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Annual Report  
Financial Committee

Advisory Committee to the  
Ministry of Finance for Chile's  
Sovereign Wealth Funds

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This publication corresponds to the 2018 Annual Report of the  
Ministry of Finance's Financial Committee.

The electronic version of this document is available on the  
Ministry of Finance website:  
<http://www.hacienda.cl/english/sovereign-wealth-funds.html>

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ISSN: 0718-5790

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Ministry of Finance for Chile's  
Sovereign Wealth Funds

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# Preface

As stipulated in the Fiscal Responsibility Law of 2006, the Financial Committee was created in 2007 to advise the Finance Minister on the investment of Chile's two Sovereign Wealth Funds: the Economic and Social Stabilization Fund (ESSF) and the Pension Reserve Fund (PRF). The Financial Committee is an independent external advisory board, whose members have a vast experience in economic and financial areas. The Committee meets periodically to analyze matters relating to the investment of the funds. This Report—the twelfth prepared by the Committee—describes its work and activities in 2018.

The publication of this Report fulfills the requirement established under Decree N° 621, issued by the Ministry of Finance in 2007, which stipulates that the Committee must present an annual report on its work to the Finance Minister and submit a copy of this report to the Finance Commissions of the Senate and the House of Representatives and to the Joint Budget Commission.

The Committee

## Executive summary

At the close of 2018, the market value of the funds was US\$ 23,797 million, of which US\$ 14,134 million was in the Economic and Social Stabilization Fund (ESSF) and US\$ 9,663 million was in the Pension Reserve Fund (PRF). The net return in dollars in the year was -0.41% for the ESSF and -3.56% for the PRF,<sup>1</sup> while the net return in pesos was 12.61% and 9.05%, respectively. In the case of the ESSF, the strategic asset allocation was 15% in bank deposits, 74% in sovereign bills and bonds, 3.5% in inflation-indexed sovereign bonds and 7.5% in equities. For the PRF, the portfolio allocation was 44% in sovereign bonds and government-related assets, 17% in inflation-indexed sovereign bonds, 20% in corporate bonds and 19% in equities.

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<sup>1</sup> Returns reported in this document correspond to the Time Weighted Rate of Return (TWR), unless otherwise stated. Returns for periods greater than one year are annualized. For periods of less than one year, the return corresponds to the change during the period. Net returns reported are net of management fees.

# Members of the Financial Committee



## **President José De Gregorio Rebeco**

Mr. De Gregorio holds a Ph.D. in Economics from the Massachusetts Institute of Technology, a Master's degree in Industrial Engineering and a degree in Civil Industrial Engineering, both from Universidad de Chile. Currently, he is Professor at the Faculty of Economics and Business of Universidad de Chile, and Nonresident Senior Fellow at the Peterson Institute of International Economics. He has been President, Vice-President and Counselor of the Central Bank of Chile, Minister of Economics, Mining and Energy for the Chilean Government, and Economist at the International Monetary Fund. He joined the Committee in September 2014.



## **Vice President Cristián Eyzaguirre Johnston**

Mr. Eyzaguirre holds a MA in Economics from University of California, Berkeley, and a degree in Business Administration from Universidad de Chile. He was CEO at Banco Bice and CFO at CMPC Enterprises. He has been Deputy Director of Chile's Tax Service (SII for its acronym in Spanish), advisor at Federation of Chilean Industry (SOFOPA for its acronym in Spanish) and Professor at Universidad de Chile. He currently participates in the Board of Directors of several companies, and is a Member of the Investment Committee of Hogar de Cristo. He joined the Committee in March 2010.



## **Member Ricardo Budinich Diez**

Mr. Budinich holds a degree in Industrial Civil Engineering and a Bachelor's degree in Engineering Science, both from Universidad de Chile and holds a diploma in corporate governance from Universidad Católica de Chile. Currently, he serves on the Board of Directors of several companies and is member of Vigilance Committees of foreign private equity, global debt, small-mid cap equities and real estate funds. He was Chief Financial Officer of Copec, Director of Sonacol and many subsidiaries from the same company, Chief Financial Officer of Casaideas and advisor to its Board of Directors, member of the Consultative Counsel of Fundación Copec-UC, member of the Investment Committee of Compañía de Seguros Cruz del Sur and assistant professor of Universidad de Chile. He also performed several executive positions in companies from the financial sector. He joined the Committee in September 2016.



**Member Jaime Casassus Vargas**

Mr. Casassus holds a Ph.D. in Finance from Carnegie Mellon University and a degree in Civil Industrial Engineering from Universidad Católica de Chile. Currently, he is Professor and Postgraduate Director at the Institute of Economics of Universidad Católica de Chile, Managing Editor at the journal “Quantitative Finance”, Deputy Director at FinanceUC, and Director of the Economics Society of Chile. He was Visiting Professor at University of California, Berkeley. His research has been published in Journal of Finance, Review of Financial Studies, and Journal of Banking & Finance. He joined the Committee in September 2014.



**Member Martín Costabal Llona**

Mr. Costabal holds an MBA from the University of Chicago and a degree in Business Administration from Universidad Católica de Chile. He has performed as Finance Minister and Budget Director, executive of Empresas Pizarreño and Infraestructura Dos Mil, CEO of AFP Habitat and Member of the Technical Advisory Committee of Investment established by the Pension Reform. Currently he serves on the Boards of Directors of private companies. He joined the Committee in January 2007.



**Member Paulina Yazigi Salamanca**

Ms. Yazigi holds a degree in Economics and a Master’s degree in Macroeconomics from Universidad Católica de Chile. Besides, she holds a Master of Science in Mathematics in Finance from New York University. Currently, she serves as Chief Investment Officer (CIO) in a family office named Nogaleta Inversiones. She was Investment Manager, Strategy Manager, and Head of Fixed-Income and Economic Research at Credicorp Capital (formerly IMTrust), Vice president of Business Management at BBVA in New York, and co-portfolio manager at Compass Group LLC in New York. She has taught several courses at Universidad Adolfo Ibáñez since 2012. She joined the Committee in September 2018.

CHAPTER 1

Fiscal policy and the  
funds' objectives,  
institutional  
framework and  
investment policy

## A. Fiscal policy

Chile's fiscal policy is aimed at contributing to macroeconomic stability and providing public goods that increase opportunities and social protection for Chilean citizens.<sup>2</sup>

Since 2001, Chile's fiscal policy is guided by a structural balance rule or, more precisely, a cyclically adjusted balance rule,<sup>3</sup> which mitigates the effect on public finances of fluctuations in economic activity, the copper price and other secondary factors. This implies saving in boom times and being able to use those savings during cyclical downturns. As a result, the fiscal rule has a stabilizing effect on public finances and the economic cycle and improves access to financing for both the public and private sectors.

## B. Objectives and rules on the use of the funds

To ensure the sustainability of public spending over time and contribute to the competitiveness of the economy, Law 20,128 on Fiscal Responsibility was passed in September 2006. This law created the Pension Reserve Fund (PRF) and authorized the President of the Republic to create the Economic and Social Stabilization Fund (ESSF), which was then officially established in February 2007. These two funds accumulate the resources resulting from the application of the structural balance rule as detailed below.

### Objectives

The funds created by the Fiscal Responsibility Law (henceforth, the Sovereign Wealth Funds) have specific objectives. In the case of the ESSF, the objectives are to accumulate resources to finance potential fiscal deficits and to amortize public debt, thereby contributing to cushioning fiscal spending against fluctuations in the world economy and the volatility of revenues from taxes and copper. The ESSF resources can also be used to finance the PRF if necessary. In the case of the PRF, the objective is to support the financing of fiscal liabilities deriving from the state pension guarantee for old-age and disability solidarity pension benefits, as well as old-age and disability solidarity pension contributions established by the Pension Reform. The PRF thus complements the financing of future pension-related contingencies.

### Rules on fund contributions

The rules on establishing the funds and accumulating resources therein are established by law (see *Figure 1*).<sup>4</sup>

The PRF is increased each year by a minimum of 0.2% of the previous year's gross domestic product (GDP). If the effective fiscal surplus exceeds 0.2% of GDP, the PRF receives a contribution equivalent to the surplus, up to 0.5% of GDP. PRF contributions only have to be made until the fund reaches UF 900 million (*Unidad de Fomento*, UF).

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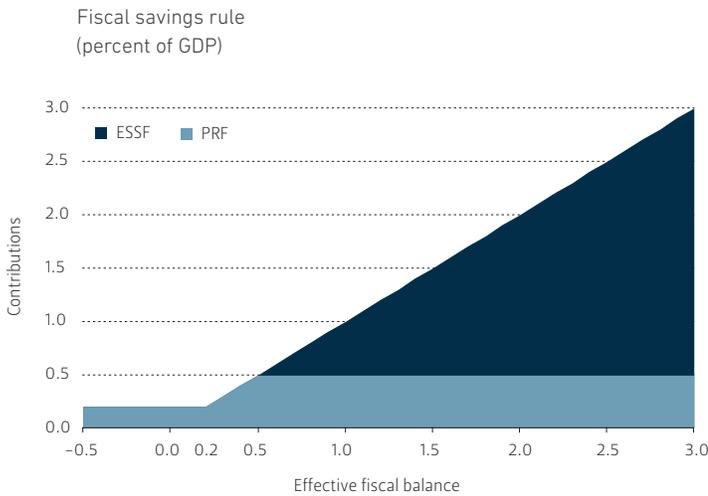
2 Decree N° 892 of 2014, which establishes the basis of fiscal policy, in accordance with the provisions of Article 1° of Law N° 20,128.

3 The structural balance rule (or cyclically adjusted balance rule) has undergone some changes since it was first implemented. For a detailed discussion of its design, modifications, application and results, see Marcel, Tokman, Valdés and Benavides (2001); García, García and Piedrabuena (2005); Rodríguez, Tokman, and Vega (2006); Velasco, Arenas, Rodríguez, Jorratt and Gamboni (2010); Comité Asesor para el diseño de una política fiscal de balance estructural de segunda generación para Chile (2011); Larraín, Costa, Cerda, Villena and Tomaselli (2011); Schmidt Hebbel (2012); Velasco and Parrado (2012) and the Budget Office (2013, 2014, 2015, 2016 and 2017).

4 For the PRF, the Fiscal Responsibility Law; for the ESSF, Statutory Decree (DFL) N° 1, issued by the Ministry of Finance in 2006.

The yearly contribution to the ESSF corresponds to the balance of the effective fiscal surplus (if positive) after subtracting the PRF contribution, less public debt pay downs and any advance contributions to the fund.<sup>5</sup> Additionally the fund can receive extraordinary contributions from the sale of assets or debt issue.

**FIGURE 1**



SOURCE: Ministry of Finance of Chile

### Rules on the use of the funds

Starting in 2016, the PRF resources can be used to complement the financing of fiscal liabilities deriving from the state guarantee for old-age and disability solidarity pension benefits, as well as old-age and disability solidarity pension contributions. The annual withdrawal of PRF resources cannot exceed one-third of the difference between expenditures on pension liabilities in the current year and the pension expenditure in 2008, adjusted for inflation. Prior to 2016, withdrawals from the PRF were allowed equivalent to the returns generated in the previous year.

As of 2021, the PRF will cease to exist if the withdrawals in a calendar year do not exceed 5% of the fiscal pension expenditure established in that year’s budget. When the PRF is eliminated, the remaining balance will be transferred to the ESSF.

The ESSF resources can be used at any time to complement fiscal revenues as needed to finance authorized public spending in the event of a fiscal deficit. These resources can also be used for the regular or extraordinary pay down of public debt (including Recognition Bonds) and for financing the annual contribution to the PRF, as per a decision by the Finance Minister.

Withdrawals from the ESSF and the PRF are effectuated through a decree from the Ministry of Finance.

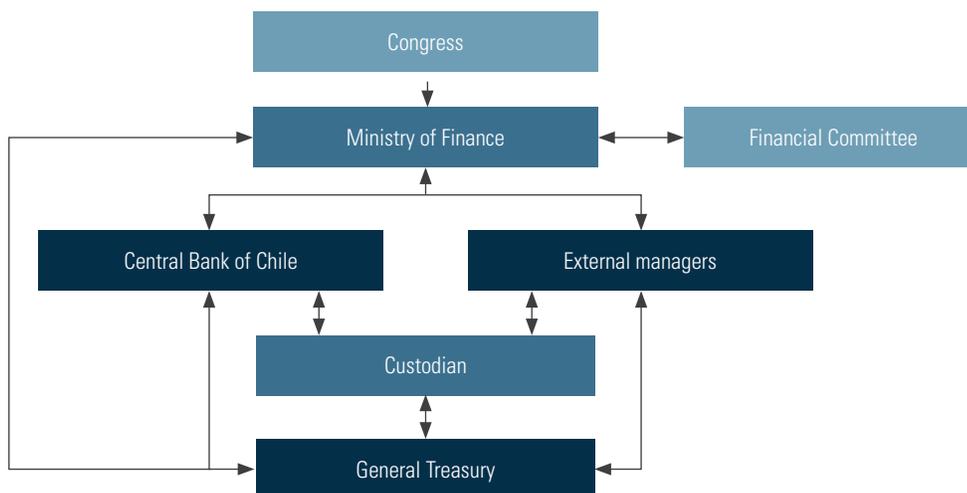
5 The current legislation allows the pay down of public debt and advance contributions to the ESSF using resources from the fiscal surplus of the current year, which must be deposited into the fund in the current or subsequent years.

## C. Institutional framework

The legal framework establishes a clear division of roles and responsibilities in order to ensure accountability and operational independence in the management of the funds. This section provides a brief description of the roles of each of the bodies involved in fund management (see *Diagram 1*).

**DIAGRAM 1**

Institutional framework for Chile's Sovereign Wealth Funds



SOURCE: Ministry of Finance of Chile

### Ministry of Finance and dependent bodies

The Fiscal Responsibility Law establishes that the funds are the property of the Fisco of Chile and that the General Treasury holds the legal title to the resources. The law authorizes the Finance Minister to make decisions on how the funds are managed and to dictate their investment policies. To this end, the Ministry of Finance draws up the investment guidelines, which define the criteria that must be followed by the funds' managers. The Ministry monitors the managers' performance and compliance with the investment guidelines and issues monthly, quarterly and annual reports on the state of the funds.

The General Treasury is responsible for the funds' accounting and the preparation of their audited financial statements, for monitoring compliance with the investment limits, for reconciling information on the portfolios from the managers and the custodian and for approving payments to the managers. The Budget Office is responsible for budgetary issues related to the funds.

### Central Bank of Chile

Executive Decree N° 1,383 (the Agency Decree), issued by the Ministry of Finance in 2006, appoints the Central Bank of Chile (CBC) to act as fiscal agent in the management and investment of the resources in both funds. In carrying out these functions, the CBC must strictly follow the investment guidelines issued by the Finance Minister. The CBC is authorized to delegate part of the management of the Sovereign Wealth Funds to external managers.

Following a careful selection process carried out in 2011, the CBC contracted BlackRock Institutional Trust Company N.A. (BlackRock), Mellon Capital Management Corporation (Mellon) and Rogge Global Partners PLC (Rogge), which was acquired by Allianz Global Investors (Allianz)<sup>6</sup> in 2016, as external managers delegated to the equity and corporate fixed-income portfolios which represent 35% of the PRF portfolio, since January 2012. In 2013, based on the recommendation of the Financial Committee, the Ministry of Finance instructed the CBC to contract BlackRock and Mellon to manage the ESSF stock portfolio, equivalent to 7.5% of the fund, taking into account that their mandate would be identical to the PRF's and that they were recently chosen from the selection process carried out for that fund.

Decree N° 1,618 of 2012 modified the Agency Decree to relieve the CBC of the management of the corporate fixed-income and equity portfolios of the ESSF and the PRF, whose management had been delegated by the CBC, in representation of the Fisco, to the aforementioned companies. In accordance with Decree N° 1,618 of 2012, the CBC's responsibilities with regard to the externally managed portfolios were significantly reduced as of 1 January 2014, being mainly limited to reconciling daily positions. With these changes, the contractual relationship with the external managers and other tasks previously carried out by the CBC were transferred to the Ministry of Finance and the General Treasury.

In 2018, the CBC selected BlackRock and Nomura Asset Management Global (Nomura) to act as external managers for the high yield bond portfolio; and BNP Paribas Asset Management (BNP) and Western Asset Management Company (Western) to manage mortgage backed securities (MBS) from U.S. agencies.<sup>7</sup> Both asset classes are part of the new investment policy established for the PRF (see section D of this chapter). The supervision of the external managers of the high yield bond portfolio is the responsibility of the Ministry of Finance and the Treasury, while the supervision of the U.S. agency MBS portfolio managers will be undertaken by the CBC, given that the Bank has experience investing in this asset class.

## Financial Committee

The Fiscal Responsibility Law stipulates that the Ministry of Finance must establish an Advisory Committee to give advice to the Finance Minister on the Sovereign Wealth Funds (henceforth, the Financial Committee). This Committee monitors the investment of the funds' resources and advises the Minister on the definition of the investment policies consistent with the funds' objectives. In compliance with these provisions, on 23 December 2006, the Finance Minister announced the establishment of both the Sovereign Wealth Funds and the Financial Committee. The Committee was then officially created through Decree N° 621, issued by the Ministry of Finance in 2007. In accordance with that decree, the Committee must be made up of six members who have experience in investment portfolio management, have held an executive position in a financial institution or have held or currently hold an academic post. The six Committee members are appointed for two years, with half the seats being renewed each year. The current and former members of the Financial Committee are presented in Appendix 1. The Committee's president receives a fee per session of 25.5 UTMs (*Unidades Tributarias Mensuales*, UTM), with an annual cap of 127.5 UTMs. The remaining members receive a fee of 17 UTMs per session, with an annual cap of 85 UTMs. The Committee must meet at least once every six months, but in practice it has met at least five times a year. A summary of the Committee's meetings during 2018 is presented in Appendix 2.

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6 From now on, it will be mentioned as Allianz.

7 The contracts with the external portfolio managers for the high yield bond and U.S. agency MBS portfolios were signed in January 2019.

Decree N° 621 also stipulated the Financial Committee's functions and the rules of procedure for its proper functioning. Thus, the duties and powers of the Committee are as follows:

- To advise the Finance Minister, when requested, on key issues related to the funds' investment policy, such as the distribution of investments by asset class (asset allocation), the incorporation of new investment alternatives, the specification of portfolio benchmarks (see *Box 1*), the permissible range of deviation from the asset allocation and the limits on the funds' investment possibilities.
- To submit recommendations to the Finance Minister, when requested, on custody and investment instructions and on the tender and selection processes for the management of the funds' portfolios.
- To express an opinion at the request of the Finance Minister about the structure and content of the annual reports on the funds' portfolio management that are presented to the Ministry of Finance by the institution(s) responsible for their management or custody and, on the basis of these reports, to express an opinion about the funds' management and, particularly, its consistency with their investment policies.
- To express an opinion about the structure and content of the reports on the funds prepared quarterly by the Ministry of Finance.
- To advise the Finance Minister, when requested, on any matter related to the funds' investment.
- To express its views and recommendations regarding other matters related to the funds' investment policies, taking into account the principles, objectives and rules that govern the funds.

In order to promote transparency, the Financial Committee decided that the decree regulating its activities, the minutes of its meetings and the corresponding press releases should be publicly disclosed. The Ministry of Finance's website thus, includes a special section containing all information on these issues.<sup>8</sup>

### **BOX 1: Portfolio benchmarks**

Portfolio benchmarks are representative market indexes for the different asset classes. In principle, they represent the passive investment performance of diversified portfolios invested in certain asset classes, where the return of each instrument is typically weighted by its relative share of market capitalization. The indexes are used as a reference for measuring the performance of the managers in charge of investing the funds.

Each asset class in an investment portfolio is associated with a benchmark. The benchmark for the total portfolio is thus constructed by weighting the selected indexes by the percentage allocation of each class, as defined in the investment policy.

Both the ESSF and the PRF have passive investment policies. That is, their investment strategy aims to achieve the benchmark return.

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8 [www.hacienda.cl/english/sovereign-wealth-funds.html](http://www.hacienda.cl/english/sovereign-wealth-funds.html)

## D. Investment policy

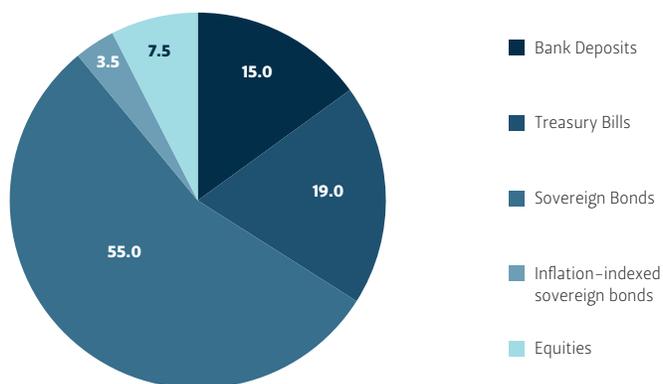
### Economic and Social Stabilization Fund

In line with the objectives described above, the main goal of the ESSF investment policy is to maximize the fund's accumulated value in order to partially cover cyclical reductions in fiscal revenues while maintaining a low level of risk. Its aversion to risk is reflected in the choice of an investment portfolio with a high level of liquidity and low credit risk and volatility, thereby ensuring the availability of the resources to cover fiscal deficits and avoiding significant losses in the fund's value. It is important to mention that the Ministry of Finance established that the resources of the fund ought to be invested abroad in order to do not damage the competitiveness of the Chilean economy.

From its inception through July 2013, the ESSF investment policy centered on investment in fixed-income instruments denominated in reserve currencies, which typically perform well in times of crisis. However, a new investment policy was implemented in August 2013, which was defined by the Ministry of Finance on the basis of the Financial Committee's recommendations in 2012.<sup>9</sup> This investment policy establishes a portfolio allocation of 15% in bank deposits, 74% in sovereign bills and bonds, 3.5% in inflation-indexed sovereign bonds and 7.5% in equities (see *Figure 2*). For the fixed-income portfolio, the currency allocation is defined as 40% in U.S. dollars (USD), 25% in euros (EUR), 20% in yen (JPY) and 7.5% in Swiss francs (CHF), expressed as a percentage of the total portfolio. The new policy also increases the duration of the fixed-income portfolio to approximately 4.8 years (see *Box 2*).

**FIGURE 2**

ESSF: Strategic asset allocation  
(percent of portfolio)



SOURCE: Ministry of Finance of Chile

9 The Financial Committee's recommendation was founded on the review and analysis of different sources, including Eduardo Walker's study on portfolio allocation commissioned by the Ministry of Finance, comments on the study contained in three external peer reviews and additional simulations using market data from the last 20 years, carried out by the Ministry of Finance's International Finance team. For more information, see Chapter 3 of the Financial Committee's 2012 Annual Report.

## BOX 2: Main elements of the Economic and Social Stabilization Fund (ESSF) investment policy

**Investment objectives:** Consistent with the ESSF objectives, the investment policy aims to maximize the fund's accumulated value in order to partially cover cyclical reductions in fiscal revenues while maintaining a low level of risk. Its aversion to risk is reflected in the choice of an investment portfolio with a high level of liquidity and low credit risk and volatility, thereby ensuring the availability of the resources to cover fiscal deficits and avoiding significant losses in the fund's value.

**Strategic asset allocation:** The ESSF investment policy stipulates a strategic asset allocation of 15% in bank deposits, 74% in sovereign bills and bonds, 3.5% in inflation-indexed sovereign bonds and 7.5% in equities. The fixed-income portfolio has a currency allocation of 40% in USD, 25% in EUR, 20% in JPY and 7.5% in CHF, expressed as a percentage of the total portfolio.

**Portfolio benchmarks:** A benchmark has been defined for each component of the strategic asset allocation, using a representative market index:

Asset class		Percent of portfolio	Benchmark
1. Bank deposits		5.0	ICE BofaAML US Dollar 3 Month Deposit Bid Rate Average Index
		6.0	ICE BofaAML Euro Currency 3 Month Deposit Bid Rate Average Index
		4.0	ICE BofaAML Japanese Yen 3 Month Deposit Bid Rate Average Index
		<b>15.0</b>	<b>Subtotal bank deposits</b>
2. Treasury bills and sovereign bonds	2.1. Treasury bills	6.0	ICE BofaAML US Treasury Bills Index
		7.0	ICE BofaAML Euro Treasury Bills Index
		6.0	ICE BofaAML Japan Treasury Bills Index
		<b>19.0</b>	<b>Subtotal Treasury bills</b>
	2.2. Sovereign bonds	26.5	Bloomberg Barclays Global Aggregate -Treasury: U.S. 7-10 Yrs
		11.0	Bloomberg Barclays Global Aggregate - Treasury: Germany 7-10 Yrs
		10.0	Bloomberg Barclays Global Aggregate -Treasury: Japan 7-10 Yrs
		7.5	Bloomberg Barclays Global Aggregate -Treasury: Switzerland 5-10 Yrs
		<b>55.0</b>	<b>Subtotal Sovereign bonds</b>
		<b>74.0</b>	<b>Subtotal Treasury bills and Sovereign bonds</b>
3. Inflation-indexed sovereign bonds		2.5	Bloomberg Barclays Global Inflation-Linked: U.S. TIPS 1-10 Yrs
		1.0	Bloomberg Barclays Global Inflation-Linked: Germany 1-10 Yrs
		<b>3.5</b>	<b>Subtotal inflation-indexed sovereign bonds</b>
4. Equities		<b>7.5</b>	<b>MSCI All Country World Index ex Chile (unhedged with reinvested dividends)</b>

The ESSF has implemented a passive management strategy since May 2011, allowing only marginal deviations from the strategic asset allocation.

**Management:** The ESSF is largely managed by the CBC, which, acting as fiscal agent, manages the fixed-income portfolio (92.5% of total assets). The equities portfolio is managed by external management companies contracted by the CBC following a tender process.

**Ex ante tracking error<sup>1</sup>:** The ex ante tracking error is capped at 50 basis points for the fixed-income portfolio and 60 basis points for the equities portfolio..

**Eligible currencies and issuers:** Only currencies in the benchmark are eligible for investment. In the case of sovereign exposure, the issuers that make up the corresponding benchmark, supranational institutions, agencies and eligible entities with an explicit government guarantee according the eligibility criterias used by the CBC in order to invest the internacional reserves and according the pre-established limits set in the investment guidelines. With regard to bank exposure, the fund can only be invested in banks with a risk rating of A-/A3 or higher (Standard & Poor's, Moody's and Fitch) and in accordance with the limits stipulated in the investment guidelines. For exposure to equities, only the issuers that make up the corresponding benchmark are eligible for investment, however the investment in exchange traded funds, mutual funds, American depository receipts, global depository receipts, and futures is also allowed.

**Leveraging and the use of derivatives:** Leveraging is not allowed.<sup>2</sup> The use of derivatives is defined according to the type of portfolio:

- Fixed-income portfolio: The use of forwards and swaps is only allowed for foreign currency hedging. The total notional amount cannot exceed 4% of the fixed-income portfolio.
- Equity portfolio: The use of forwards and swaps is only allowed for foreign currency hedging. In addition, the use of equity futures is allowed for hedging purposes or to gain exposure to part of the benchmark. The aggregate nominal amount of the futures, forwards and swaps cannot exceed 10% of the portfolio of each external manager.

**Rebalancing policy:** The rebalancing policy consists in restoring the strategic allocation once a year and whenever the share of equities exceeds the range of 5.5% to 9.5% of the total portfolio. The annual rebalancing is coordinated with fund contributions, to the extent possible.

**Investment guidelines:** The investment guidelines, which are published in Spanish and available online at the Ministry of Finance website,<sup>3</sup> provide additional information on the ESSF investment policy, such as special restriction on investment in specific countries and other relevant limits, as well as other aspects of portfolio management.

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1 The ex ante tracking error is an estimate of the standard deviation of the difference between the portfolio and benchmark returns. The lower the ex ante tracking error, the more passive the portfolio management.

2 Leveraging is the purchase of assets through debt.

3 <https://www.hacienda.cl/english/sovereign-wealth-funds/economic-and-social-stabilization-fund/investment-policy.html>.

## Pension Reserve Fund

In November 2017, the Finance Minister accepted the Financial Committee's recommendations on modifying the PRF investment policy. The new policy proposed by the Committee was defined based on the conclusions of a study commissioned to Mercer Investment Consulting (Mercer), which was submitted in mid-2017.

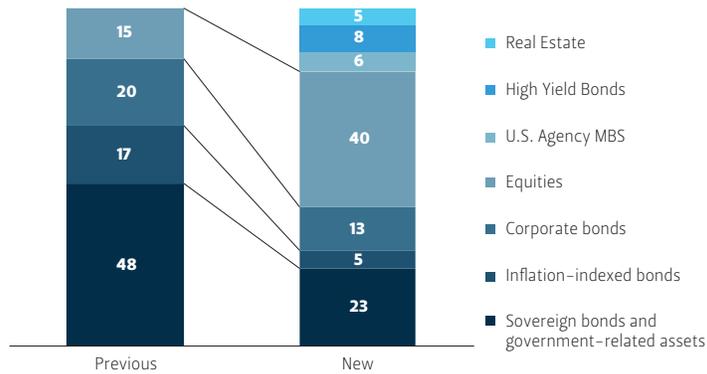
As part of the new investment policy, and considering that the fund's resources are to finance part of the fiscal pension obligations, which are denominated in pesos, a new investment objective and risk tolerance were established for the fund. Specifically, the investment objective was defined as an expected annualized return in pesos of at least 2% over Chilean inflation in a ten-year period, with a probability of at least 60%. The risk tolerance establishes that the probability that the fund's real return will be less than -12%, expressed in pesos, must not be over 5% in any given year.<sup>10</sup>

The new strategic asset allocation was defined so as to be consistent with the above objectives and risk tolerance. Specifically, the new portfolio allocation established that 40% of the fund must be invested in equities, 23% in sovereign bonds and government related assets, 5% in inflation-indexed sovereign bonds, 6% in U.S. agency MBS, 8% in high yield bonds, and 5% in real estate assets (see *Figure 3*). All asset classes will be invested globally, with the exception of U.S. agency MBS. The Committee also suggested gradually hedging the currency exposure of the fixed-income portfolios to Chilean pesos (see *Box 3*).

For more information on the implementation of the new investment policy and how the fund will converge to the new asset allocation, see chapter 3, section A.

**FIGURE 3**

Comparison between previous and new investment policy  
(percent of portfolio)



SOURCE: Ministry of Finance of Chile

For more information on the implementation of the new investment policy and how the fund will converge to the new asset allocation, see chapter 3, section A.

<sup>10</sup> For more information on the previous investment policy, see the Financial Committee's 2017 Annual Report.

### BOX 3: Main elements of the new investment policy for the Pension Reserve Fund (PRF)

**Investment objective:** The investment objective is to earn an expected annualized return in pesos of at least 2% over Chilean inflation in a ten-year period, with a probability of at least 60%. The risk tolerance establishes that the probability that the fund's real return will be less than -12%, expressed in pesos, must not be over 5% in any given year.

**Strategic asset allocation (target):** The new investment policy considers a portfolio allocation of 23% in sovereign bonds and government-related assets, 5% in inflation-indexed sovereign bonds, 13% in corporate bonds, 6% in U.S. agency MBS, 8% in high yield bonds, 40% in equities, and 5% in unlisted real estate assets. Additionally, the currency exposure associated with the fixed-income portfolio will be hedged. Based on the Financial Committee's recommendations, the Finance Minister decided to gradually converge to the new strategic asset allocation over a period of approximately three years. The convergence process is discussed in detail in chapter 3, section A of this report.

**Benchmarks:** A benchmark has been established for each component of the strategic asset allocation, using a representative market index:

Asset class	Percent of portfolio	Benchmarks
Sovereign bonds and government-related assets <sup>(a)</sup>	23	Bloomberg Barclays Global Aggregate: Treasury Bond Index (unhedged)
		Bloomberg Barclays Global Aggregate: Government-Related (unhedged)
Inflation-indexed sovereign bonds	5	Bloomberg Barclays Global Inflation-Linked Index (unhedged)
Corporate bonds	13	Bloomberg Barclays Global Aggregate: Corporates Index (unhedged)
U.S. agency MBS	6	Bloomberg Barclays US Mortgage Backed Securities (MBS) Index
High yield bonds	8	Barclays Global High Yield Index (unhedged)
Equities	40	MSCI All Country World Index ex Chile (unhedged, with reinvested dividends)
Real estate	5	<i>To be determined</i>

(a) The two subindexes of this asset class are added in accordance with their relative capitalization.

**Currency hedging:** The currency exposure associated with the fixed-income portfolio will be hedged to mitigate foreign currency conversion loss, that is, the risk deriving from the fluctuation of the portfolio's investment currencies against the peso. One or more external portfolio managers will be contracted to implement the hedging strategy in accordance with guidelines established by the Ministry of Finance, taking into account the Financial Committee's recommendations. The strategy will involve the use of currency forwards. In 2019 the Financial Committee will recommend the hedging strategy and prepare the guidelines that will be used to contract the external managers to implement the strategy. The Committee has recommended implementing the strategy gradually so as to mitigate the impact on the national currency.

**Management:** The sovereign bond and government-related asset portfolio and the inflation-indexed bond portfolio are managed directly by the Central Bank, acting as fiscal agent. The corporate bond and equity portfolios are managed by external portfolio managers. The high yield bond, U.S. agency MBS, and real estate portfolios and the currency hedging program will be managed by external portfolio managers, all of which will be selected by the Central Bank with support from the Ministry of Finance and a consulting firm (RVK).

**Ex ante tracking error:** The ex ante tracking error has been set at 50 basis points for the aggregate portfolio of sovereign bonds and government-related assets and inflation-indexed sovereign bonds, 60 basis points for the equity portfolio, 50 basis points for

the corporate bond portfolio, and 150 basis points for the high yield bond portfolio. For the U.S. agency MBS portfolio, the monthly average cannot exceed 20 basis points, and the maximum daily value cannot exceed 30 basis points.

**Eligible currencies, issuers, and instruments:** For each asset class, only currencies that are included in the respective benchmarks are eligible for investment. Eligible issuers and instruments are mainly those included in the benchmark, but each asset class may include some eligible issuers and instruments that are not in the benchmark, so as to give the portfolio managers more flexibility in managing their portfolios. These include the following:

- U.S. agency MBS: debt instruments issued or guaranteed by the U.S. government or by MBS issuing agencies, interest rate futures, and TBAs.<sup>1</sup>
- Corporate bonds: market-traded futures and reopened issues that are comparable to the instruments included in the benchmark.
- High yield bonds: futures, reopened issues that are comparable to the instruments included in the benchmark, sovereign instruments, and investment-grade bonds that leave the benchmark.
- Equities: ETFs, mutual funds, American Depositary Receipts (ADRs), Global Depositary Receipts (GDRs), and futures.

**Leveraging and use of derivatives:** The fund does not allow leveraging. The use of derivatives is differentiated by portfolio:

- Aggregate portfolio of sovereign bonds, government-related assets, and inflation-indexed sovereign bonds: forwards or swaps can only be contracted for the purpose of currency hedging. The nominal value of forwards or swaps that are contracted with a given eligible counterparty cannot exceed 1.0% of the market value of the portfolio if the counterparty has a credit rating of at least AA– and 0.5% if the credit rating is A– to A+. At the same time, the aggregate notional value of all current forward or swap contracts cannot exceed 4% of portfolio.
- U.S. agency MBS: Exposure to TBAs cannot exceed 30% of the portfolio. The nominal amounts of U.S. interest rate futures valued at market price and expressed in absolute value cannot exceed 10% of the market value of the portfolio.
- Equities, corporate bond, and high yield bond portfolios: Each manager can only contract forwards or swaps for the purpose of currency hedging; and futures—equities or fixed-income, as indicated—for hedging purposes or to gain exposure to part of the benchmark. The nominal value of the forwards or swaps that are contracted by a given manager with a given eligible counterparty cannot exceed 3% of the market value of the portfolio under management. The aggregate nominal amount of futures, forwards, and swaps cannot exceed 10% of the portfolio of any given manager.

**Rebalancing policy:** During the transition period, the portfolio will only be rebalanced among the different asset classes in order to converge to the new strategic asset allocation. See chapter 3, section A.

**Investment guidelines:** The investment guidelines, which are published on the Ministry of Finance's website,<sup>2</sup> provide additional information on the PRF investment policy, including details on the admissible instruments and other key limitations, as well as other issues related to fund management.

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<sup>1</sup> To be announced (TBA): MBS forwards.

<sup>2</sup> <https://www.hacienda.cl/english/sovereign-wealth-funds/pension-reserve-fund/investment-policy.html>

CHAPTER **2**

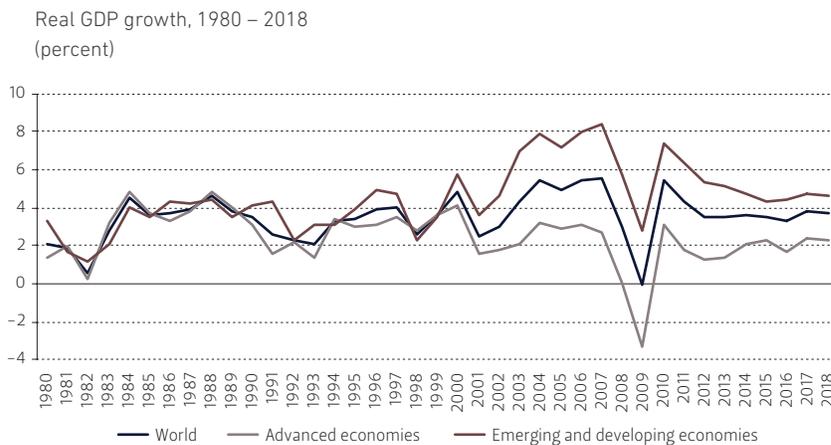
State of the  
Sovereign Wealth  
Funds

## A. Market analysis

### Main developments

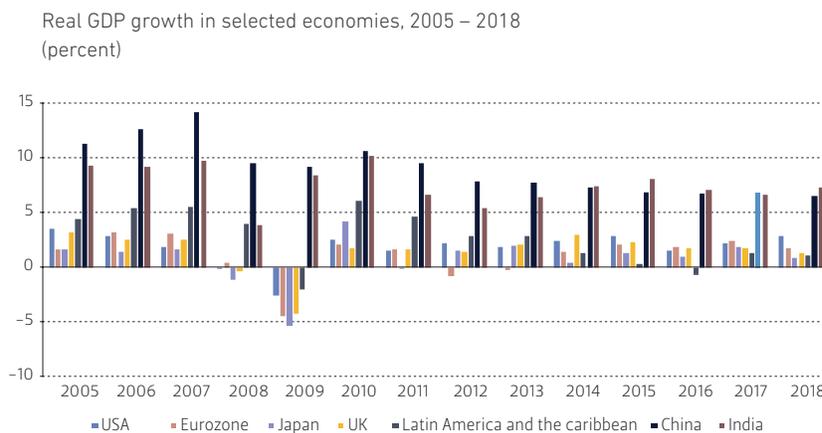
According to estimates by the International Monetary Fund (IMF),<sup>11</sup> the gross domestic product (GDP) of the world economy grew 3.7% in 2018, less than the 3.8% in 2017. For emerging and developing economies, GDP growth was around 4.6% in 2018, versus 4.7% in 2017. The advanced economies, in turn, recorded expected growth of approximately 2.3%, versus 2.4% the previous year (see *Figure 4*). By region, growth was higher in 2018 than in 2017 in the United States and India, whereas it was lower in the Eurozone, Latin America and the Caribbean, China, Japan and the United Kingdom (see *Figure 5*).

**FIGURE 4**



SOURCE: International Monetary Fund

**FIGURE 5**



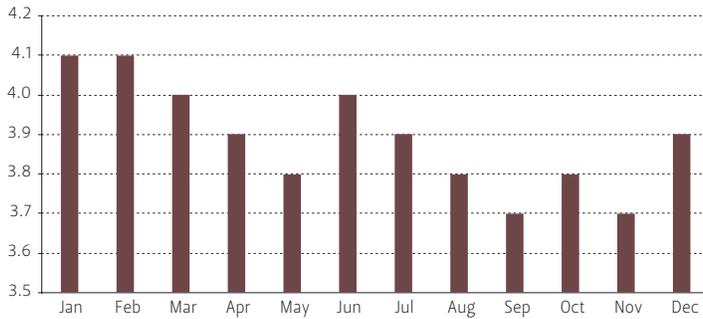
SOURCE: International Monetary Fund

11 The growth data presented in this section are from the October 2018 IMF *World Economic Outlook* database and the January 2019 update.

The U.S. economy grew 2.9% in 2018. Unemployment rate was 3.9% in December 2018 (see *Figure 6*), while hourly wages grew 3.2% at year-end relative to one year previous (see *Figure 7*). The general price index finished the year with 1.9% inflation relative to 2017, which is right around the target of 2% annual inflation set by the U.S. Federal Reserve (Fed). Core inflation, which excludes food and energy prices, was 2.2% in the year (see *Figure 8*). In this scenario, the Fed increased its monetary policy rate (the federal funds rate) by 25 basis points four times over the course of 2018.<sup>12</sup> These increases are consistent with the Fed's objective of normalizing U.S. monetary policy, a process that began in December 2015.

**FIGURE 6**

U.S. unemployment rate in 2018  
(percent)



SOURCE: Bureau of Labor Statistics

**FIGURE 7**

U.S. wage growth in 2018  
(year-on-year change, percent)

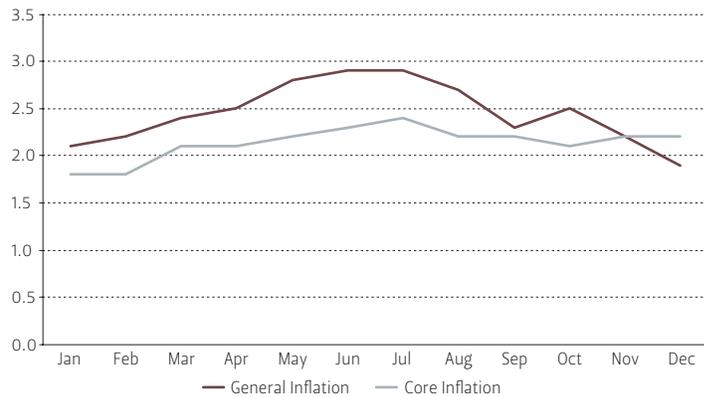


SOURCE: Bloomberg

12 The Fed increased its target range from 1.25% – 1.50% to 1.50% – 1.75% at the March meeting, to 1.75% – 2.00% in June, to 2.00% – 2.25% in September and 2.25% – 2.50% in December.

**FIGURE 8**

U.S. consumer price index in 2018  
(year-on-year change, percent)

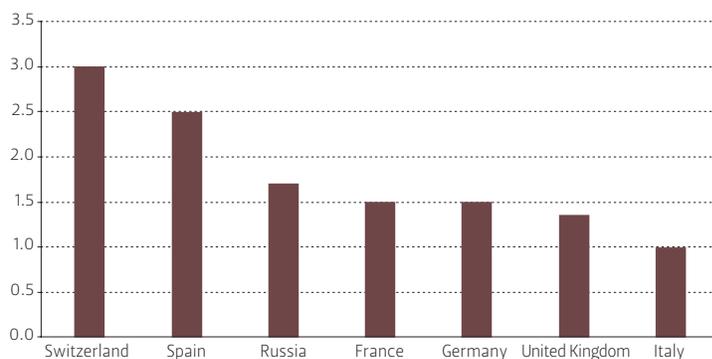


SOURCE: Bloomberg

The Eurozone grew 1.8% in the year. Germany and France, the largest economies in the Eurozone, recorded a GDP growth of 1.5%. GDP growth varied among other European countries: Switzerland, 3.0%; Spain, 2.5%; Russia, 1.7%; United Kingdom, 1.4% and Italy, 1.0% (see Figure 9). Eurozone inflation ended the year at 1.6% (see Figure 10). Unemployment decreased over the course of the year, finishing at 7.9% (see Figure 11).<sup>13</sup> In this scenario, the European Central Bank (ECB) maintained its quantitative easing program in 2018, with monthly asset purchases of 30 billion euros from January to September, which then dropped to 15 billion euros through December. In December, the ECB announced that it would end its net asset purchases in 2019 but continue to reinvest principal payments from the instruments bought under the purchase program, in order to maintain favorable liquidity conditions.

**FIGURE 9**

Real GDP growth in selected Eurozone countries in 2018  
(year-on-year change, percent)

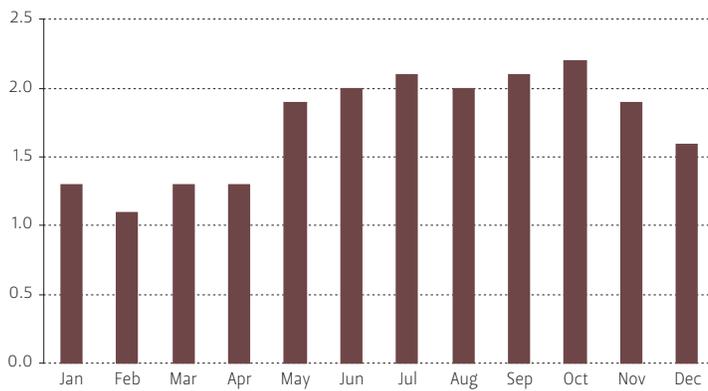


SOURCE: International Monetary Fund. Estimates

<sup>13</sup> This data corresponds to November 2018.

**FIGURE 10**

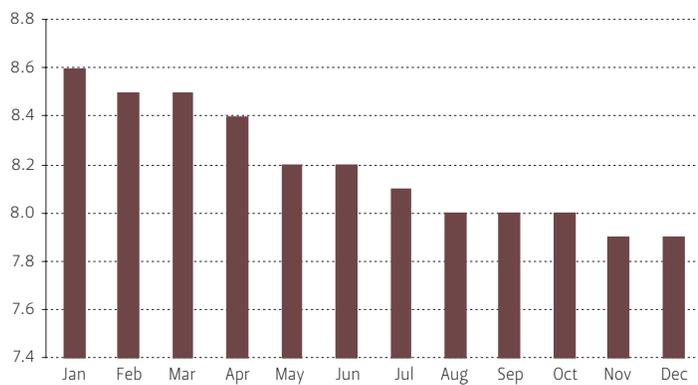
Eurozone annual inflation in 2018  
(percent)



SOURCE: Bloomberg

**FIGURE 11**

Eurozone unemployment rate in 2018  
(percent)



SOURCE: Bloomberg

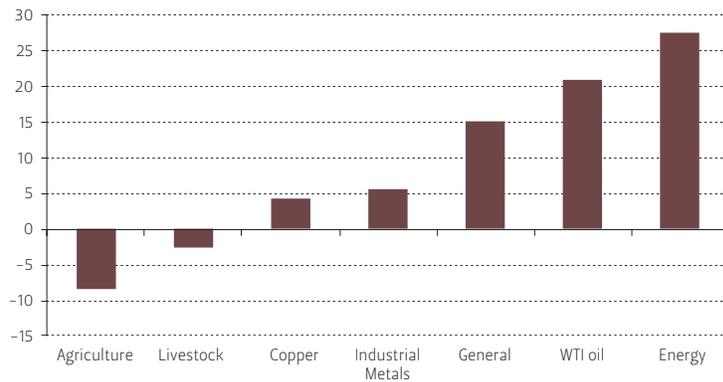
Japan grew 0.9% in 2018. The Central Bank of Japan kept its short-term interest rate target at -0.1% in order to bring inflation up over the 2% target, and continued its ten-year bond purchase program, with the aim of holding ten-year rates around 0%.

In China, the economy grew 6.6% in 2018, which represents a slowdown relative to 2017, when the annual growth rate was 6.9%. The lower growth reflects an international context characterized by tensions between China and the United States, which intensified in March when the latter imposed tariffs on steel and aluminum imports from China. This was followed by a series of import tariffs on various products by both parties.

With regard to commodities, prices rose, on average, between 2017 and 2018 in most sectors, with the exception of the agriculture and livestock sectors, which fell 8.3% and 2.5%, respectively. The copper price, which is most important for Chile, rose 4.3% relative to the previous year<sup>14</sup> (see *Figure 12*).

**FIGURE 12**

Standard & Poor's commodity index in 2018  
(year-on-year change, percent)

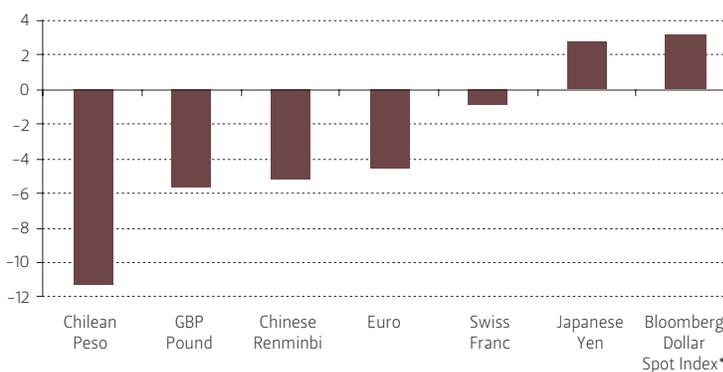


SOURCE: Bloomberg

In this global context, the U.S. dollar strengthened against the main world currencies in 3.1% (see *Figure 13*). Among the main investment currencies of the Sovereign Wealth Funds, the GBP pound, the Chinese renminbi and the euro were the ones that depreciated the most in the year (-5.6%, -5.2% and -4.5% respectively) and the Japanese yen appreciated during the year 2.73%.

**FIGURE 13**

Selected currencies against the dollar in 2018<sup>15</sup>  
(year-on-year change, percent)



SOURCE: Bloomberg

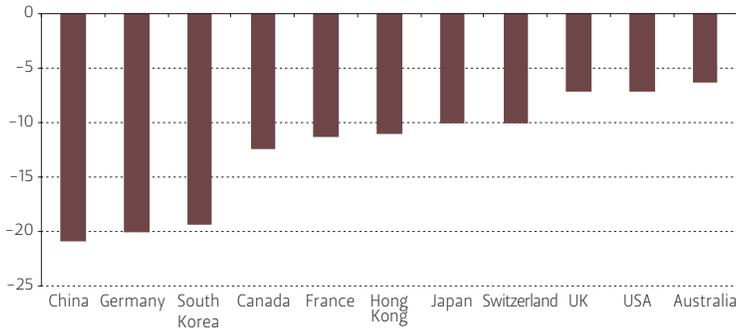
14 Metals Price, Chilean Copper Commission.

15 The Bloomberg Dollar Spot Index is a traded index that tracks the value of the dollar against the ten leading global currencies. Index returns over zero indicate appreciation of the dollar against the basket of currencies, while negative returns indicate dollar depreciation.

In 2018, share prices decreased strongly in most markets. In a selected sample (see *Figure 14*), all the markets had negative returns. China, Germany and South Korea had the lowest equity market performance in the period, with returns of -20.9%, -20.0% and -19.3%, respectively, measured in local currency. United Kingdom, United States and Australia recorded the strongest performances, with returns in local currency of -7.1%; -7.1% and -6.3%, respectively.

**FIGURE 14**

MSCI equity index returns in 2018  
(percent, measured in local currency)

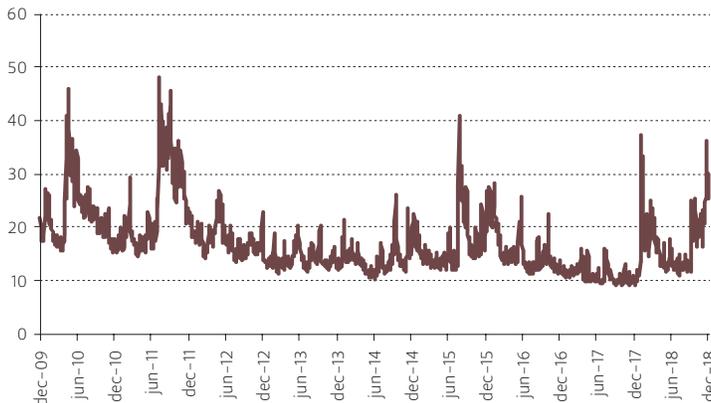


SOURCE: Bloomberg

Equity market volatility (S&P 500), measured by the Chicago Board Options Exchange (CBOE) Volatility Index (VIX), was higher, on average, in 2018 than in the previous year. The index peaked in February and December (37.2 and 36.1 respectively). The minimum value was registered in January (9.15), similar to the minimum registered in 2017 (9.14) (see *Figure 15*).

**FIGURE 15**

Equity market volatility (VIX): S&P 500, 2009–2018  
(in levels)

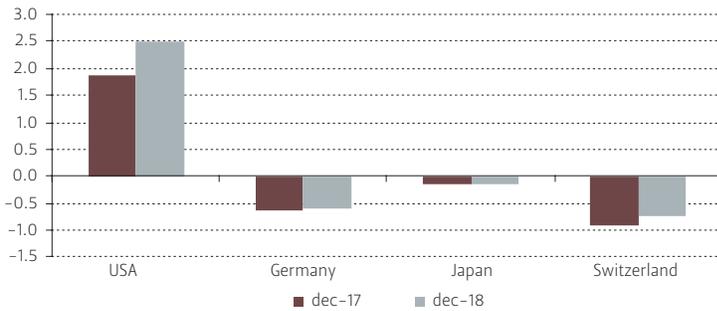


SOURCE: Bloomberg

At year-end, two-year nominal sovereign interest rates had increased in the United States, Germany, and Switzerland relative to year-end 2017 (see *Figure 16*), while in Japan it decreased slightly. Ten-year nominal interest rates increased in the United States and decreased in Germany, Switzerland, and Japan (see *Figure 17*).

**FIGURE 16**

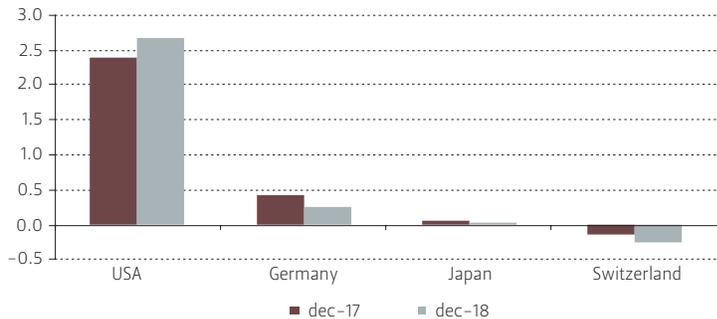
Internal rate of return (IRR) on two-year bonds in selected countries, 2017–2018 (percent)



SOURCE: Bloomberg

**FIGURE 17**

Internal rate of return (IRR) on ten-year bonds in selected countries, 2017–2018 (percent)



SOURCE: Bloomberg

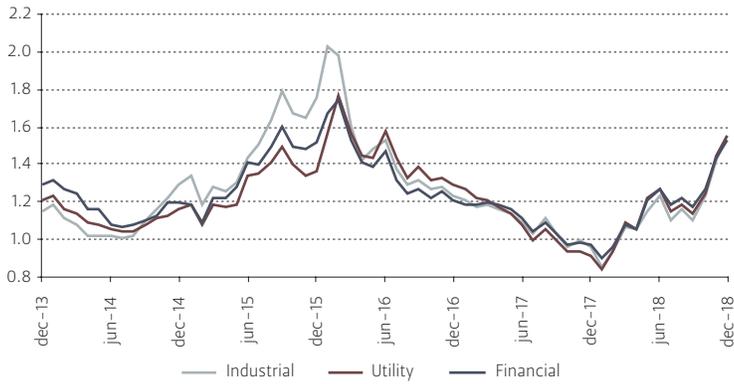
In the corporate market, spreads increased in all sectors of the Bloomberg Barclays Global Aggregate Corporate index in 2018 vis-à-vis 2017.<sup>16</sup> In the industrial, financial, and utility sectors, spreads increased 62%, 71%, and 58%, respectively (see *Figure 18*).<sup>17</sup>

16 The Bloomberg Barclays Global Aggregate Corporate Index comprises global investment-grade fixed-income corporate bonds. It covers 54 countries, including both developed and developing economies. The index is subdivided into three sectors: namely, the industrial, financial, and utility sectors. At year-end 2018, the index measured 11,948 issues, of which 54% were in the industrial sector, 34% in the financial sector, and 12% in the utility sector.

17 The industrial sector includes commodities, capital goods, communications, cyclical consumption, noncyclical consumption, energy, technology, transport, and other.

**FIGURE 18**

Corporate spreads by industry, 2013 – 2018  
(percent)



SOURCE: Barclays

In 2018, sovereign bonds recorded positive returns and corporate bonds recorded negative returns, both in local currency. The “Bloomberg Barclays Global Aggregate: Treasury Bond Index (hedged)” and the “Bloomberg Barclays Global Aggregate: Corporates Index (hedged)” closed the year with returns of 2.82% and -1.00%, respectively (see Figure 19).

**FIGURE 19**

Bloomberg Barclays Global Aggregate: Treasury Bond Index and Corporates Index (hedged), 2012 – 2018  
(percent, measured in local currency)



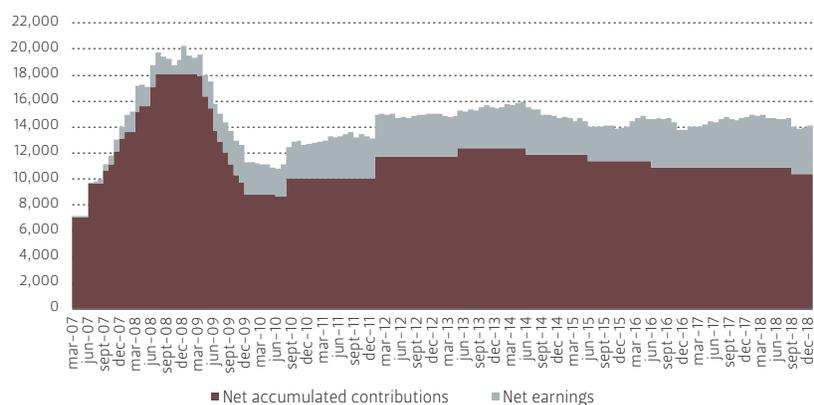
SOURCE: Barclays

## B. Market value

At year-end 2018, the market value of the ESSF and the PRF was US\$ 14,134 million and US\$ 9,663 million, respectively, versus US\$ 14,739 million and US\$ 10,011 million at year-end 2017. The decrease in the value of the ESSF was mainly due to a withdrawal of US\$ 542 million, used to finance the contribution to the PRF, and net investment losses of US\$ 63 million (see *Figure 20*). The decrease in the PRF, in turn, was mainly due to net investment losses of US\$ 364 million, which were partially offset by a net contribution of US\$ 17 million (see *Figure 21*). The net contribution to the PRF breaks down into a contribution of US\$ 542 million in September, equivalent to 0.2% of the previous year's GDP, a withdrawal of US\$ 295 million that same month and a second withdrawal of US\$ 230 million in December. The total amount withdrawn from the PRF in 2018 is the maximum withdrawal allowed to finance the Solidarity Pillar in accordance with current legislation.

**FIGURE 20**

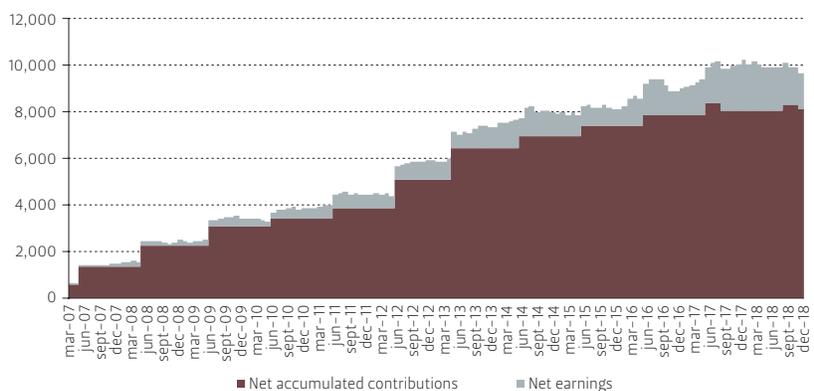
ESSF: Market value, March 2007 to December 2018  
(millions of dollars)



SOURCE: Ministry of Finance of Chile

**FIGURE 21**

PRF: Market value, March 2007 to December 2018  
(millions of dollars)



SOURCE: Ministry of Finance of Chile

## C. Returns

In 2018, the net return in dollars (see *Box 4*), was -0.41% in the ESSF and -3.56% in the PRF (see *Table 1*). The internal rate of return (IRR) was -0.42% for the ESSF and -3.59% for the PRF.

For the ESSF, the negative return breaks down into a 0.20% return on the fixed-income portfolio and an -9.11% return on the equity portfolio. The fixed-income return is the sum of 1.01% yields on instruments in local currency and -0.80% due to exchange rate fluctuations against the dollar of the currencies in which these instruments are denominated.

In the case of the PRF, the return in dollars is explained by the negative returns on all asset classes. In fixed income, the returns were -0.62% for sovereign bonds and government related assets, -4.25% for inflation-indexed sovereign bonds, and -3.77% for corporate bonds. The PRF equity portfolio, yielded -9.07% in the year.

**TABLE 1**

ESSF and PRF: Determinants of returns in dollars, 2018  
(percent)

Fund	Component	Quarter				2018
		I	II	III	IV	
ESSF	Fixed-income <sup>(a)</sup>	1.54	-2.24	-0.95	1.92	0.20
	<i>Currency of origin</i>	-0.53	0.29	-0.41	1.65	1.01
	<i>Exchange rate fluctuations</i>	2.08	-2.52	-0.54	0.27	-0.80
	Equities	-0.86	0.61	4.34	-12.67	-9.11
	<b>Total return (USD)</b>	<b>1.34</b>	<b>-2.01</b>	<b>-0.52</b>	<b>0.81</b>	<b>-0.41</b>
	Total return (CLP)	-0.30	4.90	1.56	6.02	12.61
	Total return (Real in UF)	-0.92	4.16	0.83	5.22	9.48
PRF	Sovereign and government related bonds	2.52	-3.27	-1.42	1.67	-0.62
	Inflation-indexed sovereign bonds	1.55	-3.22	-1.46	-1.14	-4.25
	Corporate bonds	-0.94	-2.45	0.52	-0.93	-3.77
	Equities	-0.84	0.63	4.34	-12.67	-9.07
	<b>Total return (USD)</b>	<b>1.13</b>	<b>-2.49</b>	<b>-0.12</b>	<b>-2.08</b>	<b>-3.56</b>
	Total Return (CLP)	-0.51	4.38	1.97	2.98	9.05
	Total return (Real in UF)	-1.13	3.65	1.22	2.20	6.01

(a) For the ESSF fixed-income portfolio, the table presents an estimate of the return in currency of origin and the return deriving from exchange rate fluctuations affecting the portfolio. The impact of exchange rate fluctuations is approximated and calculated using the benchmark currency allocation, taking into account that the ESSF is invested under a passive mandate. The return in currency of origin is calculated by subtracting that estimate from the fixed-income return.

SOURCE: Ministry of Finance of Chile

#### **BOX 4: Factors affecting returns in the Sovereign Wealth Funds**

The investment returns in the Sovereign Wealth Funds depends on a number of factors that affect the different types of instruments included in the different fund portfolios.

For the fixed-income portfolios, the main factors are interest rate levels, the credit quality of the issuers, and exchange rate movements. Market interest rates directly affect the interest rate offered on time deposits in financial institutions and sovereign debt securities at issuance. Changes in interest rates further affect the price of fixed-income instruments that are traded in the secondary market, especially for medium- and long-term securities, where an increase has a negative effect and a decrease has a positive effect. The issuer's credit quality further affects the price at which a fixed-income instrument is traded in the market: a deterioration in credit quality will cause a reduction in the price; an improvement, an increase.<sup>1</sup> Finally, because the funds' performance is measured in dollars while a large share of the portfolio is invested in instruments denominated in other currencies, exchange rate movements against the dollar have an effect on returns.

For the equities portfolios, returns will largely depend on the market's perception of the issuing corporation's income generation capacity and the risks associated with the company, as well as market financial conditions.

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<sup>1</sup> In the case of corporate bonds, credit quality is generally measured through the spread, that is, the difference between the bond's interest rate and the benchmark sovereign interest rate. An increase (decrease) in the spread on a corporate bond is associated with a reduction (increase) in the bond's value.

Returns in Chilean pesos depend on the peso-dollar exchange rate: the value of the portfolio expressed in pesos increases (decreases) when the peso depreciates (appreciates) against the dollar. In 2018, the peso depreciated against the dollar, which explains the better returns in national currency of 12.61% annual in the ESSF and 9.05% in the PRF. The real returns of the funds, which is calculated from the nominal return in pesos, discounting the variation in the UF for the respective period, was 9.48% for the ESSF and 6.01% for the PRF.

Desde el inicio de los fondos, la rentabilidad anual en dólares al cierre de 2018 fue de 2,41% para el FEES y 3,22% para el FRP. Por su parte, la rentabilidad anual desde el inicio expresada en pesos chilenos fue de 4,65% para el FEES y 5,48% para el FRP. Finalmente, la rentabilidad real anual desde el inicio fue de 1,10% para el FEES y 1,90% para el FRP.

In 2018, the return for the ESSF was 11 basis points higher than its benchmark. For the PRF the return was 6 basis points higher than its benchmark. Since 31 March 2007, the difference between the average annual return of the ESSF and PRF and their benchmarks was -4 basis points and -24 basis points, respectively.<sup>18</sup>

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<sup>18</sup> This means that the manager's portfolio generated lower returns, on average, than the implicit benchmark portfolio in the full period (2007-2018).

Figure 22 shows the evolution of the index of accumulated returns for each fund. For the ESSF, the index increased 32.2% between 31 March 2007 and year-end 2018; for the PRF, the increase was 45.1% in the same period. The figure illustrates how the evolution of the two funds' returns began to differentiate in 2012, when the PRF investment policy was changed. The higher return of the PRF, relative to the ESSF, is mainly due to the strong performance of the asset classes that were incorporated into the PRF in early 2012, in particular equities and corporate bonds, which have recorded annualized returns of around 8.36% and 2.49%, respectively.<sup>19</sup>

**FIGURE 22**

ESSF and PRF: Accumulated returns index, in dollars  
(31 March 2007 = 100)



SOURCE: Ministry of Finance of Chile

<sup>19</sup> Although the ESSF also invests in equities, they were only incorporated in August 2013 and represent 7.5% of the total portfolio, versus 19% in the PRF at the end of 2018. It should be noted that equities represented approximately 15% of the PRF between March 2012 and September 2018.



CHAPTER **3**

Activities and  
Recommendations  
of the Financial  
Committee

## A. Implementation of the new PRF investment policy

### 1. Convergence process

The Financial Committee recommended a gradual convergence to the new strategic asset allocation, given that it entails a significant increase in equities exposure. Furthermore, spacing out the increases over a long period of time would diversify some of the risk of interacting with the market at a bad time. Additionally, it considered that there are limitations to the Central Bank's capacity to dedicate resources for carrying out the process of selecting external portfolio managers for the new asset classes.

The Committee therefore proposed increasing the equities exposure gradually over three years, with scheduled increases approximately every six months, if possible timed to correspond with PRF contributions and withdrawals.<sup>20</sup> Thus, market conditions permitting, increases in this asset class would occur in January and June of each year, starting in 2018.

With regard to the new asset classes, the Committee recommended implementing the U.S. agency MBS and high yield bond asset classes in a first phase, because the associated processes are similar to past experience with the asset classes in which the PRF is currently invested. The implementation of the real estate asset class was deferred to a second phase, because it requires an in-depth analysis of the operational, legal, and tax issues associated with this type of investment in the private market. The implementation of the currency hedging program was also left for a later phase, as it depends directly on the final currency composition of the fixed-income portfolio once the fund has fully converged to the strategic asset allocation.

Based on the above recommendations, the Ministry of Finance defined a series of transitional strategic asset allocations that reflect the way the fund will converge to the final strategic allocation (see *Table 2*). The first increase in the equity portfolio was made in September 2018<sup>21</sup> and, as indicated earlier, further increases are expected to be implemented in January and June of each year. In January 2019, the fund began to invest in U.S. agency MBSs and high yield bonds. These latter mandates and the increase in the equity portfolio for that month will be funded with resources from the sovereign bond and government-related assets portfolio, the inflation-indexed sovereign bond portfolio, and the corporate bond portfolio. Investment in the real estate sector is expected to begin in January 2020. The increases in equity and real estate investments will be funded out of the sovereign bond and government-related asset portfolio and the inflation-indexed sovereign bond portfolio.

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20 Contributions to the PRF must be made in the first half of each year, usually in the month of June. The Finance Ministry is working with the Budget Office (DIPRES) to coordinate portfolio withdrawals with the date of contributions so as to minimize transaction costs.

21 The first increase in the equity portfolio was scheduled for June 2018, when the PRF would receive its annual contribution, but there was a delay in processing the decree on the PRF contribution, so the increase had to be pushed back until September.

**TABLE 2**

Transitory and final strategic asset allocation  
(percent)

	Sovereign bonds and government-related assets	Inflation-indexed sovereign bonds	Corporate bonds	Equities	U.S. agency MBSs	High yield bonds	Real estate	Total
31-12-2017	48	17	20	15	0	0	0	100
30-09-2018	44	17	20	19	0	0	0	100
31-01-2019	39	11	13	23	6	8	0	100
30-06-2019	35	11	13	27	6	8	0	100
31-01-2020	32	5	13	31	6	8	5	100
30-06-2020	28	5	13	35	6	8	5	100
31-01-2021	23	5	13	40	6	8	5	100

SOURCE: Ministry of Finance

In sum, the gradual implementation of the convergence process has begun, and the fund is expected to reach its final strategic asset allocation in early 2021. The target allocation includes 23% sovereign bonds and government-related assets, 5% inflation-indexed sovereign bonds, 13% corporate bonds, 40% equities, 6% U.S. agency MBS, 8% high yield bonds, and 5% real estate assets.

In 2019 the Committee will define the guidelines, timing, and pace of the implementation of the hedging strategy in order to limit the impact on the Chilean peso and market liquidity.

The implementation of the new investment policy requires contracting external portfolio managers who will be responsible for managing the new asset class portfolios and developing the currency hedging program. The Committee recommended delegating this selection to the Central Bank, which will apply the same standards that it uses in its international reserve management. The Committee also recommended contracting an international consulting firm to advise the Bank on the selection processes and to support the Ministry of Finance in the supervision of the external managers.

The Committee recommended carrying out the selection processes in two stages. The first phase would encompass the selection and contracting of the consulting firm and the external managers for the U.S. agency MBS and high yield bond asset classes; it would take place mainly in 2018. The second phase, scheduled mainly for 2019, would cover the selection and contracting of the external portfolio managers for real estate assets and the firm that will carry out the currency hedging.

## 2. Contracting a consultant

Based on the Financial Committee's recommendations, the Finance Minister instructed the Central Bank in February 2018 to undertake a selection process for contracting a consulting firm. Previously, the Ministry of Finance had contracted Verus Consulting in 2015, with the main objective of providing support for monitoring the current external portfolio managers for both the ESSF and the PRF. However, due to the complexity of implementing the new PRF investment policy, the Committee recommended carrying out a new selection process to ensure that the firm has vast experience in this area, especially in terms of the new asset classes that are being incorporated as part of the new investment policy.

The Central Bank sent a Request for Proposal to sixteen international consulting firms: Aon Hewitt Investment, Mercer, Meketa Investment Group, RVK, NEPC, Cambridge Associates, PPCmetrics, Pavilion Advisory Group, Wilshire Associates, Rocaton Investment Advisors, Segal Marco Advisors, Verus, Russel Investments, Callan Associates, Pension Consulting Alliance and Willis Towers Watson. Of the firms invited to submit proposals, the first four showed interest and presented proposals. After reviewing the proposals received, a delegation from the Central Bank interviewed the four firms in New York, with support from the Ministry of Finance via teleconference. Based on the interviews and an evaluation of the questionnaire presented, the Central Bank chose RVK and Mercer to advance to the final round, which consisted in reviewing the cost proposals and then contracting the less expensive of the two firms. After reviewing the proposals, the Central Bank chose RVK<sup>22</sup>. The respective contract was signed on 31 May 2018.

### **3. Contracting external managers for the U.S. agency MBS and high yield bond portfolios**

Once RVK had been contracted, the Central Bank started on the next phase, namely, the selection of the external portfolio managers for the new U.S. agency MBS and high yield bond mandates.

The process began in July 2018, when a Request for Information was sent to 147 firms that might be interested in participating. The list of firms contacted was drawn up using the RVK database, together with information from the Central Bank and the Ministry of Finance on firms that had shown interest in participating in a previous selection process. A total of 29 firms expressed interest in the U.S. agency MBS mandate and 47 in the high yield bond mandate. Based on the responses received, the Central Bank worked with RVK to narrow the field to 15 firms for U.S. agency MBS and 25 for high yield bonds. These firms were then sent a Request for Proposal, aimed at measuring their portfolio management capacity in both qualitative and quantitative terms. The Central Bank and RVK evaluated the proposals received and chose six firms for each asset class, which were interviewed in New York by the Bank, the consulting firm, and personnel from the Ministry of Finance.

Each firm was rated on their Request for Proposal and interview, using a weighted point system, and the Central Bank chose the three firms with the highest score in each mandate. Details on the selection process and the resulting finalists were presented to the Financial Committee at its meeting in November 2018. The Committee gave its approval of both the selection process carried out by the Central Bank and the finalist firms. The Central Bank then proceeded to the final step in selection process, reviewing the cost proposals to choose the two least expensive firms. The winning firms were BNP and Western for U.S. agency MBS, and BlackRock and Nomura for high yield bonds.

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22 RVK is based in Portland, with offices in Chicago and New York, has a team of 115 professionals, and is independently owned, with no outside investors or parent company. It has over US\$ 900 billion in assets under advisement (AUA) and is one of the ten largest consultants in the financial investment industry. Finally, the company is 100% owned and managed by its employees.

## **B. New study on the ESSF investment policy**

As mentioned earlier, the current investment policy for the ESSF was defined in 2012, based on the Financial Committee's recommendations and a study carried out by Eduardo Walker (2011). At that time, the currency mix was changed (reducing the share of dollars and euros and increasing the yen), and the diversification of the investment portfolio was increased, adding sovereign securities denominated in Swiss francs (7.5%) and a small share of equities (7.5%). These changes were implemented in mid-2013.

Taking into account best practices, the Financial Committee recommended that the Finance Minister undertake a new study on the fund's investment policy. However, it suggested dividing the study into two parts, to be carried out by two separate entities. The first would analyze fiscal dynamics and would be commissioned from either the National Budget Office (DIPRES) or an international organization with sufficient experience to model the behavior of fiscal income. The conclusions of this study would provide the basis for evaluating the ESSF investment objective. The second study would then explore the optimal asset allocation for achieving the defined objective.

The study on fiscal dynamics is expected to be commissioned and completed in the first half of 2019. Once that study is finalized, the investment policy study will be commissioned from a specialized external consulting firm. The second study is expected to be completed in the first half of 2020.

## **C. New PRF investment guidelines**

In the first part of the year, the Committee submitted to the Finance Minister recommendations on the investment guidelines that will be used for the U.S. agency MBS and high yield bond asset classes. Comments by the Central Bank and RVK were taken into account in the preparation of the guidelines. Based on the Financial Committee's recommendations, the Ministry of Finance prepared a new version of the PRF guidelines. The new version simplifies the organization of the document, by moving the guidelines for each asset class to the appendix. Additionally, some of the elements discussed and incorporated in the new asset classes were added to the corporate bond and equities guidelines to ensure consistency across all mandates. The new investment guidelines are available online, at [www.hacienda.cl/english/sovereign-wealth-funds/pension-reserve-fund/investment-policy/investment-guidelines-in-spanish.html](http://www.hacienda.cl/english/sovereign-wealth-funds/pension-reserve-fund/investment-policy/investment-guidelines-in-spanish.html).

## **D. Monitoring of the Sovereign Wealth Fund managers**

The Financial Committee received delegations from the Central Bank of Chile, Mellon, BlackRock, and Allianz, which are required to report annually on their portfolio management to the members of the Committee and the Ministry of Finance. The CBC discussed the main market developments in 2017 and described its portfolio performance and investment methodologies. Mellon, BlackRock, and Allianz also reviewed the main market events in the year, as well as their portfolio allocation and performance, their investment strategies, and some institutional investment trends. Mellon discussed the changes in its corporate structure deriving from the acquisition and absorption of Boston Company Asset Management and Standish by Mellon, which resulted in the formation of a new company called Mellon Investments Corporation. In the presentation, the delegation emphasized that the team and the investment process used in managing the PRF portfolio had not changed. These presentations are part of the reporting requirements for all portfolio managers.

## E. Cybersecurity

The Financial Committee received a delegation from the Central Bank, headed by the Financial Markets Division Manager, Beltrán de Ramón, who gave a presentation on cybersecurity, in the framework of the Bank's role as fiscal agent of the Sovereign Wealth Funds. The CBC reported to the Committee on cyberattacks on local and international financial institutions and described preventive measures taken since 2016 to prevent this type of attack. At that time, after learning about the first cyberattacks on international financial institutions, the Central Bank took a series of measures internally and with its correspondent banks, in order to protect its own assets and those held in its role of fiscal agent. The Bank has also carried out assessments with specialized companies to increase the security of its infrastructure, among other measures.

The CBC further reported that it would hold new meetings with the Sovereign Wealth Funds' custodian bank, to request information on new security initiatives being developed; and that the CBC had contracted a consulting firm to evaluate different aspects of this custody service. Finally, the CBC reported that in late 2018, it had joined the Customer Security Program (CSP), an initiative of the SWIFT network.<sup>23</sup> As part of the CSP project, whose objective is to strengthen the security of the SWIFT environment, the Central Bank implemented a broad set of actions to reinforce the security of this type of transaction. The Committee thanked the extensive analysis done by the Central Bank.

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23 Society for Worldwide Interbank Financial Telecommunication.

## APPENDIX 1 CURRENT AND FORMER FINANCIAL COMMITTEE'S MEMBERS

Members	Position	Incorporation Date	Departure Date
José De Gregorio Rebeco	President	September 2014	-
Cristián Eyzaguirre Johnston	Counselor Vice-President	March 2010 September 2011	-
Ricardo Budinich Diez	Counselor	August 2016	-
Jaime Casassus Vargas	Counselor	September 2014	-
Martín Costabal Llona	Counselor	August 2007	-
Paulina Yazigi Salamanca	Counselor	September 2018	-
Igal Magendzo Weinberger	Counselor	September 2014	September 2018
Eduardo Walker Hitschfeld	Counselor	August 2007	August 2016
Arturo Cifuentes Ovalle	President Counselor	Enero 2014 August 2011	August 2014
Rodrigo Valdés Pulido	Counselor	February 2014	April 2014
Eric Parrado Herrera	Counselor	August 2011	March 2014
Klaus Schmidt-Hebbel Dunker	President Counselor	August 2011 September 2009	January 2014
Andrés Bianchi Larre	President	August 2007	August 2011
Ana María Jul Lagomarsino	Vice-president	August 2007	August 2011
Andrés Sanfuentes Vergara	Counselor	August 2007	March 2010
Oscar Landerretche Moreno	Counselor	August 2007	June 2009

## APPENDIX 2 SUMMARY OF MEETINGS IN 2018

### MEETING 1 | 23 JANUARY 2018

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At its first meeting of the year, the Committee received representatives from the Central Bank, who reported on their portfolio management in 2017. The Central Bank also suggested different alternatives for implementing the new PRF investment policy. It was agreed that the Bank would be responsible for choosing the external portfolio managers for the new asset classes, using the same selection scheme as for its international reserves, including contracting a consulting firm to assist with the process. After the Bank's presentation, the Financial Committee analyzed and approved the initial drafts of the investment guidelines for the U.S. agency MBS and high yield bond asset classes prepared by the Committee's Technical Secretariat, which will be used for selecting the external portfolio managers. At the same time, the Committee recommended that the guidelines be reviewed by the consulting firm, to ensure their consistency with the intended objectives of each asset class. Finally, the Committee members analyzed the funds' performance in 2017, in particular the return in dollars obtained by the ESSF and the PRF.

### MEETING 2 | 22 MARCH 2018

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At the March meeting, the Committee met with the new Finance Minister, Felipe Larraín, who took the opportunity to thank the Committee for all its work since the inception of the Sovereign Wealth Funds. The Financial Committee also received delegations from Mellon and Allianz, which are responsible for investing part of the Sovereign Wealth Funds. These firms reported on their performance in 2017 and discussed their organizations, investment teams, and strategies, as well as the outlook for the international economy and the financial markets. The Committee members thanked the delegations for their presentations and expressed satisfaction with their performance. Finally, the Committee recommended the general guidelines for defining the timing and pace of convergence to the new asset allocation approved by the Finance Minister for the PRF.

### MEETING 3 | 19 APRIL 2018

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At the April meeting, the Financial Committee met with the delegation from BlackRock, which is responsible for investing part of the Sovereign Wealth Funds. The firm gave a presentation on its organization, investment process, and main performance results for 2017; and also discussed how to invest in high yield bonds and U.S. agency MBSs. The Financial Committee's Technical Secretariat reported on the current status of the selection process for a consulting firm to support the implementation of the new PRF investment policy. The Committee also received a report on the firms invited to participate in the process and the selection criteria that the Central Bank will use to choose the finalist. Finally, the Committee members analyzed the main performance results for both Sovereign Wealth Funds, as well as the portfolio allocation vis-à-vis the benchmarks.

#### **MEETING 4 | 13 JULY 2018**

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At the July meeting, the Financial Committee was informed about the contracting of RVK, the consulting firm that will provide support to the Central Bank in the selection process for the external portfolio managers for the PRF and also help with the supervision of the current and future external portfolio managers for the Sovereign Wealth Funds. The Committee also examined the different phases involved in the selection process for the U.S. agency MBS and high yield bond asset classes. Here, the Committee approved a new version of the investment guidelines for both asset classes, which incorporate some modifications based on feedback from RVK and the Central Bank. Additionally, the Ministry of Finance reported to the Committee on the Finance Minister's decision to undertake a new study of the ESSF investment policy. Finally, the Financial Committee members analyzed the performance of the different Sovereign Wealth Fund portfolio managers, as well as their main positions.

#### **MEETING 5 | 19 OCTOBER 2018**

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At the October meeting, the President of the Financial Committee welcomed economist Paulina Yazigi, who was appointed as a new Committee member by the Finance Minister. The meeting was also attended by the General Treasurer of Chile, Ximena Hernández Garrido. During the meeting, the Committee analyzed the main issues to be addressed in the new study of the ESSF investment policy. Additionally, the Committee received a delegation of representatives from the Central Bank, who gave a presentation on cybersecurity. The Committee's Technical Secretariat then reported on the current status of the selection process for the external portfolio managers for the U.S. agency MBS and high yield bond asset classes. Finally, the Financial Committee members analyzed the performance of the different sovereign wealth fund portfolio managers, as well as their main positions.

#### **MEETING 6 | 15 NOVEMBER 2018**

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At the November meeting, the Financial Committee received a delegation from the Central Bank, who presented the results of the selection process for the external portfolio managers for U.S. agency MBS and high yield bonds. The presentation discussed the different phases of the selection process for both asset classes and proposed three finalists. The Committee expressed its agreement with the development of the process and with the Central Bank's proposal. The Central Bank reported that the next phase in the selection process was to review the finalists' cost proposals, in order to award the mandates to the two firms with the lowest management fees. The Central Bank told the Committee that it expected to inform the winning firms of the selection results before the end of November.

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# Glossary

**Active management** — an investment strategy that seeks to obtain a higher return than a given benchmark.

**Alternative investments** — investments other than those traditionally used (equities and fixed-income); they mainly include private equity, venture capital, hedge funds, commodities and real estate.

**American depositary receipts (ADR)** — negotiable certificate issued by a U.S. bank representing a specified number of shares (or one share) in a foreign stock traded on a U.S. exchange.

**Asset class** — a specific investment category such as equities, corporate bonds, sovereign bonds or money market instruments. Assets of the same class generally share characteristics that make them similar from a tax, legal and structural perspective, but this does not imply that they respond the same way to a given market event.

**Basis point** — one one-hundredth of a decimal point; 1 basis point = (1/100) de 1%.

**Bond** — a financial liability of an issuer (for example, a company or a government) to investors, under which the issuer undertakes not only to return the investors' capital, but also to pay an agreed interest rate on a specific date(s).

**Cash** — cash in hand and bank demand deposits.

**Corporate bond** — a bond issued by a corporation or company.

**Credit default swap (CDS)** — a financial instrument used by investors as protection against default on a bond; can also be used to take a speculative position on a bond covered by the CDS.

**Credit rating** — the level of solvency of the issuer of a financial instrument (company or country) as defined by a credit rating agency.

**Duration** — a measure of the sensitivity of a bond's price to changes in interest rates: the longer the duration,

the farther the bond's price will fall in response to an increase in interest rates.

**Equities** — securities that represent the ownership or capital of a company; buyers of equities become owners or shareholders of the company and thus have earnings or losses depending on the company's performance.

**Ex ante tracking error** — a measure of the difference between the return on an investment fund and its benchmark.

**Exchange-traded fund (ETF)** — a market-traded financial instrument that typically replicates a market index; traditionally used to obtain passive exposure to equity market indexes, but has expanded into fixed-income, commodities and even active strategies.

**Fiscal Responsibility Law** — Law N° 20,128, published in Chile's *Official Gazette* on 30 September 2006.

**Fixed-income** — investment instruments with a yield over a given period that is known at the time of their acquisition; sovereign and corporate bonds and bank deposits are fixed-income assets.

**Global depositary receipts (GDR)** — bank certificate issued in more than one country for shares in a foreign company. The shares are held by a foreign branch of an international bank. The shares trade as domestic shares but are offered for sale globally through the various bank branches.

**Headline or reputational risk** — the risk of an adverse public perception of an entity's management.

**High Yield Bonds** — non investment grade sovereign and corporate bonds.

**Inflation-indexed bond** — a bond whose value varies in line with an inflation index; in the United States, these securities are known as Treasury Inflation-Protected Securities (TIPS).

**Internal rate of return (IRR)** — the effective yield on an investment, calculated taking the net present value of all cash flows as zero.

**Investment policy** — the set of criteria, guidelines and instructions that regulate the amount, structure and dynamics of an investment portfolio.

**Leverage** — the level of debt carried by a firm or investment vehicle.

**LIBID** — London interbank bid rate; the interest rate paid on interbank deposits. By definition, this rate is equal to the LIBOR minus 0.125%.

**LIBOR** — London interbank offered rate; the interest rate charged on interbank borrowing.

**Liquidity** — the degree to which an asset or security can be quickly bought or sold in the market without affecting the asset's price.

**Money market instrument** — a short-term asset with a maturity of less than a year, which can readily be converted into cash and is less volatile than other asset classes.

**Mortgage-backed securities (MBS) from U.S. agencies** — instruments that are secured by a mortgage related to the purchase of mortgage properties. These instruments are issued by Ginnie Mae, Fannie Mae and Freddie Mac.

**Mutual fund** — an investment vehicle managed by an entity that brings together the capital of different investors and provides them with exposure to different asset classes; unlike ETFs, mutual funds are not traded on the market.

**Passive management** — an investment strategy that seeks to replicate the return on a representative index of an asset class or combination of asset classes.

**Portfolio** — the combination of investments acquired by an individual or institutional investor.

**Quantitative easing** — an unconventional monetary policy tool used by some central banks to increase the money supply, usually through the purchase of the country's own government bonds.

**Recognition bond (*bono de reconocimiento*)** — an instrument issued by Chile's Pension Normalization Institute (*Instituto de Normalización Previsional*) representing a worker's contributions to the old pension system before joining the new (private) AFP system.

**Return (total)** — the combination of the return in local currency and the return generated by exchange rate fluctuations.

**Return generated by exchange rate movements** — the share of the return that is generated by variations in the value of the dollar against other currencies in which assets are held.

**Return in local currency** — the return generated by a financial instrument in the currency in which it is denominated; corresponds to the share of returns associated with the level of interest rates and their movements, creditworthiness and other factors.

**Risk** — the possibility of suffering a financial loss; the variability of the return on an investment.

**Sovereign bond** — a bond issued by a government.

**Special Drawing Rights (SDR)** — international reserve assets created by the IMF to supplement its member countries' official reserves. SDRs can be exchanged for freely usable currencies.

**Spread** — the difference between the yield rate at maturity of two fixed-income instruments; used to measure their level of relative risk.

**Swift** — Society for Worldwide Interbank Financial Telecommunication.

**TED Spread** — the difference between the interbank borrowing rate (LIBOR) and the risk-free rate (U.S.

Treasury bills). A higher TED spread typically indicates a lower level of market liquidity.

**To Be Announced (TBA)** — denotes the forward market for passthrough mortgage-backed securities (MBS) issued by Freddie Mac, Fannie Mae and Ginnie Mae. The term TBA is used because no information is given about the instruments that will be traded at the time that the transaction is made.

**Time-weighted rate of return (TWR)** — a measure of return obtained by compounding or multiplying daily

returns, excluding contributions and withdrawals; unlike the IRR, it excludes the effect of net cash flows.

**Variable-income** — equities.

**VIX** — the Chicago Board Options Exchange (CBOE) Volatility Index, which reflects market expectations for volatility over the next 30 days; based on the implied volatilities of a wide range of S&P500 index options.

**Volatility** — a measure of a financial asset's risk, representing the variation shown by its price over a period of time.

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