



# Annual Report Financial Committee 2013



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

This publication corresponds to the 2013 Annual Report of the Ministry of Finance's Financial Committee.

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# Annual Report Financial Committee 2013



Advisory Committee to the 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 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 seventh prepared by the Committee—describes its work and activities in 2013.

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 of Congress.

The Committee

## Executive summary

At the close of 2013, the market value of the funds was US\$ 22,754 million, of which US\$ 15,419 million was in the Economic and Social Stabilization Fund (the ESSF) and US\$ 7,335 million was in the Pension Reserve Fund (the PRF). The net return in dollars in the year was -1.25% for the ESSF and 1.02% for the PRF, while the net return in pesos was 8.19% and 10.46%, respectively. In the case of the ESSF, the strategic asset allocation is 15% in bank deposits, 74% in sovereign bills and bonds, 3.5% in inflation-indexed sovereign bonds and 7.5% in stocks. For the PRF, the portfolio allocation is 48% in sovereign and government related bonds, 17% in inflation-indexed sovereign bonds, 15% in stocks and 20% in corporate bonds.

## Members of the Financial Committee



### **PRESIDENT** KLAUS SCHMIDT-HEBBEL DUNKER<sup>1</sup>

Schmidt-Hebbel studied economics at the Universidad Católica de Chile and holds a Ph.D. in economics from the Massachusetts Institute of Technology (MIT). He is currently a professor at the Universidad Católica de Chile, an associate professor at the University of Chile, an international consultant and company director. He has served as chief economist of the OECD in Paris and as director of its Economics Department and previously worked as head of economic research at the Central Bank of Chile and principal economist at the Research Department of the World Bank in Washington. In addition, he has chaired the Chilean Economics Society. He joined the Committee in August 2009.



### **VICE PRESIDENT** CRISTIÁN EYZAGUIRRE JOHNSTON

Eyzaguirre studied economics at the University of Chile and holds a master's degree in economics from the University of California at Berkeley. His past positions include general manager of Banco Bice, finance manager of Empresas CMPC, deputy director of Chile's Internal Revenue Service (SII), advisor to the Chilean Manufacturers' Association (SOFOPA) and professor at the University of Chile. He currently sits on the boards of a number of companies and is a member of the Investment Committee of the Hogar de Cristo. He joined the Committee in March 2010.



### **MEMBER** ARTURO CIFUENTES OVALLE

Cifuentes studied civil engineering at the University of Chile and holds a Ph.D. in applied mechanics from the California Institute of Technology (Caltech) and an MBA in finance from New York University. He is currently a member of the Academic Committee of the Center for Micro-financial Stability and Regulation of the University of Chile's Economics and Business Department. Previously, he served as member of the governing board of the Humanities and Social Sciences Division of the California Institute of Technology (Caltech). He has worked as a researcher at the IBM T.J. Watson Research Center in New York and as an executive for different Wall Street companies (Triton Partners, Wachovia Securities, Ambac Assurance Corporation and R.W. Pressprich). He has also served as a consultant to private sector companies and government bodies in the United States, Chile and Australia and as a professor at the University of Chile, California State University and the University of Southern California. He joined the Committee in August 2011.

<sup>1</sup> Klaus Schmidt-Hebbel resigned from the Financial Committee effective 1 January 2014 for personal reasons. The Financial Committee is currently chaired by Arturo Cifuentes.





**MEMBER MARTÍN COSTABAL LLONA**

Costabal studied economics at the Universidad Católica de Chile and holds an MBA from the University of Chicago. He has served as the Chilean government's budget director and finance minister, held executive posts at Pizarreño and Infraestructura Dos Mil and been general manager of AFP Habitat. He currently sits on the board of a number of companies and is a member of the Technical Investment Council established as part of Chile's pension reform. He joined the Committee in January 2007.



**MEMBER ERIC PARRADO HERRERA**

Parrado studied economics at the University of Chile and holds a master's degree and Ph.D. in economics from New York University. He is currently a professor at the Business School of the Universidad Adolfo Ibáñez and an international consultant. He has served as coordinator for international finance at Chile's Ministry of Finance, senior economist and manager for financial stability at the Central Bank of Chile and economist at the International Monetary Fund (IMF). He joined the Committee in August 2011.

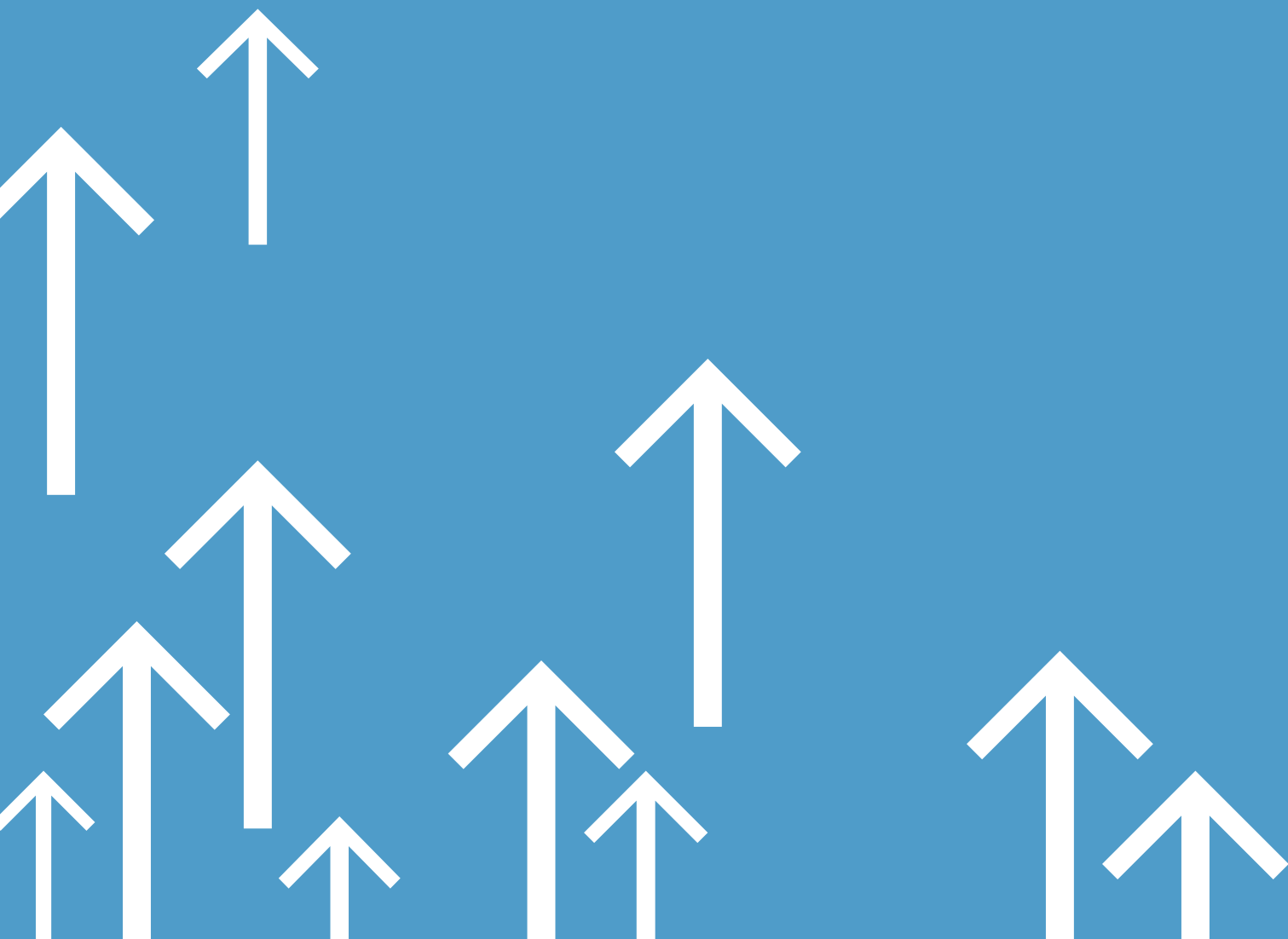


**MEMBER EDUARDO WALKER HITSCHFELD**

Walker studied economics at the Universidad Católica de Chile and holds a Ph.D. in business administration with a specialization in finance from the University of California at Berkeley. He is currently a professor at the School of Business Administration of the Universidad Católica de Chile, an international consultant and member of the Technical Investment Council established as part of Chile's pension reform. He has been a visiting associate professor at the Finance Department of the McCombs School of Business at the University of Texas in Austin and served as head of research at AFP Habitat and a member of the Capital Markets Committee and the Risk Classification Commission. He joined the Committee in January 2007.

# 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 policy helps prevent drastic changes in the level of public spending in the face of cyclical or unexpected economic events, by saving in boom times and then using the savings during cyclical downturns in gross domestic product and/or the international copper price<sup>4</sup>.

To ensure the sustainability of public spending over time and contribute to the competitiveness of the economy, the Fiscal Responsibility Law (Law 20,128) 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 receive resources resulting from the application of the structural balance rule.

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

### Objectives

The funds created by the Fiscal Responsibility Law (henceforth, the sovereign wealth funds) have specific objectives: in the case of the ESSF, to accumulate resources to finance potential fiscal deficits, to amortize public debt and to finance the PRF if necessary; in the case of the PRF, to complement the financing of future fiscal liabilities deriving from the state pension guarantee.

### Rules on fund contributions

The rules on establishing the funds and accumulating resources therein are established by law (see figure 1)<sup>5</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 Schmidt-Hebbel (2012); Velasco and Parrado (2012).

3 See footnote N°1 in Larrain and others (2011).

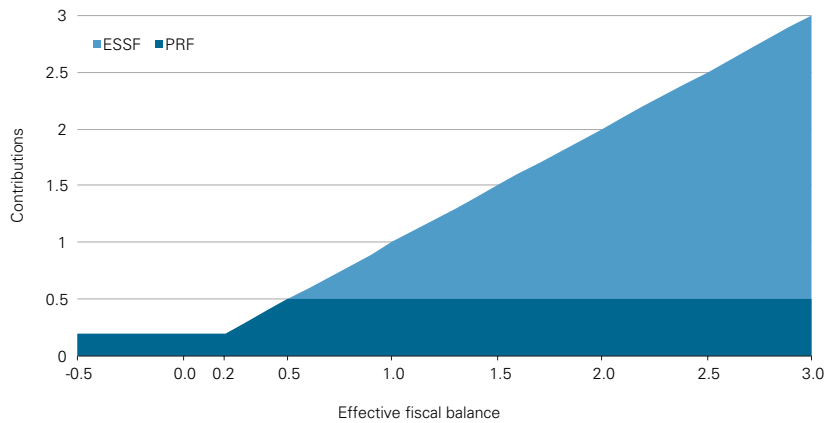
4 The structural balance rule (or cyclically adjusted balance rule) has undergone some changes since it was first implemented. For a detailed discussion of its design, modifications, application and results, see Marcel and others (2001); Rodríguez, Tokman and Vega (2006); Velasco and others (2010); Advisory Committee for the Design of a Second-Generation Structural Balance Fiscal Policy for Chile (2011); Larrain and others (2011).

5 For the PRF, the Fiscal Responsibility Law; for the ESSF, Decree with Force of Law (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>6</sup>.

**FIGURE 1**

Fiscal savings rule  
(percent of GDP)



Source: Ministry of Finance.

## 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. From that point, 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 are 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, when the Finance Minister so decides.

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

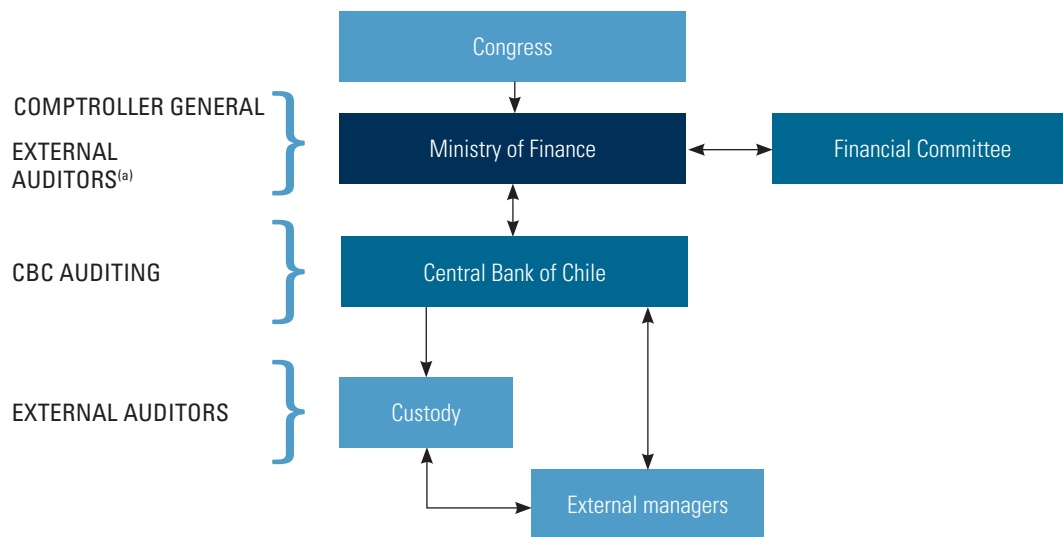
<sup>6</sup> The current legislation allows the pay down of public debt and advance contributions to the ESSF using resources from the fiscal surplus of the current year, which must be deposited into the fund in the current or subsequent years.

## C · Institutional framework

The legal framework establishes a clear division of roles and responsibilities in order to facilitate 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 their management (see diagram 1).

**DIAGRAM 1**

Institutional framework for Chile's sovereign wealth funds



(a) External auditors are contracted to assess and verify the accuracy and consistency of the financial statements prepared by the General Treasury.

Source: Ministry of Finance.

### Ministry of Finance and dependent bodies

The Fiscal Responsibility Law establishes that the funds are 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 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. 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., Mellon Capital Management Corporation and Rogge Global Partners PLC to manage the investment of 35% of the PRF portfolio starting in January 2012. In 2013, based on the recommendation of the Financial Committee, the Ministry of Finance instructed the CBC to contract BlackRock Institutional Trust Company N.A. and Mellon Capital Management Corporation to manage the ESSF stock portfolio, equivalent to 7.5% of the fund. The Minister decision to hire these two managers took into account that the 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 stock 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.

## Financial Committee

The Fiscal Responsibility Law stipulates that the Ministry of Finance must create an Advisory Committee to consult to the Finance Minister on the sovereign wealth funds (henceforth, the Financial Committee). The Committee monitors the investment of the funds' resources and advises the Minister on the definition of an investment policy 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 Committee's president receives a fee per session of 25.5 UTMs (unidades tributarias mensuales), 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 every six months, but in practice it has met at least seven times a year.

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>7</sup>.

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## 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.

If the portfolio manager obtains a higher return than the benchmark, it means that he selected instruments that, on average, had higher returns than those included in the benchmark or, rather, that market timing resulted in ex post gains. It is important to bear in mind that the returns on the managed portfolios do not usually exceed their benchmarks.

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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<sup>7</sup> [www.hacienda.cl/english/sovereign-wealth-funds.html](http://www.hacienda.cl/english/sovereign-wealth-funds.html)

## D • Investment policy

In order to avoid negative effects on the competitiveness of the Chilean economy, the ESSF and the PRF are invested exclusively in foreign currency instruments, in accordance with the investment policy outlined in this section.

### 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.

From its creation 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 (see box 2). However, a new investment policy was implemented in August 2013, which was defined by the Finance Minister on the basis of the Financial Committee's recommendations in 2012<sup>8</sup>. The new 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 stocks (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 yens (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 4.6 years (see box 3).

#### BOX 2

##### Investment policy of the Economic and Social Stabilization Fund between March 2007 and July 2013

Through July 2013, the strategic asset allocation of the ESSF was 30% in money market instruments, 66.5% in sovereign bonds and 3.5% in inflation-indexed sovereign bonds (indexed to U.S. inflation), with a duration of approximately 2.5 years and a currency allocation of 50% in U.S. dollars, 40% in euros and 10% in yen. Half the money market portfolio was in time deposits in financial institutions with a minimum risk rating of A-/A3 and the balance in Treasury bills. Sovereign exposure was only allowed to the United States, Germany and Japan.

This policy was consistent with the objective of maximizing the fund's accumulated value in order to partially cover cyclical reductions in fiscal revenues while maintaining a low level of risk. This was clear during the 2008 crisis, when the investment policy led to an increase in the fund's resources when expressed in foreign currency and pesos (taking into account that the majority of fiscal spending is in pesos). The government was therefore able to withdraw approximately US\$ 9 billion from the fund in 2009 to finance the fiscal deficit and a stimulus plan to support the Chilean economy, which was being negatively affected by the international situation.

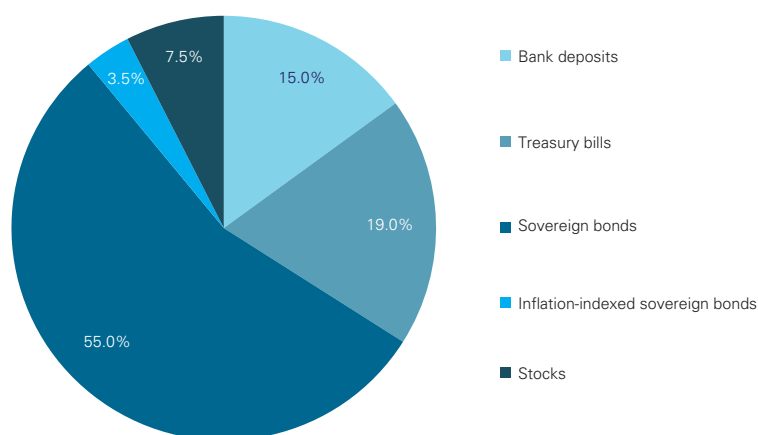
<sup>8</sup> The financial Committee's recommendation was founded on the review and analysis of different sources, including Eduardo Walker's study on portfolio allocation commissioned by the Finance Ministry, comments on the study contained in three external peer reviews and additional simulations using 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.



Nevertheless, The Finance Minister decided to revise the ESSF investment policy in late 2010, in accordance with international best practices. The new investment policy was implemented in mid-2013.

**FIGURE 2**

ESSF: Current strategic asset allocation  
(percent of portfolio)



Source: Ministry of Finance.

### BOX 3

#### Main elements of the new 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 stocks. 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	Merrill Lynch LIBID 3 Month Average USD
	6.0	Merrill Lynch LIBID 3 Month Average EUR
	4.0	Merrill Lynch LIBID 3 Month Average JPY
	15.0	Subtotal bank deposits
2.1. Treasury bills	6.0	Merrill Lynch Treasury Bills Index USD
	7.0	Merrill Lynch Treasury Bills Index EUR
	6.0	Merrill Lynch Treasury Bills Index JPY
	19.0	Subtotal Treasury bills
2.2. Sovereign bonds	26.5	Barclays Capital Global Treasury: U.S. 7–10 Yrs
	11.0	Barclays Capital Global Treasury: Germany 7–10 Yrs
	10.0	Barclays Capital Global Treasury: Japan 7–10 Yrs
	7.5	Barclays Capital Global Treasury: Switzerland 5–10 Yrs
	55.0	Subtotal sovereign bonds
2. Treasury bills and sovereign bonds	74.0	Subtotal Treasury bills and sovereign bonds
3. Inflation-indexed sovereign bonds	2.5	Barclays Capital Global Inflation-Linked: U.S. TIPS 1–10 Yrs
	1.0	Barclays Capital Global Inflation-Linked: Germany 1–10 Yrs
	3.5	Subtotal inflation-indexed sovereign bonds
4. Stocks	7.5	MSCI All Country World Index ex Chile (unhedged with reinvested dividends)

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 stock portfolio is managed by external management companies contracted by the Central Bank, previously selected through a tender process in the PRF.

**Ex ante tracking error:** The ex ante tracking error is capped at 50 basis points for the fixed-income portfolio and 60 basis points for the stock portfolio.

**Eligible currencies and issuers:** Only currencies in the benchmark are eligible for investment. In the case of sovereign and stock exposure, only the issuers that make up the corresponding benchmark are eligible for investment. 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.

**Leveraging and the use of derivatives:** Leveraging is not allowed. 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.
- Stock portfolio: The use of forwards and swaps is only allowed for foreign currency hedging. In addition, the use of stock 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 stocks 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 and available online at the Ministry of Finance website,<sup>1</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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<sup>1</sup> <http://www.hacienda.cl/fondos-soberanos/fondo-de-estabilizacion-economica-y/politica-de-inversion.html>.

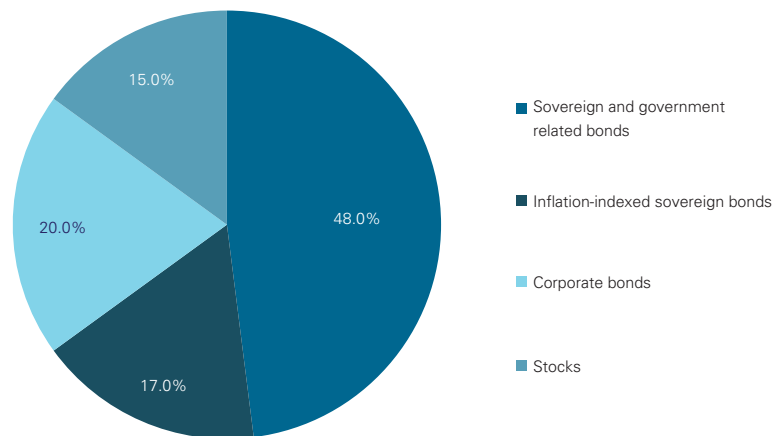
## Pension Reserve Fund

The main objective of PRF investment is to generate resources for financing a share of the government's pension liabilities. To achieve this, the investment policy incorporates the specific objective of maximizing expected returns while keeping risk within a 95% probability that the fund will not lose more than 10% of its value in dollars in a given year. The investment horizon is medium to long term, given the size and timeline of the liabilities that the fund has to finance.

The PRF investment policy was similar to that of the ESSF from its creation through year-end 2011; a new investment policy was then implemented in early 2012 (see box 4). The new policy stipulates a portfolio allocation of 48% in sovereign and government related bonds, 17% in inflation-indexed sovereign bonds, 15% in stocks and 20% in corporate bonds (see figure 3). The new policy was recommended by the Financial Committee in late 2010, with the support of a study carried out by the Mercer consulting firm, using the previously specified risk and return parameters.

**FIGURE 3**

PRF: Current strategic asset allocation  
(percent of portfolio)



Source: Ministry of Finance.

**BOX 4****Main elements of the PRF investment policy**

**Investment objectives:** The main objective of PRF investment is to generate resources for financing a share of the government's pension liabilities. To achieve this, the investment policy incorporates the specific objective of maximizing expected returns while keeping risk within a 95% probability that the fund will not lose more than 10% of its value in dollars in a given year. The investment horizon is medium to long term, given the size and timeline of the liabilities that the fund has to finance.

**Strategic asset allocation:** The current PRF investment policy, which was implemented in January 2012, stipulates a portfolio allocation of 48% in sovereign and government related bonds, 17% in inflation-indexed sovereign bonds, 15% in stocks and 20% in corporate bonds. The previous investment policy was identical to the ESSF investment policy.

**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	Benchmarks
Sovereign and government related bonds <sup>(a)</sup>	48	Barclays Capital Global Aggregate: Treasury Bond Index (unhedged)
		Barclays Capital Global Aggregate: Government-Related (unhedged)
Inflation-indexed sovereign bonds	17	Barclays Capital Global Inflation-Linked Index (unhedged)
Corporate bonds	20	Barclays Capital Global Aggregate: Corporates Bond Index (unhedged)
Stocks	15	MSCI All Country World Index ex Chile (unhedged with reinvested dividends)

(a) Each subindex of this asset class is added in accordance with its relative capitalization.

**Management:** The sovereign and government related bonds and inflation-indexed sovereign bond portfolios are managed directly by the CBC, acting as fiscal agent. The stock and corporate bond portfolios are managed by external management companies contracted by the CBC following a tender process.

**Ex ante tracking error:** The ex ante tracking error is capped at 50 basis points for the aggregate portfolio of sovereign bonds, government related bonds and inflation-indexed sovereign bonds; 60 basis points for the equity portfolio; and 50 basis points for the corporate bond portfolio.

**Eligible currencies and issuers:** For each asset class, only currencies and issuers that make up the benchmark are eligible for investment.

**Leveraging and the use of derivatives:** Leveraging is not allowed. The use of derivatives is defined according to the type of portfolio:

- Portfolio managed by the CBC: Forwards and swaps can only be contracted for foreign currency hedging. The nominal value of the forwards or swaps contracted with a given eligible counterparty cannot exceed 1% of the market value of the portfolio. The notional amount of all current forward or swap contracts, in sum, can not exceed 4% of the portfolio managed by the Bank.
- Stock and corporate bond portfolios: Each external manager can only contract forwards or swaps for foreign currency hedging, while futures (stock or fixed-income, accordingly) can only be contracted for hedging purposes or to gain exposure to part of the benchmark. The nominal value of the forwards or swaps contracted by an external manager with a given eligible counterparty cannot exceed 1% of the market value of the portfolio managed by that external manager. The aggregate nominal amount of futures, forwards and swaps cannot exceed 10% of the portfolio managed by a given external manager.

**Rebalancing policy:** The rebalancing policy consists in restoring the strategic allocation whenever contributions are received by the fund and whenever any of the asset classes exceeds the following shares of the total portfolio: 45-51% for sovereign and government related bonds, 14-20% for inflation-indexed sovereign bonds, 17-23% for corporate bonds and 12-18% for stocks.

**Investment guidelines:** The investment guidelines, which are published and available online at the Ministry of Finance website,<sup>1</sup> provide additional information on the PRF investment policy, such as the rebalancing policy, the permissible range of deviation, eligible instruments and other relevant limits, as well as other aspects of portfolio management.

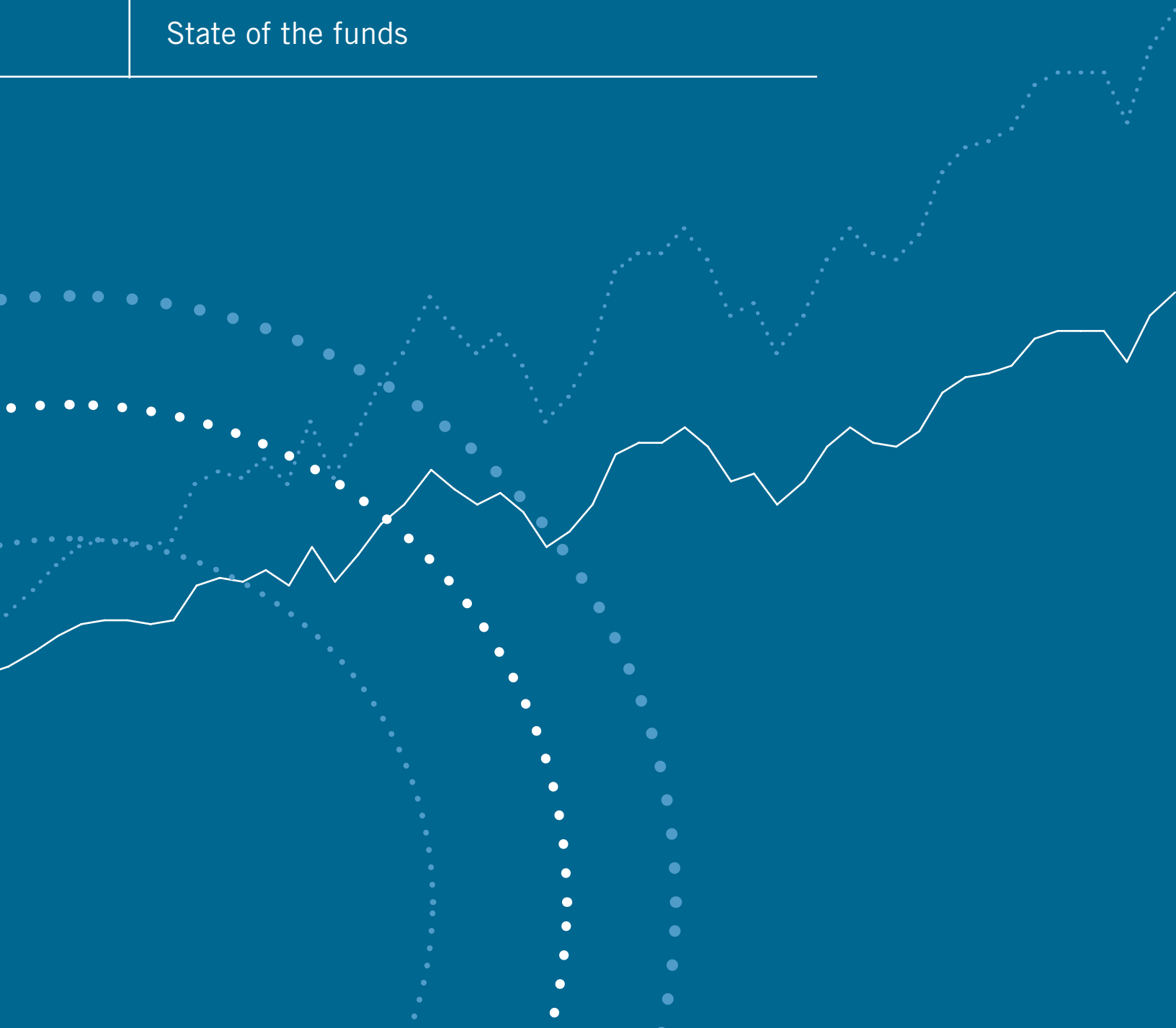
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<sup>1</sup> <http://www.hacienda.cl/fondos-soberanos/fondo-de-reserva-de-pensiones/politica-de-inversion.html>



# CHAPTER 2

State of the funds





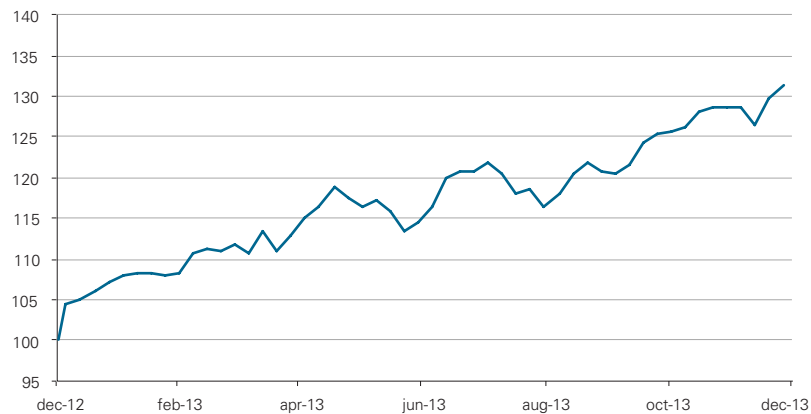
## A · Market analysis

In 2013 the international scenario was characterized by the recovery of the macroeconomic situation in the United States; calmer European markets despite the ongoing difficulties in countries such as Spain, Italy and Greece; the use of stimulus measures in Japan as a tool for bringing the economy out of a long period of stagnation; and a reduction in the emerging economies' contribution to world growth.

The U.S. economy continued to grow in 2013, recording an annual rate of 1.9% for the year. While this growth rate is not particularly dynamic, some indicators point to an improvement in the macroeconomic situation relative to previous years. For example, unemployment fell from 8.1% in 2012 to 7.4 % in 2013, after peaking at around 10% during the crisis. This improved economic situation was reflected in a general increase in the stock market in 2013 (see figure 4) and a strong, steady recovery of home prices, as demonstrated by the Case-Shiller index (see figure 5). Market volatility did not increase substantially, despite internal problems surrounding the U.S. budget approval and the increase in the debt limit (see figure 6). Given the evidence of improvements in the U.S. economy, the U.S. Federal Reserve System (the FED) was able to start scaling back its bond-purchase program in December 2013, for the first time since the crisis<sup>9</sup>. There were generalized increases all along the sovereign yield curve, but volatility spiked in response to the uncertainty triggered by the FED's announcement of the reduction in the bond-purchase program. This had a negative impact on sovereign bond prices in 2013 and, therefore, on their implied yield (see figure 7).

**FIGURE 4**

S&P 500 index, 2013  
(31 December 2012 = 100)

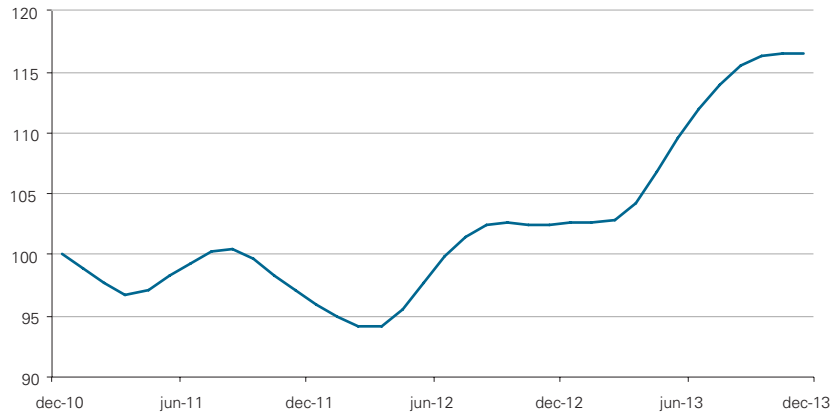


Source: Bloomberg.

<sup>9</sup> The FED reduced its bond-purchase program from US\$ 95 billion a month to US\$ 85 billion.

**FIGURE 5**

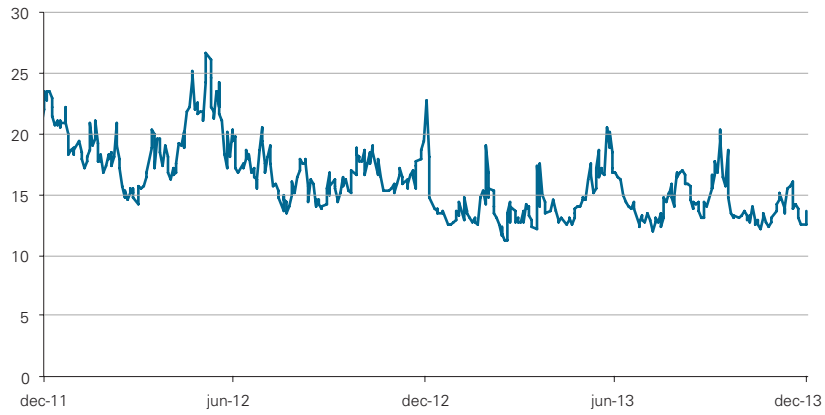
S&P Case-Shiller 20 index  
(31 December 2010 = 100)



Source: Bloomberg

**FIGURE 6**

Volatility (VIX) in the U.S. stock market (S&P 500), 2011–2013  
(percent)

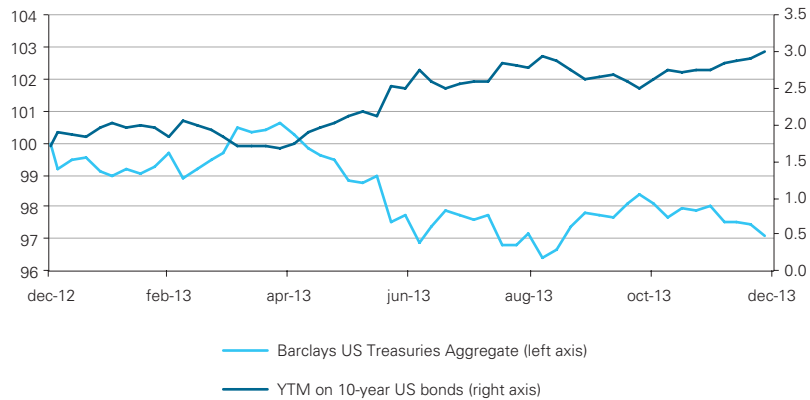


Source: Bloomberg

**FIGURE 7**

Barclays U.S. Treasuries Aggregate and the yield to maturity (YTM) on 10-year U.S. bond, 2013

(left: 31 December 2012 = 100), (right: percent)



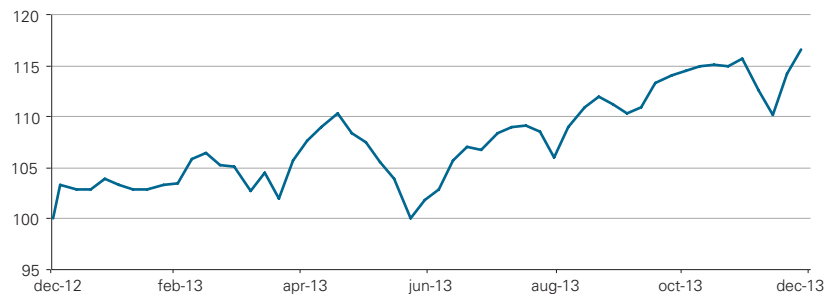
Source: Bloomberg

In Europe, Germany continued along its growth path, posting a moderate growth rate of 0.4% in 2013, while the unemployment rate hovered at just over 5%. In contrast, the countries that were most affected by the European crisis continued to record negative growth rates, with -1.2% in Spain and -1.8% in Italy, and historically high unemployment rates of around 26% and 13%, respectively. To stimulate the regional economy, the European Central Bank (ECB) reduced its monetary policy rate from 0.75% to 0.5% in May and then to 0.25% in November. The region's stock market performed well in the year (see figure 8); the fear of a possible default in these countries eased (see figure 9); and the European money markets showed no signs of liquidity problems (see figure 10). With regard to interest rates, the German sovereign yield curve sat at historically low levels (see figure 11). Unlike the United States, the index that captures the aggregate return of all sovereign instruments in Europe was positive, at 17%.

**FIGURE 8**

MSCI Europe index, 2013

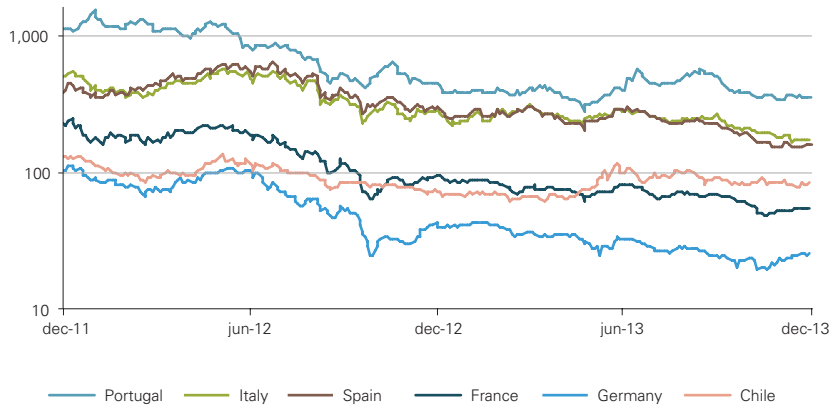
(31 December 2012 = 100)



Source: Bloomberg

**FIGURE 9**

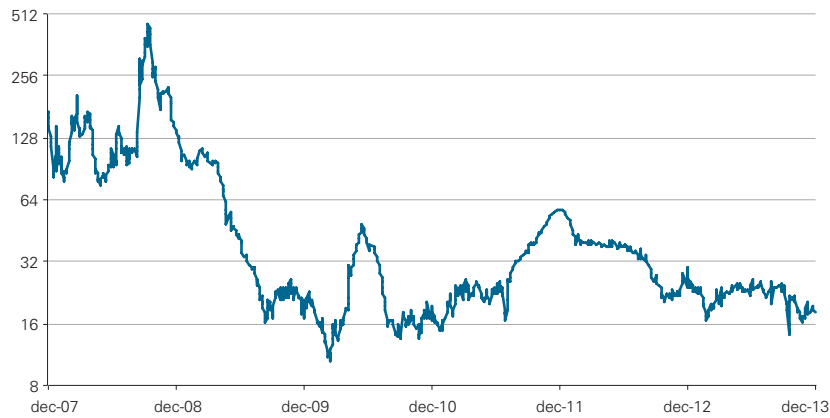
Five-year credit default swaps (CDS): Selected European countries and Chile, 2011–2013  
(basis points)



Source: Bloomberg

**FIGURE 10**

TED spread<sup>10</sup>, 2007-2013  
(basis points)

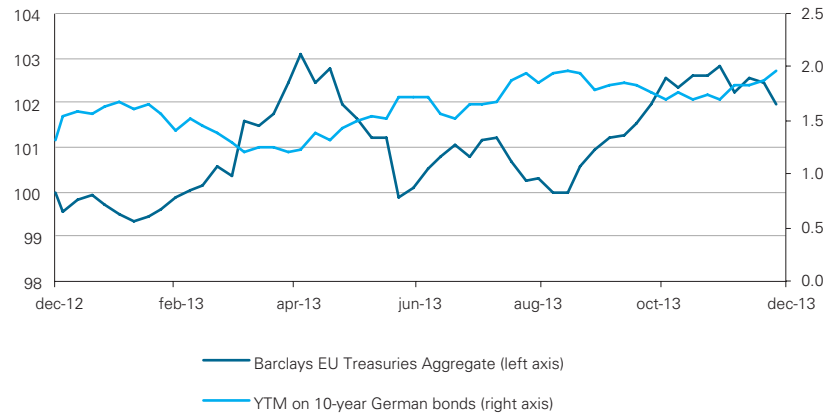


Source: Bloomberg

<sup>10</sup> The TED spread is the difference between the interest rate on interbank loans (LIBOR) and the rate on U.S. Treasury bills. A higher TED spread is typically associated with lower market liquidity.

**FIGURE 11**

Barclays U.S. Treasuries Aggregate index and the yield to maturity (YTM) on 10-year German bonds, 2013  
 (left: 31 December 2012 = 100), (right: percent)

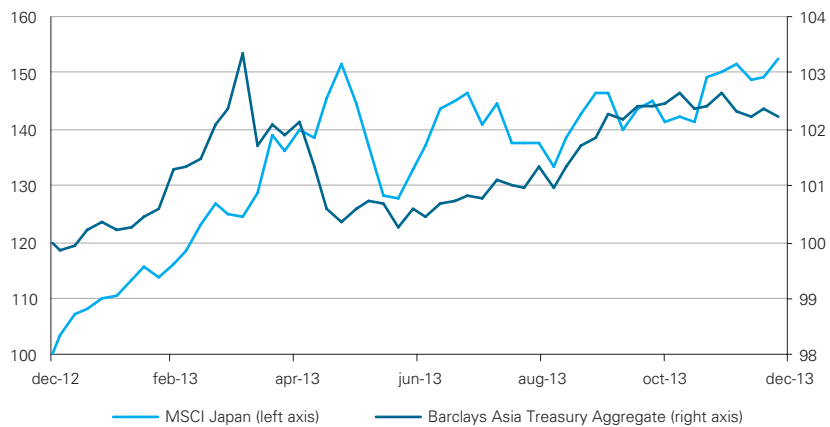


Source: Bloomberg

In Japan, 2013 was characterized by the implementation of a recovery program aimed at overcoming the economy's low performance of the past two decades. The program includes significant monetary stimulus measures, accompanied by an increase in government investment in infrastructure and the introduction of structural reforms to improve economic productivity. Through these measures, the government hopes to achieve GDP growth of 3% in nominal terms and 2% in real terms. In response, the Japanese stock market rose sharply in the year, while the sovereign yield curve decreased, favoring the return on the sovereign portfolio (see figure 12).

**FIGURE 12**

MSCI Japan index and Barclays Asia Treasuries Aggregate, 2013  
 (31 December 2012 = 100)



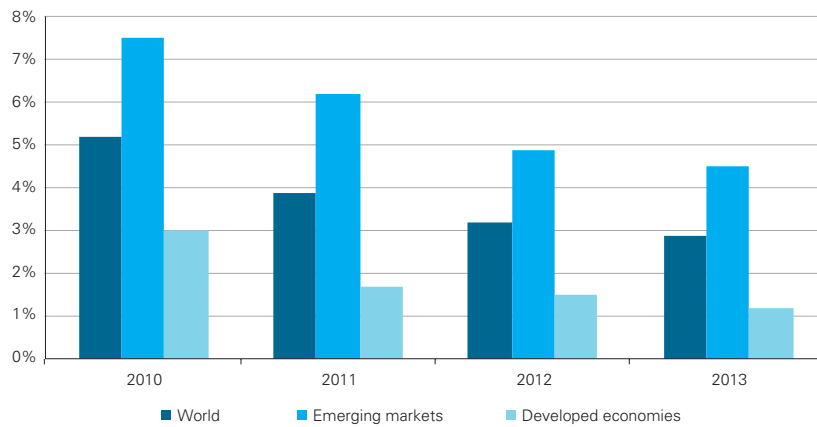
Source: Bloomberg

For the emerging economies, 2013 was characterized by capital outflows, as investors moved away from these countries and into more developed markets. This occurred in a context of lower growth than previous years (see figure 13) and the strengthening of more developed markets. China, which contributed almost a third of world growth,<sup>11</sup> recorded a growth rate of 7.7%, down from 9% in 2011. This downward growth trend was also recorded in other large emerging economies, such as Brazil, India, Indonesia, South Africa and Turkey. Central banks have responded to the capital outflows with interest rate increases aimed at protecting their currencies. This scenario had a negative impact on the emerging stock markets in the year (see figure 14).

**FIGURE 13**

World GDP growth, 2010–2013

(percent)

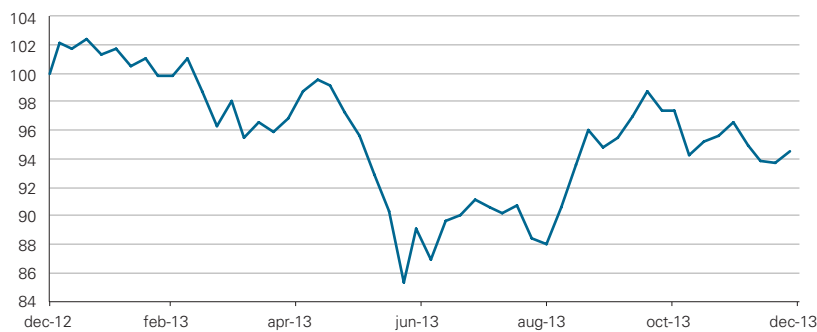


Source: International Monetary Fund

**FIGURE 14**

MSCI emerging markets index, 2013

(31 December 2012 = 100)



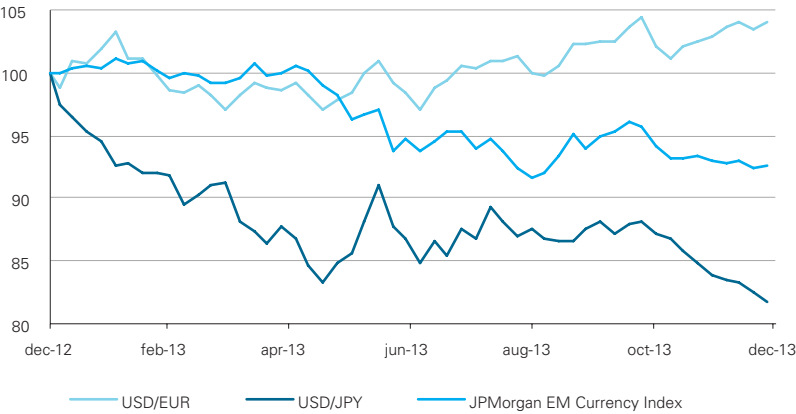
Source: Bloomberg

11 The Economist, based on IMF data.

With regard to exchange rates, the Japanese yen recorded a 19% depreciation in 2013. Emerging economies also saw their currencies depreciate, as reflected in the J.P. Morgan Emerging Markets Currency Index, which tracks changes in the currencies of the main emerging economies. The euro appreciated 4% in the year, closing at 1.38 USD/EUR (see figure 15).

**FIGURE 15**

Exchange rates, 2013  
(31 December 2012 = 100)



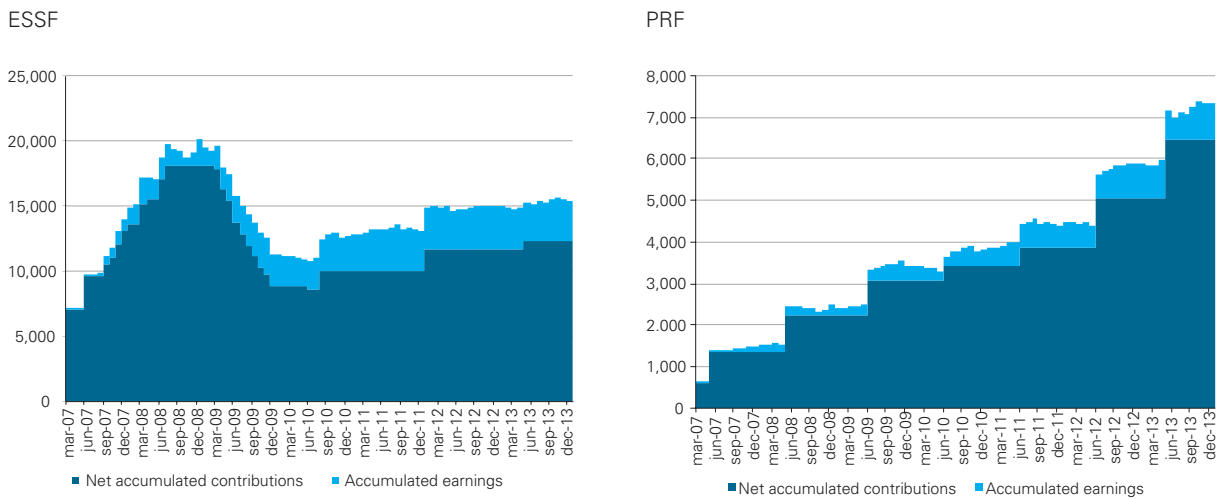
Source: Bloomberg

## B • Market value

At the close of 2013, the market value of the ESSF was US\$ 15,419 million, versus US\$ 14,998 million at the close of 2012, while the PRF had a market value of US\$ 7,335 million, versus US\$ 5,883 million at year-end 2012. The increase in the value of the ESSF was due to a contribution of US\$ 603 million, less net investment losses of US\$ 182 million. The PRF, in turn, received a new contribution of US\$ 1,377 million and recorded net gains of US\$ 75 million (see figure 16).

**FIGURE 16**

ESSF and PRF: Evolution of market value, March 2007 to December 2013  
(millions of dollars)



Source: Ministry of Finance.



## C · Returns

### 1. Conceptual definitions

The return on the funds' investments reflects a number of factors that affect the different types of instruments included in the EESF and PRF portfolios.

The ESSF portfolio is largely invested in fixed-income instruments, so the most important factors affecting total portfolio returns are the level and changes in interest rates and exchange rates.<sup>12</sup> The return on short-term fixed-income instruments is basically determined by the interest rate, which tends to be stable in the local currency. For medium- and long-term fixed-income instruments, the yield primarily depends on interest rate levels and movements in the investment country. For example, an increase in interest rates reduces the market value of bonds, whereas an interest rate reduction increases it. The fund's return also depends on exchange rate movements relative to the currency used to measure performance. For example, because both funds express their return in U.S. dollars, the market value of investments denominated in euros, yen or Swiss francs, expressed in dollars, increases (decreases) as a result of an appreciation (depreciation) of these currencies against the U.S. dollar. Given the currency allocation of the ESSF fixed-income portfolio (40% USD, 25% EUR, 20% JPY and 7.5% CHF, expressed as a share of the total portfolio), the main countries that influence the ESSF returns are the United States, Germany (European Union), Japan and Switzerland. In the case of the ESSF stock portfolio, the return largely depends on the market's perception of the income-generation capacity of the companies in the different industries where the ESSF is invested and their risks, as well as market financial conditions.

The return on the PRF portfolio is affected by additional factors, as well as those that determine the ESSF return, because the portfolio is more complex, with a larger number of issuers, currencies and types of financial instruments. For the sovereign debt asset class, the factors are similar to the ESSF, but for a larger set of countries: the return depends, to a large extent, on interest rates in the investment countries and the corresponding exchange rates. However, because the PRF does not invest exclusively in sovereign instruments from countries with a minimal credit risk, it is more exposed to the credit risk performance of the larger number of sovereign issuers in the portfolio<sup>13</sup>. For example, an increase in the credit risk of a sovereign instrument will generally be associated with a higher interest rate demanded by investors and a reduction in the market value of the instrument. For the corporate bond asset class, not only are the instruments affected by sovereign interest rates and exchange rates, but their prices also depend on the evolution of the spread, or the difference between the corporate debt instrument's internal rate of return and the interest rate on sovereign bonds from the respective countries. Thus, an increase (decrease) in the corporate bond spread is associated with a decrease (increase) in the value of the bond. For stocks, the relevant factors are the same as those cited for the ESSF.

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<sup>12</sup> Bond yields also depend on the creditworthiness of the issuer and their evolution over time. The ESSF has not been affected by this variable, however, because it mainly invests in instruments with a high credit rating.

<sup>13</sup> Whereas the ESSF only invests in sovereign debt instruments issued by the United States, Germany, Japan and Switzerland, the PRF sovereign portfolio includes debt instruments issued by a large number of countries, as well as public and semi-public agencies, state-owned companies, municipalities, multilateral financial institutions, and other issuers. This reflects the fact that one of the objectives of the fund's benchmark is to take on exposure to the global market for investment-grade sovereign debt (that is, a credit rating of BBB-/Baa3 or better).

## 2. Returns in 2013 and in 2007–2013

In 2013, the net return in dollars, measured by the time-weighted rate of return (TWR), was –1.25% for the ESSF and 1.02% for the PRF (see table 1). Using the internal rate of return (IRR), the yield was –1.18% for the ESSF and 1.15% for the PRF.

In the case of the ESSF, the negative yield is mainly explained by the return on the fixed-income portfolio (–2.02%), which was partially offset by the stock returns (12.06%) since the implementation of the new investment policy in August 2013. The negative fixed-income return breaks down into –1.08% due to interest rate increases, which was partially offset by accrued interest on the financial instruments included in the portfolio, and –0.94% from exchange rate fluctuations, mainly the depreciation of the yen against the dollar over the course of the year.

The PRF return is mainly explained by the strong performance of the stock portfolio, which obtained a return of 23.79%. This was offset by the return on sovereign and government related bonds (–4.32%), corporate bonds (–0.08%) and inflation-indexed sovereign bonds (–2.90%). The strong stock performance is based on returns in the stock markets in Japan (55% annual return) the United States (31.8%) and Europe, especially Germany (25.7%) and Spain (25.6%). As in the case of the ESSF, the fixed-income returns were strongly affected by the interest rate hike.

**TABLE 1**

### ESSF and PRF: Determinants of returns (TWR) in dollars, 2013

(percent)

Fondo	Component	Quarter				2013
		I	II	III	IV	
ESSF	Local currency	0.22	–0.99	0.43	–0.73	–1.08
	Exchange rate fluctuation	–1.84	–0.01	1.78	–0.84	–0.94
	Fixed-income	–1.62	–1.00	2.21	–1.57	–2.02
	Stocks <sup>(a)</sup>	—	—	4.16	7.58	12.06
	<b>Total return (USD)</b>	<b>–1.62</b>	<b>–1.00</b>	<b>2.31</b>	<b>–0.90</b>	<b>–1.25</b>
PRF	Sovereign and government related bonds	–2.71	–3.19	2.77	–1.16	–4.32
	Inflation-indexed sovereign bonds	–1.36	–5.51	4.10	0.07	–2.90
	Corporate bonds	–1.25	–2.76	2.86	1.16	–0.08
	Stocks	6.75	–0.20	8.13	7.46	23.79
	<b>Total return (USD)</b>	<b>–0.65</b>	<b>–2.88</b>	<b>3.81</b>	<b>0.85</b>	<b>1.02</b>

*(a) Stock portfolio returns for the third quarter and for 2013 were calculated starting in August, when the new ESSF investment policy was implemented.*

*Source: Ministry of Finance.*

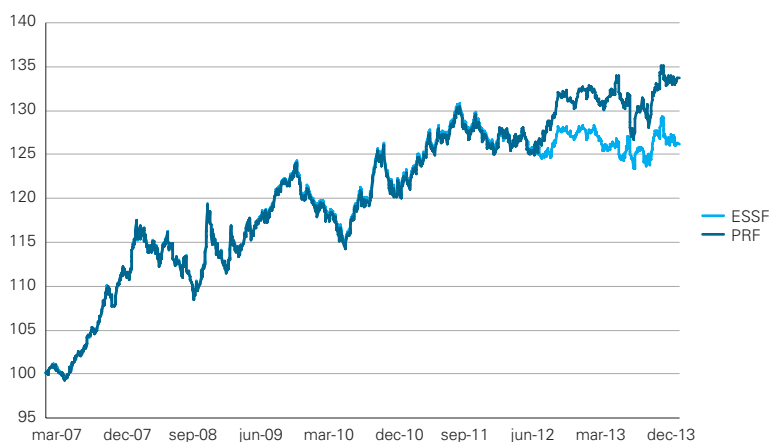
Returns in Chilean pesos depend on the peso-dollar exchange rate: the value of the portfolio expressed in pesos increases (decreases) when the peso depreciates (appreciates) against the dollar. In 2013, the peso depreciated substantially against the dollar, resulting in a return in pesos of 8.19% for the ESSF and 10.46% for the PRF.

In 2013, the ESSF earned higher returns than the benchmark by one basis point. The PRF return was 13 basis points above the benchmark. Since 31 March 2007, the difference between the average annualized return of the funds and their respective benchmarks was –10 basis points for the ESSF and –43 basis points for the PRF<sup>14,15</sup>.

Figure 17 shows the evolution of the index of accumulated returns for each fund. For the ESSF, the index increased from 100 on 31 March 2007 to 126.2 at year-end 2013; for the PRF it increased from 100 to 133.7 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.

**FIGURE 17**

ESSF and PRF: Index of accumulated returns, April 2007 to December 2013  
(31 March 2007 = 100)



Source: Ministry of Finance.

<sup>14</sup> This implies that the manager's portfolio generated lower returns, on average, than the implicit benchmark portfolio in the full period from 2007 to 2013.

<sup>15</sup> Excluding the waiver period for both the ESSF and the PRF.

The background is a solid blue color. In the top-left corner, there is a small white circle and a vertical white line extending downwards. A horizontal white line crosses the page, intersecting the vertical line. Below this horizontal line, the text 'CHAPTER 3' is written in white, uppercase letters. Further down, the subtitle 'Activities and recommendations of the Financial Committee' is written in a smaller white font. The bottom half of the page features several large, abstract white geometric shapes: two sets of concentric, open-ended arcs resembling partial circles, and a few smaller solid white circles scattered across the space.

# CHAPTER 3

Activities and recommendations of the Financial Committee

## **A · Changes to the investment guidelines for accessing markets with complex regulation**

In early 2013, the Financial Committee analyzed how the stock mandate could be changed to address concerns raised by the CBC with regard to the operational complexities associated with investing in some of the countries included in the stock index used as a benchmark (the MSCI All Country World Index excluding Chile). According to the CBC, the complexities are due to the fact that some countries require specific tax administration processes,<sup>16</sup> have operating restrictions<sup>17</sup> and add a significant administrative burden due to the large volume of documentation required to be able to invest in the country, to the extent that, from the Bank's perspective, the investment may not be justified given the country's small share in the benchmark.

Based on a review of the list of countries considered complex by the CBC and the analysis carried out by the Ministry of Finance's Sovereign Wealth Fund Unit, which weighed not only the difficulties but also the benefits of exposure to those countries, the Financial Committee recommended not investing in certain local markets, although the list is shorter than initially put forward by the CBC. Specifically, the Committee recommended not investing in the local markets of China, Egypt, the Philippines, India, Peru, Poland, Russia, Taiwan, Thailand and Turkey.<sup>18</sup> At the same time, the Committee members considered it essential for the funds to continue carrying exposure to these countries through other vehicles, such as exchange-traded funds (ETFs), depository receipts, mutual funds and futures.

The Ministry of Finance decided to implement this recommendation, introducing the following changes to the investment guidelines:

- The investment limit on ETFs and mutual funds was increased;<sup>19</sup>
- Investment through Hong Kong was allowed, to gain exposure to Chinese firms;
- The use of derivatives (futures, forwards and swaps) was increased to 10% of the portfolio of each manager;<sup>20</sup> and
- The risk budget was raised from an ex ante tracking error of 30 basis points to 60 basis points.

## **B · Review of the PRF and ESSF investment guidelines**

Based on the experience of the PRF in 2012, and taking into account suggestions from the fixed-income and stock portfolio managers, in 2013 the Financial Committee recommended changes to the PRF investment guidelines in order to give the managers more flexibility in following their benchmarks and to minimize transaction costs.

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<sup>16</sup> For example, some countries require the use of a local tax agent to pay any taxes due.

<sup>17</sup> For example, some countries apply penalties in the case of overdrafts.

<sup>18</sup> Investment in Chile is also prohibited.

<sup>19</sup> Previously, the use of ETFs and mutual funds could not exceed 2% of the portfolio of each manager. This limit was increased to the sum of the shares of the complex countries in the benchmark, plus 2%.

<sup>20</sup> Previously, the use of forwards and futures was limited to 2% of the portfolio of each manager.

The main changes introduced by the Ministry, based on the Financial Committee's recommendations, are as follows<sup>21</sup>:

Fixed-income portfolio:

- Investment is allowed in instruments that are not yet included in the benchmark but will be incorporated at the end of the month<sup>22</sup>.
- The portfolio can hold instruments that are being removed from the benchmark because their residual maturity or size is less than the required minimum, provided the issuer continues to be included in the benchmark;<sup>23</sup>
- The period to sell off instruments that cease to be eligible was increased to one month;
- The limit on corporate bonds with a risk rating between BBB+/Baa1 and BBB-/Baa3 was increased to 45%; and
- The limit on the use of derivatives (futures, forwards and swaps) was increased to 10% of each manager's portfolio.

Stock portfolio:

- The following limits were eliminated because they are redundant under the fund's passive management strategy:
  - › Investment in a given company's stock cannot exceed 5% of the stock portfolio;
  - › Investment in a given company cannot exceed 5% of the company's stock; and
  - › Some specific limits on investment by country.

Fixed-income and stock portfolios:

- The limit on overnight deposits with a given bank was increased from US\$ 10 million to US\$ 20 million, and the risk rating on banks that are eligible to receive deposits was lowered from AA-/Aa3 to A-/A3;
- External managers are forbidden from investing in their own companies; and
- External managers must notify the Ministry of Finance as soon as possible when they receive ineligible instruments due to corporate events. The Ministry must then define the steps to be taken and may consult the Financial Committee, via email, if deemed necessary.

In the case of the ESSF, in 2013 the Financial Committee reviewed and analyzed the new investment rules consistent with the new investment policy defined for this fund. The changes described above for the PRF that are relevant for the ESSF were incorporated into the ESSF investment guidelines, in order to maintain consistency between similar investment mandates.

## C • Evaluation of the sovereign wealth fund managers

On 1 January 2014, the Ministry of Finance will assume a number of new responsibilities, mainly in relation to the supervision and monitoring of the external managers. To prepare for this transition, and in line with best practices, the Financial Committee undertook a detailed analysis of all the PRF portfolio managers in 2013, covering both quantitative and qualitative aspects. The quantitative analysis included a statistical assessment of whether the returns obtained by the managers differed from their benchmarks and, if so, how much of the difference was due to factors such as transaction costs and taxes. Their investment strategies were also reviewed, with a focus on their po-

<sup>21</sup> This section does not repeat the elements of the investment guidelines discussed earlier in section 3.A.

<sup>22</sup> This typically occurs when a firm issues a new bond, which meets the eligibility criteria for being included in the benchmark, but which cannot be integrated before the end of the month when the benchmark is updated.

<sup>23</sup> The PRF fixed-income indexes require that the bonds have a maturity of over one year and a specified minimum size (for example, US\$ 300 million for bonds issued in the United States). With the passage of time, a bond will naturally cease to meet the maturity requirement of one year, which will trigger its removal from the benchmark index. Something similar happens if an issuer repurchases a bond, reducing the quantity in circulation.

sitions relative to their benchmarks. The qualitative analysis explored whether there had been any significant changes in the organization, its ownership, the evolution of portfolios and clients, the investment teams and investment processes, among other factors. After several sessions, the Committee concluded its analysis and recommended that the Ministry of Finance develop an internal policy for systematically evaluating the sovereign wealth fund managers, with guidance from the Committee.

## **D · Review of the PRF sustainability study**

In the second half of 2013, the Financial Committee actively participated in the review of the PRF sustainability study, which must be commissioned every three years, as stipulated in the Fiscal Responsibility Law. The Budget Office (DIPRES) is responsible for carrying out the study. Following a tender process, DIPRES commissioned the study to a consulting team made up of Eduardo Fajnzylber (lead consultant), Pablo Castañeda, Rubén Castro, Luis Felipe Céspedes, Félix Villatoro and Michael Sherris.

In 2013, the Financial Committee reviewed and commented on the first three drafts of the study, including direct dialogue with the team on the second and third reports. The Committee's main points were as follows:

- The key modeled variables should not be over-specified, and the treatment of financial uncertainty should be straightforward, while maintaining the main correlations for the evolution of the PRF. This reflects the fact that the long time horizons used in the study's projections require a robust model, rather than one that is highly detailed in the short term.
- Given that the macroeconomic variables in the model influence the financial variables, the study should consider incorporating interaction in the opposite direction, to allow financial markets to influence the macroeconomic aggregates.
- Another recommendation was to incorporate the potential effects of changes in formal versus informal labor and the growing participation of women in the labor market on the frequency and amount of pension contributions, given that these trends can affect future spending on solidarity pensions.
- The study authors were asked to explain in detail the assumptions used for estimating the future costs of copper production. This variable largely determines the profit margin in the industry, which in turn affects the government's contributions to and thus the evolution of the PRF.
- A number of suggestions were made with regard to estimating the risk premium necessary for modeling the PRF financial returns, including notes on updated, trustworthy international sources that make long-term estimates.
- Some Committee members expressed concern that some of the assumptions used were too optimistic, which could affect the study's conclusions.
- The study authors were asked to provide the necessary software and a user's manual, so that additional simulations could be made in the future if any of the key inputs changed.

## Appendix: Summary of Meetings in 2013

### ■ ■ MEETING 1 (8 January)

At the request of the Committee, the Director of the Financial Operations Division of the CBC presented the main tax characteristics that affect the two funds and provided a list of countries in which tax administration and operations are complex. The Committee expressed its willingness to recommend eliminating some of the countries in which the tax rates and/or operational complexities significantly reduce the investment return, after a careful evaluation. In addition, the Assistant Director of the Administrative Rationalization Division of the Budget Office (DIPRES), presented the main elements of the bid specifications for the tender of the “The PRF Sustainability Study.” The Committee recommended that the study incorporate the stochastic nature of the variables that determine both the fund’s returns and its contingent liabilities. Finally, the Committee also approved some changes to the PRF investment guidelines for corporate bonds.

### ■ ■ MEETING 2 (14 March)

At this meeting, personnel from the custodian bank, J.P. Morgan, presented the general terms of the methodology used to calculate the ex ante tracking error. Additional information was requested from the bank on the models used for each asset class. The Committee also analyzed the impact of eliminating some countries from the stock index used in the PRF, which would also be applied to the ESSF, due to the operational difficulties involved in investing in these countries. The Committee approved the main elements of the new ESSF investment guidelines, which include a stock portfolio, and also discussed the status of the Financial Committee’s 2012 Annual Report.

### ■ ■ MEETING 3 (14 May)

After further analysis, the Committee submitted recommendations to the Finance Minister on the final elements of the new ESSF investment guidelines, which include risk budgets, greater flexibility for the stock portfolio in the use of other investment instruments and the portfolio rebalancing policy. The Committee also reviewed the experiences of other sovereign wealth funds and portfolio managers regarding the indicators used to monitor deviations from the benchmark, in addition to the tracking error. Finally, the Committee recognized the work of Cristián Salinas, who left his position as the International Markets Department Manager at the CBC.

### ■ ■ MEETING 4 (12 July)

At this meeting, the Committee analyzed the need for a formal policy on selecting, monitoring and evaluating the fund managers, and asked the Finance Ministry to draw up a proposal. In addition, a report was presented on the results of the tender process for commissioning the PRF sustainability study. The Committee expressed its satisfaction with the winning team and declared its commitment to providing support during the review phase. Finally, the Committee heard a report on the status of the implementation of the new ESSF investment policy.



#### ■ ■ MEETING 5 (12 August)

At this meeting, the Committee analyzed quantitative and qualitative criteria for evaluating the managers of the PRF corporate bond portfolio. Additionally, the Committee received a report on the status of the implementation of the new ESSF investment policy, and expressed satisfaction with the progress achieved to date.

#### ■ ■ MEETING 6 (10 September)

At this meeting, the Committee finished its evaluation of the fund managers, with an analysis of quantitative and qualitative aspects of the PRF stock managers. The CBC's performance was also assessed. A report was presented on the implementation of the new ESSF investment policy, where it was learned that the CBC had no problem converging to the new benchmark during the first half of August. Moreover, in the second half of August, the first transfer of US\$ 300 million was made to each ESSF stock portfolio manager, again with no difficulties. Finally, the Committee discussed the possibility of having a budget for contracting consultants, studies, research or inspection visits, if needed to address complex situations.

#### ■ ■ MEETING 7 (18 October)

The Committee, in conjunction with Finance Ministry and Budget Office staff, reviewed the second progress report on the PRF sustainability study. The Committee expressed its satisfaction with the progress achieved to date and made some observations on methodological issues to be considered by the team of consultants in the next phases of model development. The team of consultants was asked to present a third draft of the report. In addition, the Committee received the draft policy on selecting, monitoring and retaining PRF and ESSF portfolio managers, prepared by the Ministry of Finance. With regard to the ESSF stock portfolio, the Committee was informed that in the first days of October, a transfer was made to each portfolio manager for the balance necessary for converging to the strategic asset allocation.

#### ■ ■ REUNIÓN 8 (2 December)

At this meeting, the Committee analyzed the third draft report of the PRF sustainability study. The team of consultants again presented the general structure of the model and showed both deterministic and stochastic projections of the evolution of the fund. The Committee commented on some methodological issues to be considered by the team of consultants before submitting their final report and suggested improvements to the report content. Separately, the International Markets Department Manager and the Financial Operations Division Director of the CBC presented the latest adjustments to the international reserves investment policy. The Committee and the CBC staff exchanged ideas on the latest changes and their relevance for the sovereign wealth funds, concluding that the reserves and the funds have very different objectives. Finally, Klaus Schmidt-Hebbel presented his decision to resign from the Committee on 1 January 2014. The Finance Ministry and the other Committee Members expressed their appreciation for his excellent work and dedication as a Committee Member since July 2009 and as president from August 2011 to the present.

## References

Comité Asesor para el diseño de una política fiscal de balance estructural de segunda generación para Chile (2011). *“Propuestas para perfeccionar la regla fiscal, Informe Final”*.

Larraín, F., R. Costa, R. Cerda., M. Villena and A. Tomaselli (2011). *“Una política fiscal de balance estructural de segunda generación para Chile”*, Estudios de Finanzas Públicas, Dipres, Ministerio de Hacienda, Chile.

Marcel M., M. Tokman, R. Valdés y P. Benavides (2001). *“Balance Estructural del Gobierno Central, Metodología y Estimaciones para Chile; 1987-2000”*, Serie de Estudios de Finanzas Públicas N°1, Dipres, Ministerio de Hacienda, Chile.

Rodríguez J., C. Tokman y A. Vega (2006). *“Política de Balance Estructural: Resultados y Desafíos tras seis años de Aplicación en Chile”*, Estudios de Finanzas Públicas, N° 7, Dipres, Ministerio de Hacienda, Chile.

Schmidt-Hebbel K. (2012). *“Fiscal Institutions in Resource-Rich Economies: Lessons from Chile and Norway”*, preparado para la conferencia *“Understanding and Avoiding the Oil Curse in the Arab World”*, Kuwait.

Velasco A., A. Arenas, J. Rodríguez, M. Jorratt y C. Gamboni (2010). *“El Enfoque de Balance Estructural en la Política Fiscal en Chile: Resultados, Metodología y Aplicación al Período 2006-2009”*, Estudios de Finanzas Públicas N°15, Dipres, Ministerio de Hacienda, Chile.

Velasco A. y E. Parrado (2012). *“The Political Economy of Fiscal Policy: the Experience of Chile (95-133)”*, Oxford Handbook of Latin American Political Economy, Oxford University Press.

Walker E. (2011). *“Un asset allocation para el FEES”*.



## Glossary

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

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

**Asset class** — a specific investment category such as equity, 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.

**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 stocks 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 stock 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.

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

**Inflation-indexed sovereign 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 ease (or speed) with which an investment or instrument can be sold without a significant loss in its value.

**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.

**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.

**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.

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

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

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

**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.

**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.

**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.





