>	<u>64,345.9</u>	<u>1,886,341.5</u>	<u>(3,760,329.1)</u>

Accompanying notes from 1 to 29 are an integral part of these financial statements.

STATEMENTS OF CASH FLOWS
for the years ended December 31, 2018 and 2017

	Note	2018 MCh\$	2017 MCh\$
Cash flows from operating activities			
Foreign reserves		<u>(1,034,724.4)</u>	<u>2,175,144.8</u>
Investment portfolio		(1,371,499.5)	1,841,366.9
Interests and commissions received for international reserves		338,585.3	328,254.3
Interests paid in foreign transactions		(18.4)	(3.0)
Taxes paid for investments in reserves		(3,034.9)	(3,178.4)
Cash receipts for reciprocal loan agreements		1,215.2	8,639.1
Interest receipts for reciprocal loan agreements		29.6	66.8
Interest payments for reciprocal loan agreements		(1.7)	(0.9)
Domestic assets		<u>296,233.2</u>	<u>(147,862.8)</u>
Cash receipts (disbursements) for loans to banks and financial institutions		142,585.9	(290,291.2)
Interests and adjustments received for loans to financial institutions		717.1	425.0
Cash receipts for subordinated obligation with financial institutions		88,907.1	79,459.7
Interests and adjustments received for subordinated obligations		64,023.1	62,543.7
Domestic liabilities		<u>144,172.1</u>	<u>(2,173,790.5)</u>
Redemption of notes issued		(1,208,454.4)	(188,198.0)
Interests and adjustments paid for notes issued		(342,004.0)	(702,152.6)
Increase in deposits and obligations in domestic currency		933,572.7	854,440.5
Interests and adjustments paid for deposits and obligations		(81,172.9)	(60,422.2)
Increase (decrease) in deposits and obligations in foreign currency		842,230.7	(2,077,458.2)
Other cash flows		<u>(55,989.2)</u>	<u>(85,882.9)</u>
Cash payments for goods and services		(82,056.4)	(94,574.5)
Net cash flows for arbitrage of currencies		14,141.1	5,982.9
Cash receipts as fiscal agent and other income		3,853.6	3,479.5
Movements in international organizations		8,072.5	(770.8)
Net cash used in operating activities		<u>(650,308.3)</u>	<u>(232,391.4)</u>

Accompanying notes from 1 to 29 are an integral part of these financial statements.

STATEMENTS OF CASH FLOWS
for the years ended December 31, 2018 and 2017 (continued)

	Note	2018 MCh\$	2017 MCh\$
Cash flows from investing activities			
Movements, IMF		(104,681.1)	(13,542.9)
Dividends received, BIS	8b	642.4	825.7
Proceeds from sale of property and equipment		3.9	22.7
Acquisition of property and equipment	11	(6,319.7)	(2,815.4)
Acquisition of intangible assets	12	<u>(2,075.4)</u>	<u>(1,459.2)</u>
Net cash used in investing activities		<u>(112,429.9)</u>	<u>(16,969.1)</u>
Cash flows from financing activities			
Net increase in banknotes and coins in circulation		<u>504,746.5</u>	<u>318,452.6</u>
Net cash generated from financing activities		<u>504,746.5</u>	<u>318,452.6</u>
Changes in cash and cash equivalents		<u>(257,991.7)</u>	<u>69,092.1</u>
Effect of exchange rate fluctuations on cash and cash equivalents		47,372.4	(31,941.5)
Cash and cash equivalents as of January 1		<u>722,015.7</u>	<u>684,865.1</u>
Cash and cash equivalents as of December 31	6	<u>511,396.4</u>	<u>722,015.7</u>

Accompanying notes from 1 to 29 are an integral part of these financial statements



NOTES TO THE FINANCIAL STATEMENTS

as of December 31, 2018 and 2017

Introduction

As indicated in Note 2 on Summary of significant accounting policies, the financial statements of *Banco Central de Chile* were prepared in accordance with the "Policies of presentation and preparation of financial reports of Banco Central de Chile" approved by the Banco Central de Chile's Board, which are consistent with *International Financial Reporting Standards* (IFRS), as issued by the *International Accounting Standards Board* (IASB).

International Financial Reporting Standards comprise the IFRS and *International Accounting Standards* (IAS) issued by the IASB, which are effective at the reporting date.

Banco Central de Chile has adopted IFRS 9 "Financial Instruments" starting from January 1, 2018 -its mandatory application date-, which supersedes IAS 39 "Financial Instruments: Recognition and Measurement."

The requirements of this new standard represent a significant change with respect to the previous standard. These changes translate into amendments to the classification and valuation criteria for financial instruments with respect to those applied in the prior accounting period, whose impact on these financial statements is explained in Note 4 "Accounting changes."

Note 1

INCORPORATION AND DESCRIPTION OF BUSINESS

Banco Central de Chile was formed on August 22, 1925, by Decree Law 486. *Banco Central de Chile* is a constitutionally autonomous entity, has full legal capacity, its own assets and indefinite duration, created in accordance with Articles 108 and 109 of the Political Constitution of Chile and ruled by its Basic Constitutional Act.

Banco Central de Chile's objective is to monitor the stability of both the Chilean currency and the normal functioning of domestic and foreign payments.

In order to meet its objectives, *Banco Central de Chile* regulates the amount of money and credit in circulation, executes credit transactions and international exchange, and dictates regulations on monetary credit, and financial and international exchange matters.

Additionally, *Banco Central de Chile* is exclusively empowered to issue banknotes and to mint coins.

Banco Central de Chile is domiciled in Santiago de Chile, and its main office is located at 1180 Agustinas street.

Note 2

SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES

(a) Basis of preparation of the financial statements

These financial statements have been prepared in conformity with the criteria approved by the Banco Central de Chile's Board, pursuant to Resolution 1456-01 dated 15 January 2009 and 1519-01 dated 14 January 2010, and 1867-01 dated 20 November 2014 and Resolution 2205-02 dated January 24, 2019, having a favorable report by the Superintendence of Banks and Financial Institutions, pursuant to Section

75 of Banco Central de Chile's Basic Constitutional Act. The policies approved by the Board are consistent with International Financial Reporting Standards (IFRS), as issued by the International Accounting Standards Board (IASB).

The presentation of these financial statements is framed within an economic and accounting framework that fairly reflects the financial position of *Banco Central de Chile*, and at the same time, contributes to the economic analysis of Banco Central de Chile's transactions by clearly identifying whether they are undertaken by domestic or foreign agents. With this information it is possible to determine Banco Central de Chile's share in the domestic supply of monetary and credit assets and the related effects on Banco Central de Chile's foreign creditor position. For this reason, the economic concepts of international reserves and currency issuance are shown under the captions reserve assets and monetary base liabilities, respectively.

The translation of these financial statements is provided as a free translation from the Spanish language original, which is the official and binding version. Such translation has been made solely for the convenience of non-Spanish readers.

(b) Accounting basis of accrual and measurement

These financial statements are prepared on an accrual basis of accounting, except for cash flow information. The basis of measurement is the historical cost basis except for transactions with financial instruments measured at fair value, for which the Bank uses the fair value as reference.

The methods used to measure fair values are presented in note 3.

(c) Functional and presentation currency

As Banco Central de Chile's main objective is to monitor the stability of the Chilean currency, which implies that open-market transactions play a significant role in the development of the monetary policy, being its main activity the issuance of banknotes and coins. The Chilean peso has been defined as the functional and presentation currency for the financial statements. The amounts in such statements are stated in millions of Chilean pesos, while the amounts of these notes are stated in millions of Chilean pesos or U.S. dollars, as applicable, rounded to the nearest decimal.

(d) Transactions in foreign currency and foreign currency translation

Banco Central de Chile's functional currency is the Chilean peso. Consequently, all balances and transactions denominated in currencies other than the Chilean peso are considered to be denominated in a "foreign currency". The balances of the financial statements expressed in these currencies are translated into Chilean pesos as follows:

- (i) U.S. dollars are translated into Chilean pesos at the closing date "observed U.S. dollar" exchange rate pursuant to Section 44 of the Basic Constitutional Act, that governs *Banco Central de Chile*, referred to under No. 6 of Chapter I in the "General Provisions" of the *Compendium of Foreign Exchange Regulations (Compendio de Normas de Cambios Internacionales)*.
- (ii) Assets and liabilities stated in Chilean minted gold, are valued at the average London morning quotation of the "Gold Fixing" rate (U.S. dollars per fine troy ounce), in the morning of the closing business day of the financial statements.
- (iii) Translation of foreign currencies other than the U.S. dollar is done at the exchange rates effective at the reporting date, which are always based upon the period-end "observed U.S. dollar" rate.
- (iv) Special Drawing Rights (SDR) are adjusted for at the exchange rates for each of the business days of the month, reported by *Banco Central de Chile*, except for the last business day of the month in which the exchange rate reported by the International Monetary Fund (IMF) is considered.

Gains or losses from the purchase and sale of foreign currency, as well as the differences arising from the update of the balances in foreign currency, as a result of the variation of the exchange rates of such foreign currencies compared to the Chilean peso, are recorded as gains or losses for the year.

The principal exchange rates used as of each year-end are as follows:

	2018 Ch\$	2017 Ch\$
United States dollar (observed exchange rate)	695.69	615.22
Euro	795.89	735.21
Canadian dollar	509.74	488.81
Australian dollar	488.58	479.37
Special drawing rights (SDR)	967.56	876.16

(e) Statement of cash flows

The following factors are taken into account when preparing the statement of cash flows:

- (i) Cash flows: cash and cash equivalents inflows and outflows. Cash equivalents are highly-liquid short-term investments and low risk of changes in value, as: deposits in foreign banks and cash balances in foreign currency and deposits in domestic banks.
- (ii) Operating activities: correspond to normal activities carried out by *Banco Central de Chile* and other activities that cannot be classified as investing or financing activities.
- (iii) Investing activities: correspond to the acquisition, disposal or disposition by other means of long-term assets and other investments not included in cash and cash equivalents.
- (iv) Financing activities: these activities generate changes in the size and composition of net equity and liabilities that are not part of operating or investing activities.

(f) Financial assets and financial liabilities

- (i) Initial recognition and measurement

Financial assets and financial liabilities are recognized in the statement of financial position if and only if they become a part of the contractual provisions of such instrument. Financial assets and financial liabilities are initially measured at fair value, including, in the case of a financial asset or financial liability not recognized at fair value through profit or loss, the transaction costs that are directly attributable to the acquisition.

- (ii) Derecognition

The Bank derecognizes a financial asset when the contractual rights to the cash flows from the asset expire, or it transfers the rights to receive the contractual cash flows in a transaction in which substantially all of the risks and rewards of ownership of the financial asset are transferred, or where it neither transfers nor retains substantially all of the risks and rewards associated with the ownership and does not retain control over the assets transferred.

The Bank derecognizes financial liabilities when the obligation specified in the contract is discharged or canceled, or expires

- (iii) Offsetting

Financial assets and financial liabilities are offset so that the Bank presents in the statement of financial position the net amount when *Banco Central de Chile* has a legal right to offset the amounts and intends either to settle them on a net basis or to realize the asset and settle the liability simultaneously.

- (iv) Classification and subsequent measurement

The accounting policy included in IFRS 9, on the classification and measurement of financial assets and financial liabilities, is applicable starting from January 1, 2018.

Banco Central de Chile classifies its financial assets on the basis of its business model for asset management and the cash flow characteristics. At initial recognition, a financial asset is classified as at:

- Amortized cost.
- Fair value through other comprehensive income.

- Fair value through profit or loss.

Financial assets are not reclassified after their initial recognition, unless the Bank changes its business model with a model to manage financial assets, in which case all financial assets affected are reclassified on Day 1 of the first reporting period following the change in the business model.

The definition of each classification is indicated below.

a) Amortized cost: a financial asset is measured at amortized cost if both of the following conditions are met:

- The financial asset is held within a business model the objective of which is to hold financial assets to collect the contractual cash flows; and
- The contractual terms of the financial asset give rise, on specified dates, to cash flows that are solely payments of principal and interest on the principal amount outstanding.

These assets are subsequently measured at amortized cost using the effective interest method. The amortized cost is reduced for impairment losses. Interest revenue, foreign currency gains or losses, and impairment losses are recognized in profit or loss. Any gain or loss from the sale of a financial asset is recognized in profit or loss.

b) Fair value through other comprehensive income (FVTOCI) if both of the following conditions are met and if it is not measured at fair value through profit or loss:

- The financial asset is held within a business model whose objective is achieved by collecting contractual cash flows and selling financial assets.
- Cash flows correspond only to payments of principal and interest.

These assets are subsequently measured at fair value. Interest revenue calculated through the effective interest method, gains or losses from foreign exchange transactions, and impairment losses, are recognized in profit or loss. Other net gain or losses are recognized in other comprehensive income. Any gain or loss from the sale of a financial asset is recognized in profit or loss.

At initial recognition of an investment in an equity instrument which is not held for trading, the Bank may make an irrevocable election, at initial recognition, to present subsequent changes in fair value in other comprehensive income. This election is made separately for each investment.

c) Fair value through profit or loss (FVTPL): residual category for assets not meeting the aforementioned classifications.

These assets are subsequently measured at fair value. Net gains or losses, including any interest revenue or dividends, are recognized in profit or loss.

Banco Central de Chile classifies all its financial liabilities as subsequently measured at amortized cost, except for derivatives that are liabilities, which are measured at fair value.

(v) Business model assessment

Banco Central de Chile performs an assessment, at portfolio level, of the business model under which the Bank holds financial assets. The objective of this assessment is to reflect how the Bank manages its investments. The information considered in the assessment is as follows:

- The policies and objectives established in the investment portfolio, and operation of such policies in practice. These policies and objectives include if the Bank's strategy is focused on collecting interest revenue, maintaining an interest yield profile, or coordinating the lifespan of financial investments to the lifespan of liabilities or expected cash outflows, or obtaining cash flows from the sale of those assets.
- How the Bank assesses the performance of the investment portfolio and this is reported to the Bank's key management personnel;

- The risks affecting the performance of the business model and investments held, and how such risks are managed.
- The frequency, value, and timing of the sales of financial instruments comprising the portfolio in prior periods, the rationale for those sales, and the expectations on future sales.

(vi) Assessment of whether the contractual cash flows are solely payments of principal and interest

For the purposes of this assessment, 'principal' is defined as the fair value of the financial asset at initial recognition. 'Interest' is defined as the consideration for the time value of money, for the credit risk associated with the principal amount outstanding during a particular period of time and for other basic lending risks and costs (e.g., liquidity risk and administrative costs), as well as a profit margin.

In assessing whether the contractual cash flows are solely payments of principal and interest, the Bank considers the instrument's contractual terms. This includes assessing whether a financial assets has a contractual cash flow feature which changes the timing or the amount of contractual cash flows so that it would not meet such condition. In performing this assessment, the Bank considers:

- Contingent events which would may change the amount or the timing of cash flows;
- Terms which may adjust the contractual coupon, including variable-rate features;
- Prepayment and extension features;
- Terms limiting the Bank's right to cash flows from specific assets (e.g., 'non-recourse' features).

A prepayment feature is consistent with the criterion of solely payments of principal and interest if the prepayment amount represents substantially unpaid amounts of principal and interest on the principal amount outstanding, which may include reasonable additional compensation for the early termination of the contract. In addition, for a financial asset acquired at a discount or premium of its contractual nominal amount, a feature which allows or requires the prepayment of an amount which substantially represents the contractual nominal amount plus accrued (unpaid) contractual interests (which may include reasonable additional compensation for early termination) is treated as consistent with this criterion if the fair value of the prepayment feature is insignificant at initial recognition.

(vii) Derivative financial instruments

Financial derivative contracts are initially recognized in the statement of financial position at fair value at the date on which the contract is entered into.

Derivative contracts are entered into to hedge the investment portfolio's risk exposure (currency and interest rate risk), and not specific assets. These are recognized as assets when their fair value is positive, and as liabilities when their fair value is negative.

Banco Central de Chile does not use accounting hedges; accordingly, when entering into a derivative instrument, this is accounted for as held-for-trading derivative instrument (measured at fair value through profit or loss)

(viii) Securities lending

Banco Central de Chile has a securities lending program with custodian banks for international reserves. Such program consists of lending securities owned by *Banco Central de Chile* to primary dealers, obliging them to constitute a collateral higher than the amount of the instrument lent, as applicable. Securities lent are not derecognized from the statement of financial position and their control is held in off-balance accounts.

(ix) Investment in equity instruments

Banco Central of Chile has chosen the irrevocable option of presenting in other comprehensive income the subsequent changes in the fair values of investments in equity securities which, are within the scope of IFRS 9, and not held for trading.

These assets are subsequently measured at fair value. Dividends are recognized as income in profit or

loss unless the dividend clearly represents a recovery of part of the cost of the investment. Other net gain or losses are recognized in other comprehensive income and are never reclassified in profit or loss.

(g) REPO transactions

Purchase transactions of credit instruments under repurchase “REPO” agreements (liquidity injection transactions) are classified and measured at amortized cost at the effective rate basis (caption Loans to banks and financial institutions). For such transactions, *Banco Central de Chile* recognizes the cash disbursement and constitutes a right (asset), initially measured at the price agreed or reimbursement amount, which relates to its fair value. Collateral received (securities purchased) are not recognized in the statement of financial position.

(h) Cash and cash equivalents

For the presentation of the statements of financial position and cash flows, the Bank recognizes correspondent banks abroad, current accounts of external managers, cash balances in foreign currency and domestic correspondents as cash and cash equivalents.

(i) Monetary and non-monetary gold

Investments in monetary gold refer to the gold held by monetary authorities as reserve assets (central banks). *Banco Central de Chile* believes that the most appropriate treatment for this type of assets, in conformity with the hierarchy established by IFRS, derives from the application of the Conceptual Framework for Financial Reporting issued by the IASB.

Consequently, investments in monetary gold are recognized at their fair value at initial recognition. Subsequent to initial recognition, gains or losses from changes in fair value measured by the quotation obtained from the London Stock Exchange, are directly recognized in the statement of income.

Non-monetary gold is included as part of historical artistic and/or cultural heritage assets and is measured on a historical cost basis.

(j) Property, equipment and intangible assets

Property and equipment are mainly measured at acquisition cost, net of accumulated depreciation and any accumulated impairment losses. The goods that have met their useful life are stated at their residual value considering market reference prices. Depreciation is calculated on a straight-line basis.

Intangible assets are measured at acquisition cost, net of accumulated amortization and any accumulated impairment losses. Amortization is calculated on a straight-line basis.

Depreciation and amortization for 2018 and 2017 have been calculated considering the following estimated useful lives:

	Year	
	2018	2017
Buildings	50 a 80	50 a 80
Premises	10 a 20	10 a 20
Furniture and other equipment	5 a 10	5 a 10
Computer equipment	3 a 5	3 a 5
Vehicles	5	5
Intangible assets	5	5

This caption comprises historical artistic and/or cultural heritage assets: Banknote and coin collection and works of art owned by the Bank. Because IFRS do not establish a specific accounting treatment for historical artistic and/or cultural heritage assets, it has been understood that the most appropriate treatment following the hierarchy established in IFRS, would be the application of Public Sector Accounting Standards (IPSAS), as IPSAS do address these items.

Under the acquisition method, the initial cost for a banknote and coin collection and works of art correspond to: (i) the acquisition cost when the asset is purchased, (ii) the amount of the donation when the asset is donated or (Ch\$1) when the cost is not reliable. Historical artistic and/or cultural heritage assets for non-operating use are not subject to depreciation.

(k) Impairment of financial assets

Financial assets

The Bank recognizes a loss allowance account for expected credit losses on:

- Financial assets measured at amortized cost;
- Debt investments measured at fair value through other comprehensive income; and contract assets.

The Bank measures loss allowance accounts at an amount equal to the lifetime expected credit losses; except for the following, when they are measured at the amount of the twelve-month expected credit losses.

- Debt instruments determined to have low credit risk at the reporting date; and
- Other debt instruments and bank balances for which credit risk (i.e., the risk of a default occurring over the expected life of the financial instrument) has not increased significantly from initial recognition.

In determining whether the credit risk on a financial instrument has increased significantly from initial recognition in estimating expected credit losses, the Bank considers reasonable and sustainable information that is available without undue cost or effort. This includes quantitative and qualitative information and analyses, based on the Bank's historical experience and an informed credit assessment including forward-looking assessments.

The Bank quantitatively assumes that the credit risk of a financial asset has significantly increased if it is 30 days past due.

The Bank considers a financial asset to be in default when:

- It is not probable that the borrower or issuer will pay or meet their credit obligations in full, without actions by the Bank to recover the amount such as the performance of the guarantee (if any); or
- The financial asset is past due for more than 90 days.

Expected credit losses are the probability-weighted estimate of credit losses. Credit losses are measured as the present value of cash shortfalls (i.e., the difference between the cash flow due to the entity under the contract, and the cash flows that the Bank expects to receive).

Expected credit losses are discounted using the effective interest rate of the financial asset.

At each reporting date, the Bank assesses whether the financial assets recorded at amortized cost and debt instruments at fair value through other comprehensive income are credit-impaired. A financial asset is 'credit-impaired' if one or more events that have a detrimental impact on the estimated future cash flows of that financial asset have occurred. Evidence that a financial asset is credit-impaired include the following financial data from the issuer or borrower:

- A breach of contract, such as a default or event of default of more than 90 days;
- The borrower or issuer will probably enter in bankruptcy or another form of financial reorganization; or
- The disappearance of an active market for that financial asset because of financial difficulties.

Banco Central de Chile uses the "expected credit loss" model, using the standard risk model: $ECL=PD*LG D*EAD$

- ECL: Expected Credit Loss (Ch\$)
- PD: Probability of Default (%)
- LGD: Loss Given Default (%)
- EAD: Exposure at Default (Ch\$)

The impairment model is applicable to financial assets measured at amortized cost or at fair value through other comprehensive income (FVTOCI), except for investments in equity securities. Loss estimates will be measured using one of the following bases:

- 12-month expected credit losses: These are expected credit losses that may result from events of default within 12 months subsequent to the reporting date. If at the reporting date, the credit risk of a financial instrument has not significantly increased from initial recognition, *Banco Central de Chile* will measure the loss allowance at an amount equal to 12-month expected credit loss.
- Expected credit losses over the lifespan of the financial asset. These refer to expected credit losses resulting from possible default events during the lifespan of a financial instrument.

The amount of expected credit losses or reversals will be recognized as an impairment gain or loss in profit or loss. However, the allowance for the asset for losses account associated with assets measured at FVTOCI should be recognized in other comprehensive income and it will not reduce the carrying amount of the financial asset.

Non-financial assets

The carrying amount of non-financial assets is revised at each reporting date to determine whether there is any indication of impairment. If such indications, exist, then the recoverable amount of the asset is estimated.

For impairment testing, assets are grouped together into the smallest group of assets that generates cash inflows from continuing use that are largely independent of the cash inflows of other assets or cash-generating units (CGUs).

The recoverable amount of an asset or CGU is the higher of its value in use and its fair value less costs to sell. Value in use is based on the estimated future cash flows, discounted at their present value using a pretax discount rate that reflects current market assessments of the time value of money and the risks specific to the asset or CGU.

An impairment loss is recognized if the carrying amount of an asset or CGU exceeds its recoverable amount.

(I) Employee benefits

Short-term benefits

Short-term employee benefits are recognized as expenses when the service is rendered on an accrual basis. An obligation is recognized for the expected amount payable if *Banco Central de Chile* has a present legal or constructive obligation to pay this amount as a result of past service provided by the employee and the obligation can be estimated reliably.

Long-term benefits

The Bank recognizes long-term benefits using an actuarial valuation method which considers demographic and financial variables (projected unit credit method). It is measured at the present value of all future payments using an annual discount interest rate, affected by the expected employment term and life expectancy of beneficiaries.

- Post-employment benefits correspond to employee benefits which are payable after the completion of employment in *Banco Central de Chile*, as stipulated in the collective agreement between *Banco Central de Chile* and the Labor Union of *Banco Central de Chile*.
- Other long-term employee benefits include: all employee benefits other than short-term benefits, benefits after the employment term and severance indemnity payments.

The actuarial calculation is based on the following assumptions:

- Mortality rate: for 2018 the *Banco Central de Chile* used the RV-2014 (RV-2014 for 2017) mortality table to determine the expected lives in the calculation of benefits associated with severance indemnity payments, post-employment benefits associated with the retirement plan's health plan and benefits of the Former Association of Retired Employees and Beneficiaries of Pensions of Public Officials of *Banco Central de Chile*.
- Employee turnover: The probabilities of remaining an employee of *Banco Central de Chile* were calculated on the basis of the tables prepared by *Banco Central de Chile* organized in tranches by years of service.
- Salary growth rate: calculated as the annual average composed of the salary growth rate for a five-year period of 5.46% (2017: 5.71%).
- Discount rate: *Banco Central de Chile* used the nominal rate for BCP instruments at 10 years at the calculation date. For 2018, the discount rate was 4.40% (2017: 4.62%).

(m) Provisions and contingent liabilities

Provisions are liabilities for which there exists uncertainty related to their timing or amount. These provisions are recognized in the statement of financial position when both of the following requirements are met:

- A present obligation arising from past events; and
- At the reporting date of the financial statements it is probable that an outflow of resources embodying economic benefits will be required to settle the obligation; and a reliable estimate of the amount of the obligation can be made.

When an outflow of economic benefits is not probable, or when it is not possible to obtain a reliable measurement of the obligation, the Bank discloses a contingent liability.

(n) Revenue and expense recognition

The most relevant criteria used by *Banco Central de Chile* for recognizing revenue and expenses in the financial statements are:

Interest revenue and expenses are recognized based on the accrual period, applying the effective interest method except for interests for assets classified as FVTPL where the interest revenue is recognized on a straight-line basis using the coupon rate.

Fee and commission revenue and expenses and other revenue from the rendering of services are recognized in profit or loss over the period in which services are rendered.

Non-financial revenue, costs and expenses are recognized to the extent that economic events occur so that they are systematically recorded in the related accounting period.

Revenue and expenses from changes in the fair value of financial assets measured at fair value are reported in other comprehensive income (equity) and will be recognized in profit or loss at the date of disposal, except for changes in fair value for assets classified at FVTPL which are directly charged to profit or loss.

(o) Use of estimates and judgments

The preparation of financial statements requires management to make judgments, estimates and assumptions that affect the application of accounting policies and the reported amounts of assets, liabilities, income and expenses. Actual results may differ from these estimates.

Estimates and underlying assumptions are reviewed on an ongoing basis by Banco Central de Chile's senior management in order to quantify some assets, liabilities, income, expenses and uncertainties. The changes from accounting estimates are recognized in the period in which the estimate is revised and in any future periods affected.

In particular, information about significant areas of estimation uncertainty and critical judgments in applying accounting policies that have the most significant effect on the amounts recognized in the financial statements are described in the following notes:

- Note 2(j) Property, equipment, and intangible assets, determination of useful life, depreciation or amortization and residual value.
- Note 3 Methodology applied for the measurement of fair value.
- Note 10(c) *Caja Central de Ahorros y Préstamos* and *Asociación Nacional de Ahorro y Préstamo*.
- Note 17 Provisions, including severance indemnity and post-employment benefits.

(p) New accounting pronouncements

A number of new accounting standards are applicable to annual periods beginning on or after January 1, 2019. Early adoption is permitted. However, the following standard and amendments has not been early adopted by *Banco Central de Chile* in preparing these financial statements.

IFRS 16 "Leases"

Beginning on January 1, 2019, the Bank must adopt IFRS 16, which replaces the following guidelines on leases: IAS 17 "Leases", IFRIC 4 "Determining whether an Arrangement Contains a Lease," SIC 15 "Operating Leases – Incentives," SIC 27 "Evaluating the Substance of Transactions Involving the Legal Form of a Lease." The main effects of such standards applies to the lessee accounting, mainly because of the removal of the dual model of accounting: operating or finance lease, i.e., the lessee should recognize a "right to use an asset" and a liability for the lease (the present value of future payments of leases). For the lessor, the standard maintains the current practice, i.e., lessor continues to classify finance and operating leases. In accordance with the analysis of contracts entered into by the Bank and the potential impact of adopting this standard, the Bank concluded that it does not need to recognize a right-to-use asset and a lease liability because all the lease contracts held by *Banco Central de Chile* as lessee are revocable agreements, and the assets subject to such use contracts are low-value assets for asset and liability levels maintained by the Bank. Accordingly, the Bank will continue recognizing lease payments as expenses on a straight-line basis throughout the term of the contract.

Additionally, other standards have been issued but are not yet effective, which address matters that neither affect nor will affect the Bank's current transactions.

Note 3

METHODOLOGY APPLIED FOR THE MEASUREMENT OF FAIR VALUE

The methodology for the calculation of fair value is applied to financial instruments held as foreign investments, classified as securities at fair value through profit or loss, instruments at fair value through equity, and instruments at amortized cost.

The fair value of international reserve securities is classified by level as shown in Note 7:

- Level 1, fair value measurements using quoted prices (unadjusted) in active markets for identical assets and liabilities, for which the Bank has the ability to access at the measurement date.
- Level 2, inputs other than quoted prices included within Level 1 that are observable for the asset or liability, either directly or indirectly.

- Level 3, fair value measurements using unobservable inputs for the asset or liability.

For financial assets and financial liabilities not recognized at fair value, fair value will be disclosed collectively in groups to allow comparison with the related carrying amounts, as shown in Note 7 (f).

Note 4

CHANGES IN ACCOUNTING POLICIES

Banco Central de Chile has initially applied IFRS 9 (4.1) and IFRS 15 (4.2) beginning on January 1, 2018. Certain other standards also become effective beginning on January 1, 2018, but they have no significant impact on the Bank's financial statements.

Because of the transition method adopted by *Banco Central de Chile* for applying these standards, the comparative information included in these financial statements has not been restated to reflect the requirements of such new standards.

4.1 Application of IFRS 9 Financial Instruments

Banco Central de Chile has adopted IFRS 9 "Financial Instruments" issued in July 2014 and effective for annual periods beginning on or after January 1, 2018. IFRS 9 requirements represent a significant change with respect to IAS 39 "Financial Instruments: Recognition and Measurement."

Banco Central de Chile adopted the exemption that allows it not to restate comparative information from prior periods referred to changes in classification and measurement (including impairment). Differences in carrying amounts of financial assets and financial liabilities arising from the adoption of IFRS 9 are recognized in retained earnings as of January 1, 2018. Accordingly, the information presented for 2017, in general, does not reflect the requirements of IFRS 9 and, accordingly, its measurement is not comparable to information for 2018.

Impact on equity related to the application of IFRS 9 as of January 1, 2018.

Concept::	(Millions of Chilean pesos)
Impairment under IFRS 9	(5,538.4)
Adjustment at fair value, BIS shares	26,373.1
Net increase in equity	20,834.7

The main changes related to the adoption of IFRS 9 are as follows:

i. Classification and measurement of financial assets and financial liabilities

IFRS 9 includes a new approach to classify and measure financial assets, which reflects the business model under which the assets are managed, as well as the nature of cash flows.

The standard includes three main categories to classify financial assets: measured at amortized cost, at fair value through other comprehensive income (FVTOCI), or at fair value through profit or loss (FVTPL). The standard eliminates the existing categories under IAS 39, held to maturity, loans and receivables, and available for sale.

The Bank's financial liabilities are not affected by the application of IFRS 9 with respect to their current accounting treatment, which results in all financial liabilities being measured at amortized cost except for financial derivatives.

The table below shows the former classification/measurement categories under IAS 39 and the new measurement categories under IFRS 9 for each type of financial asset as of January 1, 2018.

Classification/measurement of financial assets as of 01-01-2018

	Ref.	IAS 39		IFRS 9	
		Classification/measurement	Amount	Classification/measurement	Amount
Reserve assets:			MCh\$		MCh\$
Cash		Loans receivable	721,878.5	Amortized cost	721,878.5
Investment portfolio	a)	FVTPL	19,569,596.6	FVTPL	81,527.5
	a)	Available for sale	1,492,666.8	FVTOCI	19,552,196.1
	a)	Held to maturity	1,562,764.9	Amortized cost	2,988,685.5
Monetary gold		FVTPL	6,305.8	FVTPL	6,305.8
SDR			473,891.0		473,891.0
Position in the IMF			154,491.6		154,491.6
Reciprocal loan agreements	b)	Loans receivable	1,296.8	Amortized cost	662.5
Other assets	c)	Non-financial assets	-	Non-financial assets	836.4
Subtotal			23,982,892.0		23,980,474.9
Other foreign assets			MCh\$		MCh\$
BID shares	d)	Available for sale/Amortized cost	80,950.4	FVTOCI	80,950.4
BPI shares	d)		36,846.0		63,219.1
Subtotal			117,796.4		144,169.5
Domestic assets:			MCh\$		MCh\$
Loans to banks			302,947.8		302,947.8
Credit with SAOS S.A.	e)	Amortized cost	231,291.0	Amortized cost	231,258.0
General Treasury transfers	e)		305,069.6		301,981.3
Subtotal			839,308.4		836,187.1

FVTPL: fair value through profit or loss.

FVTOCI: fair value through other comprehensive income.

Reconciliation of the carrying amount of financial assets under IAS 39 to under IFRS 9 as of 01-01-2018

Items	Ref.	IAS 39	Impact of application of IFRS 9		IFRS 9
		Carrying amount MCh\$	Reclassification MCh\$	Remeasurement (impairment) MCh\$	Carrying amount MCh\$
i) Reserve assets:					
FVTPL					
PD FVTPL	a)	19,569,596.6	(19,488,069.1)	-	81,527.5
Monetary gold		6,305.8	-	-	6,305.8
FVTPL		19,575,902.4	-	-	87,833.3
FVTOCI					
PD FVTOCI	a)	-	19,552,196.1	-	19,552,196.1
FVTOCI		-	-	-	19,552,196.1
Held to maturity					
PD Held to maturity	a)	1,562,764.9	1,427,703.3	(1,782.7)	2,988,685.5
Amortized cost		1,562,764.9	-	-	2,988,685.5
Available for sale					
PD Available for sale	a)	1,492,666.8	(1,492,666.8)	-	-
FVTPL		1,492,666.8	-	-	-
Loans and receivables					
Cash		721,878.5	-	-	721,878.5
SDR		473,891.0	-	-	473,891.0
Position in the IMF		154,491.6	-	-	154,491.6
Reciprocal loan agreements	b)	1,296.8	-	(634.3)	662.5
Amortized cost		1,351,557.9	-	-	1,350,923.6
Other assets					
Recoverable taxes	c)	-	836,4	-	836,4
Non-financial assets		-	-	-	836,4
Subtotal		23,982,892.0	-	(2,417.0)	23,980,474.9
ii) Other foreign assets					
Available-for-sale / amortized cost					
Shares of the Inter-American Development Bank (IDB)	d)	80,950.4	-	-	80,950.4
Shares of Bank for International Settlements (BIS)	d)	36,846.0	-	26,373.1	63,219.1
FVTOCI		117,796.4	-	-	144,169.5
Subtotal		117,796.4	-	26,373.1	144,169.5

Reconciliation of the carrying amount of financial assets under IAS 39 to under IFRS 9 as of 01-01-2018 (continued)

iii. Domestic assets:					
Loans and receivables					
Loans to banks		302,947.8	-	-	302,947.8
Loan with SAOS	e)	231,291.0	-	(33.0)	231,258.0
General Treasury transfers	e)	305,069.6	-	(3,088.3)	301,981.3
Amortized cost		839,308.4	-		836,187.1
Subtotal		839,308.4	-	(3,121.3)	836,187.1
Total carrying amount/ IFRS 9 impact i)+ii)+iii)		24,939,996.8	-	20,834.7	24,960,831.5

I.P.: Investment portfolio.

FVTPL: Fair value through profit or loss.

FVTOCI: Fair value through other comprehensive income.

The following references explain how applying new classifications under IFRS 9 implied reclassifications and remeasurements to calculate the final carrying amounts:

a) Investment portfolio (I.P.)

Banco Central de Chile has reclassified its investments mainly as "Fair value through other comprehensive income" (FVTOCI), because these investments are framed within a mixed business model, the objective of which is achieved by obtaining contractual cash flows and selling financial assets. Additionally, the Bank has estimated that instruments that are classified as FVTOCI are simple debt instruments which comply with the SPPI (Solely Payments of Principal and Interest) the "SPPI test" defined in IFRS 9.

In general, new classifications have implied that investments held in the portfolio are classified as follows:

	IAS 39	IFRS 9
Bonds and notes (nominal and inflation-adjusted)	FVTPL	FVTOCI
Discounted commercial paper (Treasury notes)		
Short-term bonds issued by BIS		
Floating rate notes		
Derivative instruments (FX and/or Futures)		FVTPL
Mortgage-backed securities		
Commercial paper	Available-for-sale	Amortized cost
Short-term investments at fixed rate with BIS		
Collective investments through BIS (BISIP)		FVTPL
Term and overnight deposits	Held-to-maturity	Amortized cost



The new classification FVTOCI will imply that all fair value gains and losses should be presented in other comprehensive income and recognized in profit or loss upon disposal.

Investments classified at FVTPL are investments the cash flow structure of which does not comply with the SPPI test.

The change in remeasurement affects instruments classified at amortized cost and relates to the impairment estimate of term deposits and commercial paper amounting to MCh\$1,782.7.

b) Reciprocal loans

The change in remeasurement relates to the estimation of impairment on reciprocal loans with countries that are members of ALADI, which amounts to MCh\$634.3.

c) Other assets

Relates to the reclassification of taxes recoverable associated with the investment portfolio, which do not relate to financial assets.

d) IDS and BIS Shares

Banco Central of Chile has made the irrevocable option of presenting in other comprehensive income the subsequent changes in fair values of investments in equity securities which, being within the scope of IFRS 9, are not held for trading. The aforementioned option will imply the recognition of the dividends from such investments in profit or loss.

This remeasurement relates to the adjustment of the fair value of shares maintained in BIS, which implied an increase of MCh\$26,373.1. For IDS shares, the Bank established that the best fair value reference for this type of financial asset is the acquisition cost, because such shares are not held for trading and have no active market.

e) Loan with SAOS and General Treasury transfers

The change in remeasurement relates to the estimation of impairment on both receivables for MCh\$3,121.3.

ii. Impairment of financial assets

IFRS 9 replaces the “incurred loss” model of IAS 39 with the “expected credit loss” (ECL) model. This will require considerable judgment with respect to how changes in economic factors affect ECL, which will be determined on a weighted average basis.

The new impairment model will be applicable to financial assets measured at amortized cost or classified at fair value through other comprehensive income, except for investments in equity securities. Under IFRS 9, loss estimates are measured using one of the following bases:

- 12-month expected credit losses: These are expected credit losses that may result from default events within 12 months subsequent to the reporting date; and
- Lifetime expected credit losses: These are expected credit losses that may result from potential default events during the useful life of the financial instrument.

Reconciliation of allowance for impairment of financial assets from IAS 39 to IFRS 9 as of 01-01- 2018

Amortized cost	Ref.	IAS 39	Decrease in assets MCh\$	Decrease in retained earnings MCh\$	IFRS 9
		Allowance MCh\$			Allowance MCh\$
Cash	a)	-	-	-	-
I.P. at FVTOCI	a)	-	-	(14,716.6)	(14,716.6)
I.P. held to maturity	a)	-	(1,782.7)	-	(1,782.7)
SDR	a)	-	-	-	-
Position in the IMF	a)	-	-	-	-
Reciprocal Loans	a)	(8.2)	(634.3)	-	(642.6)
Subtotal reserve assets		(8.2)	(2,417.0)	(14,716.6)	(17,141.9)

Amortized cost	Ref.	IAS 39	Decrease in assets MCh\$	Decrease in retained earnings MCh\$	IFRS 9
		Allowance MCh\$			Allowance MCh\$
Loans to banks	b)	-	-	-	-
Loan with SAOS	b)	-	(33.0)	-	(33.0)
General Treasury transfers	b)	-	(3,088.3)	-	(3,088.3)
National Savings and Loan System (SINAP)	b)	(1,211,447.4)	-	-	(1,211,447.4)
Subtotal domestic assets		(1,211,447.4)	(3,121.3)	-	(1,214,568.7)
Total allowance for impairment		(1,211,455.6)	(5,538.4)	(14,716.6)	(1,231,710.6)

The following references explain how applying the new impairment approach based on expected losses affected financial assets on the application date of IFRS 9:

a) Reserve assets:

The effect resulting from the application of the expected loss model on assets measured at amortized cost implied a decrease of MCh\$2,417.0 in such assets.

The effect resulting from the application of the expected loss model on assets measured at FVTOCI implied a decrease of MCh\$14,716.6 in retained earnings.

Banco Central de Chile has estimated that if an investment in a debt instrument involved a low credit risk as of the date of initial application of IFRS 9, it is assumed that the asset credit risk recorded no significant increase from its initial recognition.

The impairment calculation estimate is within Bucket 1, which recognizes "Expected losses within the next 12 months." When no allowance for impairment (cash, SDRs and position in the IMF) has been determined, it is because these items record a counterparty risk close to zero, or a guarantee covering the related risk exists.

b) Domestic assets:

The effect resulting from the application of the expected loss model on assets measured at amortized cost implied a decrease of MCh\$3,121.3 in such assets.

The impairment calculation estimate is within Bucket 1, which recognizes "Expected losses within the next 12 months", except for the impairment of the National Savings and Loan System (SINAP) item (see Note 10 c), which is recorded in Bucket 3. For loans to banks, a provision equal to 0 has been determined, because such loans relate to repurchase agreements (REPOS), where Banco Central de Chile maintains a guarantee greater than 100% for each operation.

iii. Reconciliation of retained earnings to other comprehensive income

The reconciliation of "Retained Earnings" (RE) to "Other Comprehensive Income" (OCI) resulting from the application of IFRS 9 as of January 1, 2018, is detailed as follows:

	RE	OCI	Net effect
	MCh\$	MCh\$	MCh\$
Balances as of January 1, 2018 (IAS 39)	(1,583,767.5)	17,076.1	
Concepts:			
Reclassification of financial assets	109,605.1	(109,605.1)	-
Fair value of shares issued by BIS	-	26,373.1	26,373.1
Impairment at amortized cost	(5,538.4)	-	(5,538.4)
Impairment at FVTOCI	(14,716.6)	14,716.6	-
Effect of the application of IFRS 9	89,350.1	(68,515.4)	20,834.7
Balances as of January 1, 2018 (IFRS 9)	(1,494,417.4)	(51,439.3)	

iv. Transition

Banco Central de Chile has elected the exemption that allows it to not restate comparative information from prior periods concerning changes in classification and measurement (including impairment). The differences in carrying amounts of financial assets and liabilities arising from the adoption of IFRS 9 were recognized in retained earnings (accumulated deficit) as of January 1, 2018.

On the basis of the facts and circumstances that existed at the date of initial application, the following assessments were conducted:

- The determination of a business model in which a financial asset is held.
- The designation and revocation of prior designations of certain financial assets and financial liabilities as measured at fair value through profit or loss.
- The designation of certain investments in equity instruments not held for trading as measured at fair value through other comprehensive income.

4.2 Application of IFRS 15 Revenue from Contracts with Customers

The Bank's revenue mainly arises from financial instruments in accordance with IFRS 9, the effects of which have been described in Section 4.1 of this note. However, as a result of IFRS 15 entering into force, *Banco Central de Chile* reviewed its contracts related to other income that are within the scope of this standard and conducted an analysis based on the five steps required, concluding that all contracts analyzed involve the rendering of financial services, whose sole performance obligation relates to rendering each service, and accordingly, no effects on revenue recognition exist from the application of IFRS 15.

Note 5

FINANCIAL INSTRUMENT RISKS

The goal of *Banco Central de Chile* is to monitor the stability of the Chilean currency; i.e. maintain a low and stable inflation rate over time. Additionally, the Bank promotes the stability and effectiveness of the financial system, safeguarding the normal performance of internal and external payments.

In order to meet that goal, *Banco Central de Chile* has its international reserves, liquid assets in foreign currency which are mainly comprised of financial instruments that are traded and kept in custody abroad such as bonds and government notes, bank deposits, among others.

Additionally, *Banco Central de Chile* implements its monetary policy through the definition of an objective level for the nominal inter-bank interest rate, known as the Monetary Policy Rate (*Tasa de Política Monetaria*, TPM in Spanish). In order for the inter-bank rate to be determined at this level, *Banco Central de Chile* regulates the availability of liquidity (or reserves) of the financial system through several financial instruments related to the management of debt and open-market transactions made by the local market through the issuance of notes and term deposits received.

Banco Central de Chile's financial risks are related to those risks arising from managing the asset and liability portfolio and their effect on the Bank's equity. Such risks can be classified as: Market risk, Credit risk, Liquidity risk, and Operational risk.

Financial risk management is established and based on general policies approved by Banco Central de Chile's Board of Directors. In this respect, the definition of guidelines and assets and debt exposure limits are proposed to the General Management and the Council for the Management of the Financial Markets Division for their approval.

International Market Management and Domestic Market Management, which report to the Financial Markets Division, are responsible for implementing the policies established by the Board. While, within the same hierarchical line, the Management of Operations and Payment Systems records, processes and performs the settlement of transactions. Additionally, they manage the information systems in which these are carried out.

Corporate Risk Management monitors the compliance with the established limits, measures management results and risks and reports them to the Manager of the Financial Markets Division and the General Management. In addition, the Bank's Controllershship, which reports directly to the Board, assesses the effectiveness and efficiency of the internal control, risk management and governance of the financial asset and liability portfolio process.

Finally, Banco Central de Chile's Audit and Compliance Committee, which is an external advisor entity for the Board, is responsible, among other functions, for reporting on the effectiveness of the systems and the internal control procedures used in the financial asset and liability portfolio management, and assesses the reliability, integrity and timeliness of the information of the financial statements.

(a) Market risk

Market risk is the risk of potential losses from changes affecting the price or final value of a financial instrument or group of financial instruments. Risks are identified mainly by fluctuations in currencies and interest rates. Market risk affecting the *Banco Central de Chile* statement of financial position is dominated by international reserves mainly due to the increased volatility of currencies composing their investments, while for liabilities, the greatest impact arises from fluctuations in the inflation-adjusted unit which impacts the long-term debt.

Market risk of international reserves is limited by the investment policy establishing maturity and composition margins of currencies around referential parameters of the portfolios and through the diversification of currencies, securities and investment periods. Market risk is monitored through the daily term and detail by currency and through the follow-up of Value at Risk (VaR) and risk related to the Referential Buyer (Tracking Error or TE).

Table 5.1 sets out the different monitored market risk measurements.

TABLE 5.1
MARKET RISK, INVESTMENT PORTFOLIO AS OF DECEMBER 31, 2018 AND 2017

		2018	2017
Amount (MCh\$)*		24,255,746.1	21,576,765.5
Length (Months)*	Portfolio	21.5	22.4
	Departure	-2.5	-1.5
Breakdown by currency (%)	US\$	63.5	63.5
	EUR	17.2	16.6
	JPY	0.5	0.3
	Other	18.8	19.6
VaR** Internal Investment Portfolio	Absolute (%)	1.9	1.6
	Tracking Error (b.p.)	12.5	9.2
VaR** External Investment Portfolio Blackrock***	Absolute (%)	3.4	3.1
	Tracking Error (bp)	25.8	53.9
VaR** External Investment Portfolio Amundi***	Absolute (%)	3.3	2.9
	Tracking Error (bp)	71.9	65.2

Source: BCCh.

* The amounts correspond solely to the Investment Portfolio portion within the International Reserves. We do not consider amounts related to the Cash Portfolio or Other Assets.

** Value at Risk (VaR) and Tracking Error (TE): a parametric estimate methodology for VaR is used through a portfolio decomposition in risk factors related to changes in currencies, fiscal rates and spread. For those factors, we have developed a variance and covariance matrix, using a data window of 550 days, with an exponential decline factor of 0.94. The VaR is presented with a confidence level of 84%, equivalent to a standard deviation. VaR and TE are measured in US dollars and are presented relative to the Investment Portfolio.

For open-market transactions, this risk is mainly associated with changes in the market value of bonds and promissory notes issued by *Banco Central de Chile*, and the change in value of collaterals received in liquidity injection transactions. For collaterals the risk of value loss is mitigated by using margins and haircuts that write-down their value and allow the effective amount lent to be lower than the collateral received. For the placement of bonds and promissory notes, risk is mitigated in line with the provisions in current legislation contained in the Compendium of Financial Regulations ruling the placement and adjudication of debt that contemplates the use of competitive bidding processes among financial institutions. Upon issuance of instruments, the main risk is associated with changes in inflation that affect bonds issued in UF.

Monitored market risk indicators include the term and currency of notes issued. Tables 5.2 and 5.3 show such indicators.

TABLE 5.2
STRUCTURE AND RISK OF THE DEBT PORTFOLIO OF BANCO CENTRAL DE CHILE AS OF DECEMBER 31, 2018.

Instrument	MCh\$	% UF	Holding period (months)
Short-term	6,449,710.0	-	1.4
Long-term	7,435,197.1	60.9	58.3
Total	13,884,907.1	32.6	31.9

Source: BCCh.

TABLE 5.3
STRUCTURE AND RISK OF THE DEBT PORTFOLIO OF BANCO CENTRAL DE CHILE AS OF DECEMBER 31, 2017.

Instrument	MCh\$	% UF	Holding period (months)
Short-term	5,100,724.8	-	0.8
Long-term	9,735,959.0	62.3	52.2
Total	14,836,683.8	40.9	35.1

Source: BCCh.

(b) Credit risk

Credit risk is the risk of potential losses due to a counterparty failing to make a payment. The main source of risk arises from the investments in international reserves in debt instruments issued by foreign countries and financial institutions. A second source of credit risk comes from open market transactions and facilities that provide liquidity to the domestic financial system (*Repo*, *FLI* and *FPL*).

For international investments, the credit risk is mitigated by controls and limits established in the investment policies considering limits by type of risk (Sovereign, Supranational, Agencies and Banking), by type of instrument, issuer and counterparty, risk management of brokers and custodians. Additionally, the Company considers restrictions and controls by credit ranking related to the issuer of the instrument, which is calculated using the average ratings obtained from Fitch, Moody's, Standard and Poor's and DBRS; if only two ratings are available, the lowest will prevail; and in the event of only one rating is available, such rating will be used.

Tables 5.4 and 5.5 show the breakdown of reserves by credit rating and type of risk.

TABLE 5.4
BREAKDOWN OF THE INVESTMENT PORTFOLIO ACCORDING TO CREDIT RISK AS OF DECEMBER 31, 2018.

Credit rating	Type of credit risk (%)				Total
	Agency	Banking	Sovereign	International	
AAA	0.2	0.3	73.0	12.6	86.1
AA+, AA, AA-	0.0	0.4	6.9	0.0	7.3
A+, A, A-	0.0	1.4	5.1	0.0	6.5
BBB+	0.0	0.0	0.1	0.0	0.1
Total	0.2	2.1	85.1	12.6	100.0

Source: BCCh.

TABLE 5.5
BREAKDOWN OF THE INVESTMENT PORTFOLIO ACCORDING TO CREDIT RISK AS OF DECEMBER 31, 2017.

Credit rating	Type of credit risk (%)				Total
	Agency	Banking	Sovereign	International	
AAA	0.8	0.0	80.5	3.1	84.4
AA+, AA, AA-	0.0	1.0	7.2	0.0	8.2
A+, A, A-	0.0	1.3	4.4	0.0	5.7
BBB+	0.0	0.0	1.7	0.0	1.7
Total	0.8	2.3	93.8	3.1	100.0

Source: BCCh.

Credit risk associated with open-market transactions and facilities that inject liquidity into the local financial system (*Repo, FLI, FPL*) is mitigated by requiring collaterals eligible according to their credit quality, which are valued at market prices at the time of their receipt and subject to the application of discounts or haircuts according to the instrument specific characteristics.

As of December 31, 2018, the Bank recorded Permanent Liquidity Facility (FPL) operations of Ch\$160,258.1 million. The average amount for 2018 was Ch\$6,944.4 million for FPL, collateralized through instruments issued by *Banco Central de Chile* and the General Treasury.

Table 5.6 and 5.7 shows the credit risk exposures related to the open-market transactions and facilities. We can identify that such risk is mitigated by the required collaterals, where *Banco Central de Chile* and General Treasury's securities are eligible.

TABLE 5.6
AVERAGE EXPOSURE OF FPL DURING 2018 AND 2017.

	Average amounts (MCh\$)	
	2018	2017
Gross exposure	6,944.4	9,065.3
Collaterals:		
PDBC	(413.4)	(3,507.6)
BCCh bonds	(2,346.6)	(5,205.6)
BTP Bonds	(4,316.4)	(486.2)
Net exposure	(132.0)	(134.1)

Source: BCCh.

TABLE 5.7
AVERAGE EXPOSURE OF REPO TRANSACTIONS DURING 2018 AND 2017.

	Average amounts (MCh\$)	
	2018	2017
Gross exposure	-	448.7
Collaterals:		
PDBC	-	(1.1)
BCCh bonds	-	(442.3)
BTP Bonds	-	(10.8)
Net exposure	-	(5.5)

Source: BCCh.

Table 5.8 shows the credit risk exposures associated with the swap purchase transactions. Note that such risk is mitigated through the guarantees required.

TABLE 5.8
AVERAGE EXPOSURE OF SWAP DURING 2018 AND 2017.

	Average amounts	
	2018	2017
Gross exposure (ThUS\$)	-	82.2
Collateral:		
Cash (MCh\$)	-	(51.2)

Source: BCCh.

(c) Liquidity risk

Liquidity risk is the risk of not being able to settle an instrument or incurring losses when it is necessary to sell it due to a lack of market depth.

To reduce liquidity risk of the international reserves, a portfolio is mainly structured comprising fixed income securities traded in secondary markets of high liquidity and depth, and to a lesser extent short-term deposits in international commercial banks, with different due dates. The most liquid tranche includes instruments from the United States and Germany, as well as, overnight and weekend transactions, representing 65.9% of the internal investment portfolio in 2018 and 67.9% in 2017.

For open-market transactions, this risk relates to the possibility of issuing bonds and promissory notes or rolling them over in the primary market at prices that are too high compared to securities with similar characteristics traded in the secondary market. This type of risk is mitigated through the provisions in current legislation contained in the Compendium of Financial Regulations that governs the placement and adjudication of debt and by monitoring both secondary and primary markets and their institutions. In the event of a decrease in demand for its securities, the *Banco Central de Chile* could pay its maturities by issuing cash.

For further information on maturities for Banco Central de Chile's financial liabilities, see Note 16 to these financial statements.

Tables 5.9 and 5.10 show a summary of the results of the granting of bonds and promissory notes for 2018 and 2017.

TABLE 5.9
RESULTS OF THE BIDDING OF DEBT INSTRUMENTS OF *BANCO CENTRAL DE CHILE*
AS OF DECEMBER 31, 2018.

Instrument	Amount granted in Ch\$ million	Demand	Award	Bidding rate	Market rate	Spread (bp)
PDBC	60,850,000.0	155.6%	95.4%	2.59%	2.58%	1.0
BCP	-	-	-	-	-	-

Source: BCCh.

TABLE 5.10
RESULTS OF THE BIDDING OF DEBT INSTRUMENTS OF *BANCO CENTRAL DE CHILE*
AS OF DECEMBER 31, 2017

Instrument	Amount granted in Ch\$ million	Demand	Award	Bidding rate	Market rate	Spread (bp)
PDBC	53,770,000.0	150.4%	99.9%	2.69%	2.72%	(3.0)
BCP	-	-	-	-	-	-

Source: BCCh.

(d) Operational risk related to the financial instrument management

Operational risk is defined as the risk of loss resulting from inadequate or failed internal processes, people and systems or from external events that prevent the normal performance of processes related to the financial instrument management.

The internal organization in *Banco Central de Chile* enables for an appropriate implementation of the design of processes related to financial instruments management, considering segregation of duties and responsibilities.

Consequently, the International Investments Management and Domestic Market Management with the Operations and Payment Systems Management, which report to the Financial Markets Division, are responsible for making investments and their settlement, respectively. The Corporate Risk Management, reporting to the General Management, is responsible for issuing the performance and financial risks and ensure the compliance with investment limits.

Each management involved in the processes related to the financial instrument management, manages and controls its own operational risks. However, the Accounting Management and Planning supports the divisions in the identification, analysis, evaluation and treatment of risks through a methodology that measures the inherent risk based on its feasibility and impact, and in the assessment of the residual risk we measure the effectiveness of the corresponding controls, in order to reduce the impact and/or possibility of occurrence. In addition, we track the action plans related to the risk management system and the business continuity system, including the results arising from the regular tests performed to ensure that the mechanisms developed to face contingency situations are working properly.

The Banco Central de Chile's Controllershship, which reports directly to the Board, reviews regulatory compliance, the existence of an appropriate internal control environment and security of the information technology applications and infrastructure, as well as several issues related to governance, risks management, information and communication.

In addition, we have computer applications operating with market quality standards and we carried out initiatives to improve operational continuity, maintaining an alternate operation site to ensure the operation in case of problems with the physical infrastructure of the building and an external processing site in case of eventual technological failures which could affect its main technological processing site. The aforementioned elements ensure that the decision-making and management evaluation process within *Banco Central de Chile* are appropriately defined.

Note 6

CASH AND CASH EQUIVALENTS

The detail of balances under cash and cash equivalents and their reconciliation to the statement of cash flows at each year-end is as follows:

	2018 MCh\$	2017 MCh\$
Correspondent banks abroad (*)	490,016.6	705,107.5
Current accounts of external managers (*)	19,729.7	16,242.6
Foreign currency (*)	1,253.1	528.4
Domestic correspondents (**)	<u>397.0</u>	<u>137.2</u>
Total cash and cash equivalents	<u>511,396.4</u>	<u>722,015.7</u>

(*) These are included in the caption "Cash" in the Statement of Financial Position

(**) These are included in the caption "Other Securities"

Note 7

RESERVE ASSETS AND FAIR VALUES

(a) Reserve assets

Reserve assets are liquid assets in foreign currency held by *Banco Central de Chile*. They are instruments supporting monetary and foreign exchange policies, in order to meet Banco Central de Chile's objective of safeguarding currency stability and the normal functioning of internal and external payment systems. Reserve assets comprise those external assets under the control of the monetary authority, which can dispose them immediately in order to fund the imbalances of the balance of payments and to indirectly regulate the magnitude of those imbalances.

Reserve assets

- Cash: relates to balances held in current accounts with foreign banks and cash balances in foreign currency.
- Investment portfolio: Relates to instruments eligible for investment and is composed of a portion directly managed by *Banco Central de Chile* (Internal Investment Portfolio) and other lower portion managed by external managers (External Investment Portfolio) through mandates approved by the Board.
- Monetary gold: corresponds to gold held as international reserve, expressed in Chilean minted gold, valued at the average quotation of the London Gold Fixing (U.S. dollar per fine troy ounce) and the differences arising from updating the gold positions are recorded as profit or loss for the year.
- Special drawing rights (SDR) correspond to reserve assets, equivalent to foreign currencies, assigned by the International Monetary Fund (IMF) to the member countries proportionally to the installment paid and valued in Chilean pesos considering the current parity reported by the International Monetary Fund.
- Reserve position in the International Monetary Fund (IMF): corresponds to the net difference between the assets (payments made to the IMF for subscription, and loans granted by *Banco Central de Chile* to the IMF for the participation in the financing program "New Arrangement to Borrow" (NAB) and liabilities (deposits maintained by the IMF in domestic currency) and is classified as an investment at amortized cost, measured at the cost indexed to Special Drawing Rights (SDR).
- Reciprocal Loan Agreements (debit): represent the amount owed to *Banco Central de Chile* by the central banks comprising Aladi's Agreement on Reciprocal Payments and Credits for the exports made by Chilean entities through such method. Their classification corresponds to non-derivative financial instruments, measured at amortized cost using the effective interest method.

This caption includes international reserves held by *Banco Central de Chile* and is detailed as follows:

	2018 MCh\$	2017 MCh\$
Cash	510,999.4	721,878.5
Investment portfolio:	26,433,660.9	22,624,191.9
Instruments at fair value through OCI	21,456,837.3	19,552,444.2
Instruments at amortized cost	4,889,155.0	2,990,220.1
Instruments at fair value through profit or loss	87,668.6	81,527.6
Monetary gold	7,055.5	6,305.8
Special drawing rights (SDR)	522,497.0	473,891.0
Reserve position in the International Monetary Fund (IMF)	255,006.6	154,491.6
Reciprocal loan agreements	-	1,296.8
Other assets	1,420.2	836.4
Total reserve assets	27,730,639.6	23,982,892.0

	2018 MUS\$	2017 MUS\$
Cash	734.5	1,173.4
Investment portfolio:	37,996.3	36,774.1
Instruments at fair value through OCI	30,842.5	31,781.2
Instruments at amortized cost	7,027.8	4,860.4
Instruments at fair value through profit or loss	126.0	132.5
Monetary gold	10.1	10.2
Special drawing rights (SDR)	751.1	770.3
Reserve position in the International Monetary Fund (IMF)	366.6	251.1
Reciprocal loan agreements	-	2.1
Other assets	<u>2.0</u>	<u>1.4</u>
Total reserve assets	<u>39,860.6</u>	<u>38,982.6</u>

As of December 31, 2018 and 2017, the distribution of investments in foreign currencies by currency is as follows:

	2018 MCh\$	2017 MCh\$
U.S. dollar	18,099,530.5	15,481,136.5
Euro	4,174,846.5	3,588,688.5
Other currencies	<u>5,456,262.6</u>	<u>4,913,067.0</u>
Total	<u>27,730,639.6</u>	<u>23,982,892.0</u>

	2018 MUS\$	2017 MUS\$
U.S. dollar	26,016.7	25,163.6
Euro	6,001.0	5,833.2
Other currencies	<u>7,842.9</u>	<u>7,985.8</u>
Total	<u>39,860.6</u>	<u>38,982.6</u>

(b) Detail by classes of assets of the investment portfolio

	Fair value level	2018 MCh\$	2017 MCh\$
Investment securities at fair value through other comprehensive income			
Internal management portfolio:			
Bonds and nominal paper	Level 1	16,396,058.6	14,645,852.6
Discounted commercial paper (Treasury notes)	Level 1	3,605,929.6	3,703,419.7
Inflation-adjusted bonds	Level 1	758,434.7	587,453.5
Other assets	Level 1	<u>37.2</u>	<u>155.8</u>
Total internal management portfolio		<u>20,760,460.1</u>	<u>18,936,881.6</u>
External management portfolio:			
BlackRock external manager investments	Level 1	339,462.1	321,863.1
Amundi external manager investments	Level 1	356,915.1	293,699.5
Total external management portfolio		<u>696,377.2</u>	<u>615,562.6</u>
Total		<u>21,456,837.3</u>	<u>19,552,444.2</u>

	Fair value level	2018 MCh\$	2017 MCh\$
Investment instruments at amortized cost			
Internal management portfolio:			
Term deposits		2,714,978.7	854,861.5
Fixed-Rate Investments at the BIS		2,172,507.9	1,427,364.1
Current accounts		1,377.0	371.7
Overnight deposits		208.7	707,531.6
Commissions for securities lending		81.9	90.3
Total		<u>4,889,154.2</u>	<u>2,990,219.3</u>
External management portfolio:			
BlackRock external manager investments		0.3	0.5
Amundi external manager investments		0.5	0.4
Total external management portfolio		<u>0.8</u>	<u>0.9</u>
Total investment instruments at amortized cost		<u>4,889,155.0</u>	<u>2,990,220.1</u>

	Fair value level	2018 MCh\$	2017 MCh\$
Investment securities at fair value through profit or loss			
Internal management portfolio:			
Collective investments through the BIS (BISIP)	Level 1	74,358.7	65,302.7
Derivative instruments	Level 1	934.6	-
Other assets		-	-
Total internal management portfolio		<u>75,293.3</u>	<u>65,302.7</u>
External management portfolio			
Amundi external manager investments	Level1	12,375.3	16,224.8
Total external management portfolio		12,375.3	16,224.8
Total investment instruments at fair value through profit or loss		<u>87,668.6</u>	<u>81,527.5</u>
Total		<u>26,433,660.9</u>	<u>22,624,191.9</u>

(c) Monetary gold

At the end of 2018, monetary gold amounted to US\$10.1 (US\$10.2 million in 2017) equivalent to 7,940 fine gold troy ounces valued at US\$1,277.3 per ounce (US\$1,291.0 in 2017). There was no change in the amount of troy ounces compared to 2017.

(d) Special drawing rights (SDR)

At each year-end, the balance of Special Drawing Rights (SDR) is as follows:

	2018 MCh\$	2017 MCh\$
SDR trends in IMF	<u>522,497.0</u>	<u>473,891.0</u>
Total special drawing rights	<u>522,497.0</u>	<u>473,891.0</u>

(e) Reserve position in the International Monetary Fund (IMF)

The reserve position balance in the IMF at each year-end is detailed as follows:

	2018 MCh\$	2017 MCh\$
Subscription installment, contribution	1,687,712.1	1,528,280.0
New Arrangement to Borrow (NAB)	56,815.1	67,026.5
Deposits (Accounts Nos.1 and 2)	(1,489,520.6)	(1,440,814.9)
Total position in the IMF	255,006.6	154,491.6

(f) Fair Values as of December 31

Statement of Financial Position BCCh (Ch\$ million)	2018			2017		
	Carrying amount (a)	Fair value (b)	Difference (b-a)	Carrying amount (a)	Fair value (b)	Difference (b-a)
Assets						
International reserves	27,730,639.6	27,730,639.6	-	23,982,892.0	23,982,892.0	-
Other foreign assets	161,706.7	161,706.7	-	117,796.4	117,796.4	-
Loans to banks and financial institutions	160,258.1	160,258.1	-	302,947.8	302,947.8	-
General Treasury transfers (Law 18.401)	311,783.9	249,084.0	(62,699.9)	305,069.6	227,047.6	(78,022.0)
Subordinated liabilities (Laws 18.401 and 19.396)	88,567.2	89,251.1	683.9	231,291.0	236,597.1	5,306.1
Other assets	56,439.4	56,439.4	-	57,835.4	57,835.4	-
Total assets	28,509,394.9	28,442,734.6	(62,016.0)	24,997,832.2	24,925,116.3	(72,715.9)
Liabilities						
Monetary base	11,295,937.6	11,295,937.6	-	11,105,786.6	11,105,786.6	-
Other deposits and obligations	5,349,750.3	5,349,750.3	-	3,728,419.1	3,728,419.1	-
Obligations with General Treasury	869,433.3	869,433.3	-	317,897.9	317,897.9	-
Notes issued by <i>Banco Central de Chile</i>	13,884,907.1	14,400,613.0	515,705.9	14,836,683.8	15,330,456.3	493,772.5
Foreign liabilities	849,825.0	849,825.0	-	768,875.8	768,875.8	-
Other liabilities	19,870.7	19,870.7	-	23,505.5	23,505.5	-
Total liabilities	32,269,724.0	32,785,429.9	515,705.9	30,781,168.7	31,274,941.2	493,772.5
Equity						
Net equity	(3,760,329.1)	(4,342,695.3)	(577,721.8)	(5,783,336.5)	(6,349,824.9)	(566,488.4)

Banco Central de Chile determines the fair value of the assets and liabilities for which a difference exists between their carrying amount and their fair value as follows

- General Treasury transfers

Such amounts are derived from the provisions of Law No. 18.577 and its amendments, and Law No. 18.577 of 1986 by way of which *Banco Central de Chile* sold to CORFO loan portfolios granted to financial institutions for the latter to finance the acquisition, by third parties, of shares of such financial institutions. In accordance with Article No. 13 of Law No. 18.401, the differences generated from the recovery as a result of the discounts granted to the shareholders, would be covered by the Chilean Treasury through future General Treasury transfers of up to UF 15 million.

Such Decree determined that the total amount of the transfer that the General Treasury has to perform in favor of *Banco Central de Chile* is equivalent to UF 11.4 million and it has been established that such General Treasury transfer will be performed in annual partial payments, equivalent to, at least, one twentieth of the aforementioned total sum, starting on the eleventh year subsequent to the year in which the aforementioned decree was processed, which corresponds to January 25, 2011.

Fair value is determined on the basis of the present value of the annual payments indicated in such decree. BCU-30 market rates have been considered for the estimation of the present value of the payments.

- Cash receipts for subordinated obligation with financial institutions

This is generated by Law No. 18.401 of 1985 because of the financial crisis at the beginning of such decade. Such Law, specifically in Article 15, establishes that banks could substitute agreements pending the repurchase of portfolio with *Banco Central de Chile*, because of the new subordinated obligation, which in practice had an indefinite payment period.

In 1995, Law No. 19.396 was established supplementing the previous law incorporating a maximum term of 40 years for the payment of the debt in partial payments, which are determined in accordance with the profits obtained by banks, defining a minimum payment, fixed payment, annual payment, "surplus for future deficit" account and annual interest on the balance of the debt of 5%.

Through the present date, only *Banco de Chile* has subordinated obligation of Ch\$88,567.2 million at the end of December, equivalent to UF 8,630,858.4981 The subordinated obligation of *Banco de Chile* is secured by 28,593,701,789 shares of such bank through *Sociedad Administradora de Obligación Subordinada S.A. (SAOS)*, which at the end of September 2017 are equivalent to 28.75% of total shares of *Banco de Chile*.

The annual payment of the subordinated obligation has been made considering the net profits of *Banco de Chile* that can be distributed and ownership interest that *Banco Central de Chile* has through such guarantee. Despite the fact that a minimum payment of UF 3.2 million has been established, the average annual payment for the last 5 years has been over UF 5.0 million and as such under a conservative scenario, the final payment of the obligation would be made in 2019.

For the fair value estimation, an increase of 5% in the level of net distributable profits of *Banco de Chile* is used as scenario, considering the maintenance of the ownership interest that *Banco Central de Chile* has as pledge in such institution and in the discount of its cash flows at market rates bonds in UF of *Banco de Chile* with a period similar to the estimated term of the obligation plus 2.26%.

- Notes issued

The debt portfolio of *Banco Central de Chile* has been valued using the parameters developed by the Risk America portal.

Note 8

OTHER FOREIGN ASSETS

(a) Shares and contributions to the Inter-American Development Bank (IDB)

The accounting treatment of the shares and contributions is in conformity with Article 3 of DL 2943 dated 1979, according to which such shares and contributions as well as the notes evidencing them, must be recorded by *Banco Central de Chile* as investments with a charge to its own resources for accounting purposes.

The shares of Ordinary Capital of the Inter-American Development Bank and contributions to the International Monetary Fund, all from the General Treasury are measured at their acquisition cost or contribution plus the adjustments reported by each of the institutions, where appropriate.

During 2018, the Bank made no subscription of new shares or contributions to the IDB.

(b) Bank for International Settlements (BIS) Shares

During 2003, Banco Central de Chile's Board Resolutions 1073-04 dated July 10, 2003 and 1084-02 dated September 16, 2003, authorized the incorporation of *Banco Central de Chile* as a member of the Bank for International Settlements (BIS). On September 26, 2003, in accordance with these resolutions, *Banco Central de Chile* acquired 3,000 shares of the BIS for SDR42,054,000.

During 2018, dividends were received in the amount of MUS\$1.0 (MUS\$1.2 in 2017).

	2018 MCh\$
Balance as of 01-01-2018	36,846.0
Fair value adjustments	29,478.2
Increase in the valuation of SDR	<u>3,843.8</u>
Closing balance as of 12-31-2018	<u>70,168.0</u>

Banco Central de Chile calculates the fair value considering its ownership interest in BIS equity by discounting 30% of the value determined, and replicating the method used by BIS for the last repurchase of shares issued in 1970.

Note 9

LOANS TO BANKS AND FINANCIAL INSTITUTIONS

This caption includes the following transactions, which are defined as non-derivative financial instruments, valued at amortized cost through the effective rate:

	2018 MCh\$	2017 MCh\$
Line of credit on debt restructuring	-	5.7
<i>Banco Central de Chile</i> repurchase agreements (Repo)	<u>160,258.1</u>	<u>302,942.1</u>
Total	<u>160,258.1</u>	<u>302,947.8</u>

Note 10

TRANSACTIONS UNDER SPECIFIC LEGAL REGULATIONS

This caption includes the following transactions, which are defined as non-derivative financial instruments, valued at amortized cost through the effective rate:

(a) Loan for subordinated liability

The balances as of each year-end represent a subordinated liability of *Banco de Chile* with *Banco Central de Chile* as established in the agreement amending payment terms dated 8 November 1996, in accordance with the provisions of Law No. 19.396.

On that date, the parent company *Sociedad Matriz del Banco de Chile*, previously referred to as *Banco de Chile*, agreed to transfer the liability to SAOS S.A. (*Sociedad Administradora de la Obligación Subordinada*), based on paragraphs three and five of the law 19.396. Consequently, the liability must be paid in forty annual, consecutive and equal installments beginning in April 1997.

During 2018, *Sociedad Administradora de la Obligación Subordinada* SAOS S.A. paid UF 5,663,110.7754 to *Banco Central de Chile*, equivalent to Ch\$152,930.2 million, of which UF 422,035.5311, equivalent to Ch\$11,396.9 million, were allocated to the payment of interests of the debt and UF5,241,075.2443, equivalent to Ch\$141,533.3 million to the credit amortization for subordinated liability (during 2017, a payment of UF5,344,803.0896, equivalent to Ch\$142,003.3 million was made, from which UF660,655.2422, equivalent to Ch\$17,522.6 million was destined to the payment of interest, and UF4,684,147.8474, equivalent to Ch\$124,450.7 million to the repayment of principal owed).

At the end of 2018, the balance amounts to Ch\$88,567.2 million, equivalent to UF 3,212,938.7891 (Ch\$231,291.0 million in 2017, equivalent to UF 8,630,858.4981), as a result of applying IFRS 9 and beginning on this year the impairment model is applied to this asset, and its amount is part of the balance, reducing the liability by Ch\$2.6 million for 2018.

	2018 MCh\$
Balance as of 01-01-2018	231,291.0
Adjustments and net interests	10,209.0
Payment of subordinated liability*	(152,930.2)
Impairment for the period	<u>(2.6)</u>
Balance as of 12-31-2018	<u>88,567.2</u>

* Includes Ch\$11,396.9 million that were allocated to the payment of interests of the debt.

(b) General Treasury transfers

The item "Tax transfers" under the specific legal regulation in the caption Transactions includes the following amounts:

	2018 MCh\$	2017 MCh\$
General Treasury transfer Law 18.401	311,783.9	305,069.6

In accordance with Article No. 13 of Law No. 18.401, the differences generated from the recovery as a result of the discounts granted to the shareholders, would be covered by the Chilean Treasury through future General Treasury transfers of up to UF 15 million, which as of December 31, 2018 amount to Ch\$311,783.9 million, equivalent to UF 11.4 million (Ch\$305,069.6 million in 2017, equivalent to UF 11.4 million).

The Executive Decree No. 1.526 issued by the Ministry of Finance in 2010, determined the total amount of the transfer that the General Treasury has to perform in favor of *Banco Central de Chile* due to the application of the above mentioned law, for UF11,383,983.4695 in annual installments equivalent, at least, to one twentieth of the aforementioned total sum, starting on the eleventh year subsequent to the year in which the aforementioned decree was processed, which corresponds to January 25, 2011. However, this decree expressly contemplates that the General Treasury will be able to make prepayments.

	2018 MCh\$
Balance as of 01-01-2018	305,069.6
Adjustment for the period	8,738.9
Impairment for the period	<u>(2,024.6)</u>
Balance as of 12-31-2018	<u>311,783.9</u>

(c) *Caja Central de Ahorros y Préstamos* and *Asociación Nacional de Ahorro y Préstamo*

Through Decree Laws No. 1.381 of 1976 and No. 2.824 of 1979 the obligation imposed by *Banco Central de Chile* of granting loans to organizations which were part of the former National Savings and Loan System (SINAP) was regulated, because of the financial position affecting organizations in that system.

Banco Central de Chile granted the mentioned loans with a charge to its own resources through credit facilities for refinancing to organizations which were part of SINAP. In addition, the former *Caja Nacional de Ahorros y Préstamos*, part of SINAP, was also granted loans by the Chilean Government, with charge to the external resources from the Credit Program Agreement "AID 513-HG-006" entered into by the Republic of Chile, and applied through the *Banco Central de Chile*, as Fiscal Agent and Financial Agent, in accordance with Decree No.20 of the Finance Ministry of 1976.

Subsequently, through Law No. 18.900 dated January 16, 1990, *Caja Central de Ahorros y Préstamos* (CCAP) and *Asociación Nacional de Ahorro y Préstamo* (ANAP) ceased to exist and a procedure was established through which the respective equity would be liquidated and used to pay shareholders and the obligations of the institutions.

Article 3 of the law establishes that *Caja Central de Ahorros y Préstamos* shall cease its transactions and with consideration of existing commitment, whether it has settled the liquidations required by the law or not, and shall include an inventory of all its rights, obligations and equity and those of the *Asociación de Ahorro y Préstamo*. This account will be submitted to the review of the President of the Republic through the Ministry of Finance. This article also stipulates the President of the Republic will approve such account through executive decree issued by the Ministry of Finance published in the Official Gazette.

Likewise, Article 5 of the aforementioned law establishes that the General Treasury shall be responsible for any obligations of the SINAP that are not covered upon liquidating shareholders' equity, the funds for which should be requested from the national budget, in conformity with Article 21 of Decree Law No. 1.263 dated 1975.

The recovery of such amounts depends on the determination of a specific date for the payment of that loans, from the General Treasury in favor of *Banco Central de Chile*, which is not possible to determine because the Ministry of Finance has not issued the Decree approving the account for the *Caja* and the *Asociación*.

Accordingly, based on considerations solely for accounting and financial reporting purposes, as provided in Articles 18 No.9 and No. 75 et seq. of the Basic Constitutional Act regulating the *Banco Central de Chile*, the criteria and standards on International Financial Reporting Standards (IFRS), the Bank has determined that starting from year-end 2014 this Institution's financial statements will recognize an allowance for its losses in equity of *Banco Central de Chile* for the total amount of debt owed to the Bank by the entities comprising SINAP which are indefinitely in the process of liquidation.

Likewise, the obligation by the Chilean Treasury established in Law 18.900, which guarantees the obligations of the abovementioned entities which could not be covered by the amount resulting from their liquidation, as indicated in several opportunities by the Ministry of Finance, is subject to the legal budget and the publication in the Official Gazette of the executive decree approving the liquidation account for such entities, because this had not yet occurred or has a determined verification date; the *Banco Central de Chile* has opted to reflect this situation in the notes to the financial statements to comply with the requirement of substantiating the rationale behind these decisions. Additionally, expressly indicate that the information contained in the preceding paragraph will only affect the method for recognizing the "SINAP liquidation Law No. 18.900" loan for reporting purposes, in accordance with IFRS standards. Accordingly, this should not and cannot be deemed, in any case, as a waiver by *Banco Central de Chile* of its right to continue to require the total and full payment of such debt.

Prior to making the decision mentioned above, the Bank informed the Minister of Finance. In response, the Minister responded the Bank that even though the President of Chile will approve such account through an executive decree issued by the Ministry of Finance, such approval has not been formalized because the requirement established by law for such purpose has not been met. In addition, the Minister indicated that because of this situation the Ministry of Finance was unable to express any opinion with respect to the balances in such account but acknowledged the information provided by the Bank.

Additionally, in relation to the part of the debt of the former *Caja Nacional de Ahorros y Préstamos* assumed by such entity in accordance with Decree No.20 of the Ministry of Finance of 1976, considering that: (i) this transaction refers to an obligation in which the Banco Central de Chile was Fiscal Agent and Financial Agent of the General Treasury and (ii) once the condition established in Article 5 of Law No.18.900 has been complied with, the General Treasury will have the double status of creditor and debtor of such obligation. During this year, the *Banco Central de Chile* has determined that it is not applicable to recognize such part of the debt of the former *Caja Nacional de Ahorros y Préstamos* in its financial statements, and therefore, it derecognized such item from the Bank's asset and liability account. But whilst the mentioned condition is not verified, it will be registered at its adjusted value off balance-sheet accounts, under the name and on behalf of the General Treasury, for identification purposes, in order to distinguish it clearly from the higher part of the debt of the former SINAP corresponding to such other part financed directly by the Bank using its own resources, adjusting also the impairment recognized as of December 31, 2014.

In this respect, as of December 31, 2018, the amount owed by the *Banco Central de Chile* for the settlement of the institutions that were part of SINAP, for the concept of credit facilities for refinancing granted directly to them charged to the bank's own resources, amounts to Ch\$1,308,775.2 million (Ch\$1,211,447.4 million in 2017), included the impairment mentioned above. In addition, the updated value of the debt of the former *Caja Nacional de Ahorros y Préstamos*, member of SINAP, corresponding to the loans to related parties financed by the Chilean Government, through *Banco Central de Chile*, in accordance with Decree No.20 stated above, amounts to Ch\$87,395.8 million (Ch\$84,702.3 million in 2017), which has been recognized in order accounts maintained by the Bank acting as Fiscal Agent of Chile.

Note 11

PROPERTY AND EQUIPMENT

	2018 MCh\$	2017 MCh\$
Net property and equipment	39,029.7	34,791.6

Reconciliation of property, equipment and intangible assets carrying amounts

This caption is mainly composed of the following balances and movements

	MCh\$					Balance as of 12-31-2018
	Balance as of 12-31-2017	Acquisi- tions	Dispo- sals	Depre- ciation	Transfers	
Real estate and facilities	27,465.1	-	-	(244.3)	-	27,220.8
Furniture and equipment	5,742.3	1,812.1	(46.0)	(1,735.8)	1,371.9	7,144.5
Transport material	212.1	18.4	-	(55.5)	-	175.0
Work in progress	1,372.1	4,489.2	-	-	(1,371.9)	4,489.4
Net property and equipment	34,791.6	6,319.7	(46.0)	(2,035.6)	-	39,029.7

As of December 31, 2018 and 2017, the caption Depreciation and Amortization in the statement of income includes Ch\$2,035.6 million and Ch\$1,939.3 million, respectively.

Note 12

INTANGIBLE ASSETS

	2018 MCh\$	2017 MCh\$
Intangible assets, net	4,348.8	3,003.8

Reconciliation of Intangible Assets carrying amounts

Composition and movements of intangible assets

	Balance as of 12-31, 2017	Acquisition	MCh\$ Amortiza- tion	Transfers	Balance as of 12-31-2018
Computer programs	2,601.2	-	(730.4)	-	1,870.8
Computer programs under development	402.6	2,075.4	-	-	2,478.0
Intangible assets, net	3,003.8	2,075.4	(730.4)	-	4,348.8

As of December 31, 2018 and 2017, the caption Depreciation and Amortization in the statement of income includes Ch\$730.4 million and Ch\$814.7 million on a straight-line basis.

Operating lease contracts

As of December 31, 2018 and 2017, there are no non-cancellable operating lease contracts. Conversely, assets subject to these contracts relate to low amount assets with respect to the levels of assets and liabilities held by the Bank. Accordingly, the Bank will continue recognizing lease payments as an expense during the term of the contract.

Note 13

FOREIGN LIABILITIES

This caption includes the following transactions:

		2018 MCh\$	2017 MCh\$
Reciprocal loan agreements	13 a	2.9	41.7
Accounts with international organizations	13 b	58,012.6	52,250.6
Special drawing rights (SDR) allocations	13 c	791,809.5	716,583.5
Total foreign liabilities		849,825.0	768,875.8

13 a. Reciprocal Loan Agreements (credits) represent the amount owed by *Banco Central de Chile* to the central banks comprising ALADI's Agreements on Reciprocal Payments and Credits for the imports conducted by Chilean entities. Its classification corresponds to non-derivative held-to-maturity securities, valued at amortized cost at effective rate.

13 b. Accounts with international organizations correspond to resources held in local currency by such organizations for its drawing and to obligations of *Banco Central de Chile* acting as a fiscal agent, with IDB, for promissory notes subscribed in foreign currency in payment of the subscription of shares and capital increases. They do not bear interest, but maintain their value for the fluctuations in the United States dollar.

This caption is composed of the following:

	2018 MCh\$	2017 MCh\$
Promissory note obligations with IDB	55,544.6	49,119.8
Inter-American Development Bank (IDB)	1,529.4	2,187.9
Agency for International Development (AID)	901.1	901.1
Multilateral Investment Guarantee Agency (MIGA)	32.9	32.9
International Bank for Reconstruction and Development (IBRD)	4.6	8.9
Total accounts with international organizations	58,012.6	52,250.6

13 c. The assignments of Special Drawing Rights (SDRs) correspond to 818,357,015 equivalent to Ch\$791,809.5 million allocated to Chile, of which SDR 1,465,436 equivalent to Ch\$1,417.9 million relate to interests through *Banco Central de Chile*, by the International Monetary Fund, which are subject to possible restitution; they accrue interests on the basis of a rate determined by the IMF on a weekly basis.

Note 14

MONETARY BASE

Liability of *Banco Central de Chile* composed of banknotes and coins of legal tender plus deposits of the financial system in *Banco Central de Chile*.

This caption is composed of the following:

	2018 MCh\$	2017 MCh\$
Banknotes and coins in circulation	9,475,030.3	8,970,283.8
Deposits from financial institutions	1,820,907.3	1,527,426.8
Deposits for technical reserve	-	608,076.0
Total monetary base	11,295,937.6	11,105,786.6

(a) Banknotes and coins in circulation

Includes the amount of banknotes and coins of legal tender issued by *Banco Central de Chile* held by third parties, resulting from the total banknotes and coins received from suppliers and recorded as liabilities at their face value, less the banknotes and coins that are in the cash of *Banco Central de Chile* and in its vault.

Banknotes and coins in circulation are recorded at face value. The costs of printing and coining are recorded as expense in the caption issuance and distribution costs.

The distribution of banknotes and coins in circulation as of December 31 of each year is as follows:

Bank notes denomination	2018 MCh\$	2017 MCh\$	Coins denomination	2018 MCh\$	2017 MCh\$
\$ 20,000	4,715,935.8	4,236,709.3	\$ 10,000	348.4	348.4
\$ 10,000	3,575,755.9	3,578,742.9	\$ 2,000	98.6	98.6
\$ 5,000	364,712.8	344,462.3	\$ 500	213,186.6	201,382.5
\$ 2,000	80,449.0	79,090.4	\$ 100	150,018.1	148,086.2
\$ 1,000	270,414.1	280,348.3	\$ 50	29,002.0	28,133.9
\$ 500	4,714.2	4,716.9	\$ 10	54,659.6	52,261.7
Miscellaneous	<u>251.5</u>	<u>251.4</u>	\$ 5	10,747.9	10,852.9
Total	<u>9,012,233.3</u>	<u>8,524,321.5</u>	\$ 1	4,698.0	4,726.0
			Other	<u>37.8</u>	<u>72.1</u>
			Total	<u>462,797.0</u>	<u>445,962.3</u>

(b) Deposits from financial institutions

Deposits from financial institutions reflect the movements in drafts and deposits in local currency resulting from transactions performed by financial institutions with *Banco Central de Chile*. Their balance represents the funds or reserves in favor of financial institutions and is used for the constitution of cash positions.

(c) Deposits for technical reserve

This refers to compliance with the obligation on the technical reserve contemplated for banking entities in Article 65 of the General Banking Law, which establishes the alternative of maintaining deposits with *Banco Central de Chile* for such purposes. Such legal precept provides that deposits in current account and other deposits and on demand deposits, which a bank receives, as well as the amounts that has to destine to pay on demand obligations which it assumes within its financial line of business, to the extent that they exceed two times and a half their effective equity, should be maintained in cash or in a technical reserve consisting of deposits with *Banco Central de Chile* or in notes issued by the General Treasury at any term valued at market price.

Note 15

DEPOSITS AND OBLIGATIONS

Deposits received and obligations are financial liabilities for deposits and other transactions made with the General Treasury and financial institutions, and which are not affected by transaction costs. Subsequently, they are measured at amortized cost pursuant to the effective interest rate method with an effect in earnings. Unadjustable balances are stated at nominal value. Adjustable balances or those denominated in foreign currency include the effect of the accrued exchange rate and adjustments at the reporting date.

	2018 MCh\$	2017 MCh\$
Deposits and obligations with General Treasury	869,433.3	317,897.9
Other deposits and obligations	<u>5,349,750.3</u>	<u>3,728,419.1</u>
Total	<u>6,219,183.6</u>	<u>4,046,317.0</u>

(a) Deposits and obligations with the General Treasury include:

	2018 MCh\$	2017 MCh\$
General Treasury current accounts	<u>869,433.3</u>	<u>317,897.9</u>
Total	<u>869,433.3</u>	<u>317,897.9</u>

(b) Other Deposits and Obligations include:

	2018 MCH\$	2017 MCH\$
Permanent Deposit Facility in local currency	3,525,078.9	2,258,529.4
Current accounts in foreign currencies	184,474.4	415,544.3
Short-term deposits from bank institutions in foreign moneda extranjera	1,610,882.0	1,021,265.2
Other	<u>29,315.0</u>	<u>33,080.2</u>
Total	<u>5,349,750.3</u>	<u>3,728,419.1</u>

Note 16

NOTES ISSUED BY BANCO CENTRAL DE CHILE

Notes issued by *Banco Central de Chile* are financial liabilities issued in order to adopt the decisions of the monetary and debt policy, initially measured at fair value, and are not affected by transaction costs. Subsequently, they are measured at amortized cost pursuant to the effective interest rate method with the effect recorded in earnings. Unadjustable balances are stated at their nominal value. Adjustable balances include the effect of the accrued adjustments at the reporting date.

Notes issued comprise: Central Bank of Chile bonds in UF (BCU), Central Bank of Chile bonds in Chilean pesos (BCP), Central Bank of Chile discountable promissory notes (PDBC), Indexed-promissory notes payable in coupons (PRC), and Optional indexed coupons (CERO) in UF.

The issuance of notes by *Banco Central de Chile* is the main element supporting the implementation of the monetary and debt policy in order to provide liquidity to the market and deepen its transactions in an efficient manner.

As of December 31, 2018 and 2017, maturities of these instruments are as follows:

	(Millions of Chilean pesos)					Total 2018	Total 2017
	Up to 90 days	91-180 days	181 days to 1 year	1-3 years	Over 3 years		
<i>Banco Central de Chile</i> bonds in UF (BCU)	-	26,568.3	-	1,234,355.2	3,048,361.7	4,309,285.2	5,996,960.3
<i>Banco Central de Chile</i> bonds in Chilean pesos (BCP)	611,936.0	-	-	1,847,372.7	619,900.8	3,079,209.5	3,669,482.4
<i>Banco Central de Chile</i> discountable promissory notes (PDBC)	5,775,620.8	373,333.5	300,755.7	-	-	6,449,710.0	5,100,493.5
Optional indexed coupons (CERO) in UF	4,195.8	4,369.6	9,143.3	15,026.9	0.1	32,735.7	51,121.4
Indexed promissory notes payable in coupons (PRC)	125.2	138.7	510.2	6,458.6	6,726.2	13,958.9	18,618.4
Other	<u>7.8</u>	=	=	=	=	<u>7.8</u>	<u>7.8</u>
Total as of December 31	<u>6,391,885.6</u>	<u>404,410.1</u>	<u>310,409.2</u>	<u>3,103,213.4</u>	<u>3,674,988.8</u>	<u>13,884,907.1</u>	<u>14,836,683.8</u>

Balances include interest and adjustments accrued as of December 31, 2018 and 2017.

Note 17

PROVISIONS

Banco Central de Chile has recorded provisions for severance indemnity, a benefit established in the Collective Labor Agreement in force for the periods 2015-2019 accounted for in accordance with the actuarial method of projected cost. At the same time, the benefits granted to the former Association of Retired Employees and Beneficiaries of Pensions of Public Officials of *Banco Central de Chile* and healthcare benefits for retirement plans are also included and detailed as follows:

	2018 MCh\$	2017 MCh\$
Provision for the year:		
Severance indemnity	12,377.5	12,749.3
Special indemnity and agreed deposit for retirement plan Resolution 1651	1,808.4	2,004.7
Subtotal provision for severance indemnity	<u>14,185.9</u>	<u>14,754.0</u>
Benefits to the former Association of Retired Employees		
Beneficiaries of Pensions of Public Officials of Banco Central	2,280.3	2,305.1
Healthcare benefits for retirement plans	15.4	8.1
Pending accrued vacations of personnel	2,814.9	2,735.7
Special indemnity Resolution No. 572-05-961226	1.1	1.1
Incentive allocation	<u>380.5</u>	<u>364.1</u>
Subtotal otras provisiones	<u>5,492.2</u>	<u>5,414.1</u>
Total	<u>19,678.1</u>	<u>20,168.1</u>

	2018 MCh\$	2017 MCh\$
Movements in provisions for severance indemnities (*):		
Current value of liabilities as of January 1	14,754.0	13,853.7
Current value of service costs	1,212.9	1,262.2
Interest cost	649.2	640.0
Benefits paid	(1,967.1)	(835.1)
Actuarial gains (losses)	<u>(463.1)</u>	<u>(166.8)</u>
Total	<u>14,185.9</u>	<u>14,754.0</u>

(*) This does not include benefits for the Former Association of Retired Employees and Beneficiaries of Pensions of Public Officials of Banco Central de Chile, retirement health care plans and incentive payments.

	2018 MCh\$	2017 MCh\$
Post-employment benefit expenses		
Current value of service costs	1,460.5	<u>1,154.5</u>
Interest cost	<u>393.3</u>	<u>753.7</u>
Total	<u>1,853.8</u>	<u>1,908.2</u>

As of December 31, 2018, the sensitivity of the actuarial liability amount from post-employment benefits considering changes indicated in actuarial assumptions generates the following effects:

Calculation of variable sensitivity analysis impact	Base Scenario	Scenario 1	Scenario 2
Discount rate (-1%, +1%)	4.40%	3.40%	5.40%
Effect on provision for severance indemnity payments (Ch\$ million)	14,185.9	15,457.4	13,104.2
Effect on provision for severance indemnity payments (%)	-	8.88%	-7.53%

Calculation of probable payment of the provision for severance indemnity payments	MCh\$
Short-term provisions for severance indemnity payments (up to one year)	1,371.8
Long-term provisions for severance indemnity payments (over one year)	<u>12,814.1</u>
Balance as of December 31	<u>14,185.9</u>

Note 18

CAPITAL

(a) Capital

Section 5 of the Basic Constitutional Act of *Banco Central de Chile* established an initial capital for *Banco Central de Chile* at \$500,000 million, which at December 31, 2018 corresponds to Ch\$2,551,956.4 million (Ch\$2,482,447.9 million as of December 31, 2017) adjusted to the Consumer Price Index as of that date, with a time lag of one month, which has to be paid according to transitory Article 2 of the Basic Constitutional Act.

In accordance with Section 77 of the Basic Constitutional Act of *Banco Central de Chile*, the deficit produced in any year will be absorbed with a debit to constituted reserves.

When there are no, or insufficient, reserves, the deficit produced in any period will be absorbed with a debit to capital.

As of December 31, 2018, *Banco Central de Chile* has negative equity of Ch\$3,760,329.1 million (negative equity of Ch\$5,783,336.5 million as of December 31, 2017) arisen mainly from differences between international reserve returns and the cost of liabilities at domestic interest rate due to gains and losses from changes in the exchange rates of assets in foreign currencies.

(b) Price-level adjusted capital

The Board decided to no longer apply comprehensive price-level adjustment to financial statements beginning in 2010, and therefore price-level adjustment on capital is no longer presented in the statement of financial position nor in the statement of comprehensive income; however, in order to comply the provisions of Section 5 of the Basic Constitutional Act of *Banco Central de Chile*, paragraph 2, which states "The capital may be increased by decision of the majority of the Board Members, through capitalization of reserves and adjusted by means of price-level adjustment", as well as stated in Title VI of the same legislation, regarding the distribution of Banco Central de Chile's surpluses included in Section 77, and the payment of the initial capital referred to in transitory Article 2. Once the initial capital, properly adjusted as stated in the terms of Section 5 is paid, the resulting surplus for each year, will be determined and calculated for the purposes of surplus distribution to the General Treasury as contained in Section 77, considering the annual adjustment to the equity recorded in memorandum accounts.

As of December 31, 2018, the negative capital price-level adjustment recognized in memorandum accounts amounted to a negative equity of Ch\$183,135.4 million (negative equity of Ch\$94,967.2 million in 2017), which resulted in adjusted capital at the reporting date of Ch\$6,723,683.9 million (negative equity of Ch\$5,093,240.9 million in 2017). The amount to price-level adjusted is capital at the reporting date which includes the capital adjusted at the prior year-end, plus the profit or loss from such year and its contributions by the General Treasury, if any, which does not consider valuation accounts. Note that as of to-date the related deficit has not been distributed yet and during 2018, there were no capital contributions by the General Treasury.

	Capital as of 12-31-2018 before price-level adjustment	Price-level adjustment in memorandum accounts	Price-level adjusted total capital as of Dec.31.18
Balances as of December 31, 2018	(6,540,548.6) (*) 2.8%	(183,135.4)	(6,723,683.9)

(*) Corresponds to price-level adjusted capital as of December 31, 2017 plus profit or loss for the same year.

Note 19

NET GAIN FROM INTERNATIONAL RESERVES

(a) Investment portfolio

At each year-end, this caption is composed of the following:

	2018 MCh\$	2017 MCh\$
(a) On interests		
Interest income	<u>384,132.8</u>	<u>246,294.4</u>
On investments measured at fair value through other comprehensive income	303,334.3	189,157.1
On investments measured at amortized cost	80,269.4	56,864.0
On investments measured at fair value through profit or loss	529.1	273.3
Interest expense	<u>(21.3)</u>	<u>(2.9)</u>
On investments measured at amortized cost	<u>(21.3)</u>	<u>(2.9)</u>
Subtotal for interests	<u>384,111.5</u>	<u>246,291.5</u>
(b) On commissions		
Commission income	<u>1,704.1</u>	<u>2,053.8</u>
Commission for securities lending	1,704.1	2,053.8
Commission expense	<u>(2,104.4)</u>	<u>(2,005.9)</u>
On current account operating expenses	(261.7)	(204.1)
On custody expenses	(1,579.3)	(1,528.6)
On administrative expenses	(263.4)	(273.2)
Subtotal for commissions	<u>(400.3)</u>	<u>47.9</u>
(c) On sale of investments		
Receipts from sale of investments	<u>32,531.6</u>	<u>76,013.5</u>
On sale of investments measured at fair value through other comprehensive income	32,531.6	53,299.3
On sale of investments measured at amortized cost	-	<u>22,714.2</u>
Loss on sale of investments	<u>(119,239.7)</u>	<u>(148,342.7)</u>
On sale of investments measured at fair value through other comprehensive income	(119,239.7)	(148,342.7)
Subtotal on sale of investments	<u>(86,708.1)</u>	<u>(72,329.2)</u>
(d) Other income and expenses		
Other income:	137,118.2	83,677.0
Fair value through profit or loss	1,014.9	(799.7)
Derivative instruments	112,086.7	82,877.3
Impairment	24,016.6	-
Other expenses	<u>(127,418.2)</u>	<u>(112,591.9)</u>
Fair value through profit or loss	(52,895.9)	(27,137.7)
Taxes paid	(3,181.3)	(3,132.0)
Impairment	(18,093.3)	(32,320.8)
Derivative instruments	<u>(53,247.7)</u>	<u>(50,001.4)</u>
Subtotal other income and expenses	<u>9,700.0</u>	<u>(28,914.9)</u>
Total net income from international reserves	<u>306,703.1</u>	<u>145,095.3</u>

(b) Other foreign transactions

Net gain or loss on foreign transactions comprise the following:

	2018 MCh\$	2017 MCh\$
On interests	<u>(7,377.5)</u>	<u>(3,760.8)</u>
Special drawing rights (SDR) allocations	(7,376.6)	(3,760.1)
Reciprocal loan agreements	(0.9)	(0.7)
Other income and expenses	<u>664.5</u>	<u>742.4</u>
Dividends received, BIS	692.0	765.9
Operating expenses, Fiscal Agency	(27.5)	(23.5)
Total net (loss) gain from other foreign transactions	<u>(6,713.0)</u>	<u>(3,018.4)</u>

Note 20

NET GAIN FROM DOMESTIC TRANSACTIONS

For the years ended December 31, 2018 and 2017, this caption is composed of the following:

	2018 MCh\$	2017 MCh\$
(a) Gain or loss on interest and adjustments		
Interest and adjustment expenses		
Notes issued	(612,107.0)	(621,869.8)
Deposits and obligations	<u>(80,195.0)</u>	<u>(63,854.2)</u>
Total interest and adjustment expenses	<u>(692,302.0)</u>	<u>(685,724.0)</u>
Interest and adjustment income		
Domestic loans	613.4	579.8
Transactions under specific legal regulations	<u>18,947.9</u>	<u>23,412.9</u>
Total interest and adjustment income	<u>19,561.3</u>	<u>23,992.7</u>
Total gain or loss on interest and adjustments	<u>(672,740.7)</u>	<u>(661,731.3)</u>
(b) Other income and expenses		
Other expenses	(492.3)	(225.6)
Other income	<u>4,417.1</u>	<u>2,606.4</u>
Total other income and expenses	<u>3,924.8</u>	<u>2,380.8</u>
Total net gain (loss) on domestic transactions	<u>(668,815.9)</u>	<u>(659,350.5)</u>

Note 21

NET GAIN (LOSS) FROM FOREIGN EXCHANGE TRANSACTIONS

For the years ended December 31, 2018 and 2017, this caption is composed of the following:

	2018 MCh\$	2017 MCh\$
Gain on foreign exchange transactions	4,976,167.2	2,097,624.5
Loss on foreign exchange transactions	<u>(2,636,039.2)</u>	<u>(3,070,121.6)</u>
Total	2,340,128.0	(972,497.1)

Net gain (loss) from foreign exchange transactions for each year end, resulting mainly from the effect of exchange rate differences on foreign currency assets, as follows:

	2018 MCh\$	2017 MCh\$
U.S. dollar	1,784,671.0	(1,149,912.0)
Euro	307,208.2	196,637.2
Yuan	43,166.0	(9,433.7)
Canadian dollar	46,366.2	(7,376.6)
Korean won	59,720.5	23,797.7
Other currencies	126,955.8	<u>(34,834.8)</u>
Subtotal net (loss) gain from foreign exchange	2,368,087.7	(981,122.2)
Other	<u>(27,959.7)</u>	8,625.1
Total net (loss) gain from foreign exchange	2,340,128.0	(972,497.1)

Note 22

ISSUANCE, DISTRIBUTION AND PROCESSING COSTS

At each year-end, this caption is composed of the following:

	2018 MCh\$	2017 MCh\$
Banknotes	(15,165.8)	(12,792.3)
Coins	(5,848.4)	(20,747.7)
Distribution and processing	<u>(2,228.2)</u>	<u>(1,585.1)</u>
Total	(23,242.4)	(35,125.1)

Note 23

FOREIGN CURRENCY BALANCES

The statement of financial position includes assets and liabilities payable in foreign currencies, whose balances as of December 31, 2018 and 2017 are as follows:

	2018 MUS\$	2017 MUS\$
Assets		
Foreign assets	<u>40,093.0</u>	<u>39,174.1</u>
Reserves	39,860.6	38,982.6
Other foreign assets	232.4	191.5
Other asset accounts	<u>81.1</u>	<u>12.6</u>
Total assets	<u>40,174.1</u>	<u>39,186.7</u>
Liabilities		
Foreign liabilities:	<u>1,218.0</u>	<u>1,244.7</u>
Other foreign assets	79.8	79.9
Special drawing rights (SDR) allocations	1,138.2	1,164.8
Domestic liabilities	<u>3,890.8</u>	<u>2,907.8</u>
Deposits and obligations with General Treasury	1,249.7	516.7
Other deposits and obligations	2,641.1	2,391.1
Other liabilities	-	<u>1.8</u>
Total liabilities	<u>5,108.8</u>	<u>4,154.3</u>
Net assets	<u>35,065.3</u>	<u>35,032.4</u>

Note 24

CONTINGENCIES AND COMMITMENTS

There are no lawsuits that are in process against *Banco Central de Chile*; accordingly, the Bank has recorded no contingencies that are expected to have a material effect on equity.

Note 25

INCOME TAX

Pursuant to Article 7 of Decree Law No.3345 dated 1980, *Banco Central de Chile* is exempt from income taxes.

Note 26

Fiscal agency

Law 20,128 related to General Treasury Liability created the "Economic and Social Stabilization Fund" (FEES) and the "Pension Reserve Fund" (FRP)". In conformity with the provisions of the aforementioned law, through Executive Decree 1383, dated 2006 of the Minister of Finance amended Executive Decree 1618 dated 2012, and appointed *Banco Central de Chile* as Fiscal Agent for the administration of resources referred to such funds, in conformity with the procedures, conditions, methods and other standards established in the aforementioned decree.

The Executive Decree 19 in 2011, issued by the Minister of Finance, appointed *Banco Central de Chile* as Fiscal Agent for the administration of the Strategic Contingency Fund.

In accordance with Article 5 of the abovementioned Executive Decree 1383, as amended by Decree 1618, investments of public resources managed by *Banco Central de Chile*, as Fiscal Agent, have been carried out in accordance with the guidelines established for these effects by the Minister of Finance. These investments have been recorded in off balance sheet accounts.

On June 18, 2015, via Agreement 1909-02, the current execution guidelines for the Pension Reserve Fund and the Economic and Social Stabilization Fund, respectively, were approved. On July 18, 2013, via Agreement 1765-04, the current execution guidelines for the Strategic Contingency Fund were approved.

Note 27

TRANSACTIONS WITH RELATED PARTIES

(a) *Banco Central de Chile* does not have any related companies.

(b) Compensation of the board and key executives:

In accordance with *Banco Central de Chile*'s Basic Organic and Constitutional Law, compensation of the board is set by the President of the Republic for periods not exceeding two years, following a proposal made by a commission formed by former governors and deputy governors of the entity, appointed by the President of the Republic. In order to propose compensation, the act requires them to be based on the compensation paid to the highest-ranked executive positions in bank institutions within the private sector.

Compensation corresponding to the General Manager, the General Counsel and General Auditor of *Banco Central de Chile*, are at level one of the compensation structure, as they are positions established in Sections 24 through 26 of the *Banco Central de Chile*'s Basic Constitutional Act.

The total gross compensation paid to the Board and key executives during 2018 amounted to Ch\$1,441.8 million (Ch\$1,445.2 million in 2017).

Note 28

RELEVANT EVENTS

(a) Through Decree No.447, issued by the Ministry of Finance, dated March 16, 2018, and published in the Official Gazette on April 27, 2018, Mr. Alberto Raúl Naudon Dell'Oro was appointed on March 22, 2018 as Legal Advisor of *Banco Central de Chile*'s Board of Directors for a term of ten years.

(b) Through Decree No.2144-01-180412 dated April 12, 2018, the Board agreed to appoint Mr. Ricardo Budinich Diez as member of the Audit and Compliance Committee for a term of three years, replacing Mr. Gustavo Favre Domínguez.

(c) Through Decree No.2144-02-180412, the by-laws of the Audit and Compliance Committee were modified increasing the number of members to 4.

(d) Through Decree No.2144-03-18041 dated April 12, 2018, the Board agreed to appoint Mr. Ramiro Mendoza Zuñiga as member of the Audit and Compliance Committee for a term of three years.

Note 29

SUBSEQUENT EVENTS

In the opinion of Management, between December 31, 2018 and the date of issuance of these financial statements the following subsequent events which could significantly affect the amounts presented in the financial statements have occurred:

(a) Change in US dollar and euro exchange rate

The exchange rate for U.S. dollar as of January 22, 2019 amounted to Ch\$672.42 representing a decrease of Ch\$23.27 compared with the exchange rate prevailing as of December 31, 2018. This represents a decrease in Banco Central de Chile's equity of Ch\$510,153.9 million.

The exchange rate for Euro as of January 22, 2019 amounted to Ch\$764.37 representing a decrease of Ch\$31.52 compared with the exchange rate prevailing as of December 31, 2018. This represents a decrease in Banco Central de Chile's equity of Ch\$165,325.7 million.

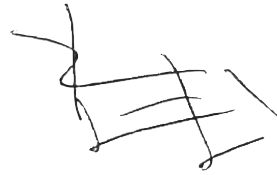
The total decrease in Banco Central de Chile's equity because of the decrease in the exchange rate for United States dollar and Euro on January 22, 2019 amounts to Ch\$675,479.6 million.

(b) Approval of the financial statements

The financial statements as of December 31, 2018 were presented by the General Manager to the Banco Central de Chile's Board on January 24, 2019, and approved for issue at the Meeting No.2205.

(c) Other

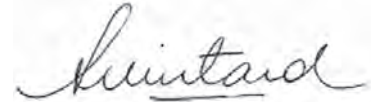
There are no subsequent events that might have a significant effect on the amounts presented herein or in Banco Central de Chile's economic or financial position.



ALEJANDRO ZURBUCHEN SILVA
General Manager



JUAN CARLOS SALAZAR TAPIA
General Accountant



SILVIA QUINTARD FLEHAN
General Auditor

INDEPENDENT AUDITORS' REPORT

The Board President and Members of
Banco Central de Chile:

Report on the financial statements

We have audited the accompanying financial statements of *Banco Central de Chile*, which comprise the statements of financial position as of December 31, 2018 and 2017, and the related statements of comprehensive income, changes in equity, and cash flows for the years then ended, and the related notes to the financial statements.

Management's responsibility for the financial statements

Management is responsible for the preparation and fair presentation of these financial statements in accordance with International Financial Reporting Standards; this includes the design, implementation and maintenance of internal controls relevant to the preparation and fair presentation of financial statements that are free from material misstatement, whether due to fraud or error.

Auditors' responsibility

Our responsibility is to express an opinion on these financial statements based on our audits. We conducted our audits in accordance with generally accepted auditing standards in Chile. Those standards require that we plan and perform the audit to obtain reasonable assurance about whether the financial statements are free from material misstatement.

An audit involves performing procedures to obtain audit evidence about the amounts and disclosures in the financial statements. The procedures selected depend on the auditors' judgment, including the assessment of the risks of material misstatement of the financial statements, whether due to fraud or error. In making those risk assessments, the auditor considers internal control relevant to the entity's preparation and fair presentation of the financial statements in order to design audit procedures that are appropriate in the circumstances, but not for the purpose of expressing an opinion on the effectiveness of the entity's internal control. Accordingly, we express no such opinion. An audit also includes evaluating the appropriateness of accounting policies used and the reasonableness of accounting estimates made by management, as well as evaluating the overall presentation of the financial statements.

We believe that the audit evidence we have obtained is sufficient and appropriate to provide a basis for our audit opinion.

Opinión

In our opinion, the financial statements referred to above present fairly, in all material respects, the financial position of *Banco Central de Chile* as of December 31, 2018 and 2017 and the results of its operations and its cash flows for the years then ended in accordance with International Financial Reporting Standards.

The above translation of the auditors' report is provided as a free translation from the Spanish language original, which is the official and binding version. Such translation has been made solely for the convenience of non-Spanish readers.

Mario Torres S.

KPMG Ltda.

Santiago, January 24, 2019

