

# **ANNUAL REPORT**

# **FINANCIAL COMMITTEE**

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

# **2010**

This publication corresponds to the 2010 Annual Report  
of the Finance Ministry's Financial Committee.

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

Intellectual Property Register N° 202906

ISSN: 0718-5790

DESIGN AND LAYOUT  
Luis Silva

April 2011, Santiago, Chile  
All rights reserved.

# **ANNUAL REPORT**

# **FINANCIAL COMMITTEE**

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

# **2010**

PREFACE		7
MEMBERS OF THE FINANCIAL COMMITTEE		8
CHAPTER 01	<b>FISCAL POLICY AND FUNDS' OBJECTIVES</b>	<b>10</b>
	A. Fiscal policy	11
	B. Objectives, rules and management of Funds	11
CHAPTER 02	<b>FINANCIAL COMMITTEE'S MANDATE AND ROLE</b>	<b>14</b>
	A. Functions	15
	B. Meetings	17
CHAPTER 03	<b>MAIN ACTIVITIES IN 2010</b>	<b>24</b>
	A. Recommendation on the PRF's investment policy	25
	B. Review of conclusions of PRF actuarial study	29
	C. Evaluation of the ESSF's investment policy	31
	D. Passive management	31
CHAPTER 04	<b>SITUATION OF THE SOVEREIGN WEALTH FUNDS</b>	<b>34</b>
	A. Market value	35
	B. Returns	36
APPENDIX 1	<b>TRENDS IN KEY INTERNATIONAL FINANCIAL INDICATORS, 2010</b>	<b>44</b>
REFERENCES		50
GLOSSARY		52

# Contents

<b>TABLE 1</b>	38	<b>FIGURE 7</b>	46
ESSF and PRF: Determinants of returns (TWR), 2010		Stock market, 2010	
<b>TABLE 2</b>	40	<b>FIGURE 8</b>	47
Strategic asset allocation and returns in dollars of selected SWFs		Corporate bond market, 2010	
<hr/>		<b>FIGURE 9</b>	47
<b>FIGURE 1</b>	12	Nominal sovereign bond market, 2010	
Fiscal savings rule and capitalization of the CBC		<b>FIGURE 10</b>	48
<b>FIGURE 2</b>	26	Inflation-indexed sovereign bond market, 2010	
Initial investment policy and Financial Committee recommendation		<hr/>	
<b>FIGURE 3</b>	35	<b>BOX 1</b>	23
ESSF and PRF: Market value, March 2007-December 2010		Custody of securities and securities lending program	
<b>FIGURE 4</b>	39	<b>BOX 2</b>	28
Index of ESSF and PRF, April 2007-December 2010		New PRF investment policy	
<b>FIGURE 5</b>	45	<b>BOX 3</b>	32
Stock market volatility (VIX) and corporate bond spread, 2006-2010		Passive and active management	
<b>FIGURE 6</b>	46	<b>BOX 4</b>	36
TED spread, 2006-2010		Rates of Return: Time-Weighted Rate of Return (TWR) and Internal Rate of Return (IRR)	
		<b>BOX 5</b>	42
		Categories of Sovereign Wealth Funds	

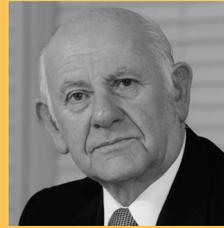


## Preface

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).

This report - the fourth prepared by the Committee - sets out its work and activities in 2010 and is part of a systematic effort to increase access to information about its deliberations and recommendations and the situation of the two Funds. In this way, the Committee fulfills the requirement established under Decree N° 621, issued by the Ministry of Finance in 2007, which stipulates that it 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 lower house of Congress and to the Joint Budget Commission of Congress.

# Members of the Financial Committee



## PRESIDENT

### **ANDRÉS BIANCHI LARRE**

Bianchi studied legal and social sciences at the Universidad de Chile and holds a masters degree and Ph.D. (c) in economics from Yale University. He was governor of the Central Bank of Chile (1989-1991) and Chile's ambassador to the United States (2000-2006). He has also served as president of Banco Crédito Lyonnais and Dresdner Banque Nationale de Paris and as joint executive secretary of the UN Economic Commission for Latin America and the Caribbean (ECLAC) and has worked as a consultant for the World Bank, the Inter-American Development Bank and the central banks of Bolivia, Colombia, Mexico and Venezuela. He currently sits on the board of a number of companies.

8

## VICE-PRESIDENT

### **ANA MARÍA JUL LAGOMARSINO**

Jul studied economics at the Universidad de Chile and holds a Ph.D. in economics from the University of Pennsylvania. She worked at the International Monetary Fund (IMF) for 27 years where she rose to become assistant director and represented Chile and five other Southern Cone countries as executive director on the IMF's board. She has also worked as a consultant on fiscal affairs for the Ministries of Economy and Finance of Peru and Panama and for the Inter-American Development Bank and as a private consultant in Chile.



**COUNSELOR**    **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.

**COUNSELOR**    **CRISTIÁN EYZAGUIRRE JOHNSTON**

Eyzaguirre studied economics at the Universidad de Chile and holds a masters degree in economics from the University of California at Berkley. He has served as general manager of Banco Bice and finance manager of Empresas CMPC and as deputy director of Chile's Tax Service (SII), advisor to the Chilean Manufacturers' Association (SOFOFA) and a professor at the Universidad de Chile. He currently sits on the boards of companies that include Cencosud, Besalco, E-CL S.A., the companies of Grupo GTD and Inforsa and is a member of the Investment Committee of the Hogar de Cristo.

**COUNSELOR**    **KLAUS SCHMIDT-HEBBEL DUNKER**

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 Universidad de 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.

**COUNSELOR**    **EDUARDO WALKER HITSCHFELD**

Walker studied economics at the Universidad Católica de Chile and holds a Ph.D. in business administration with 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.

# Fiscal Policy and Funds' Objectives

CHAPTER



## A. Fiscal policy

Chile's fiscal policy seeks to contribute to the country's macroeconomic stability and to provide public goods that increase opportunities and social protection for all Chileans. In order to comply with these objectives, emphasis has been placed on the efficient use of public resources and the transparency of their management.

Since 2001, fiscal policy has been anchored in a structural or cyclically-adjusted balance rule. This reflects the central government's trend finances and is designed to reduce the impact on public finances of cyclical fluctuations, principally in economic activity, the price of copper and other secondary variables. To this end, it decouples public expenditure from cyclical changes in effective fiscal income, tying it instead to the estimated performance of the more permanent or structural component of revenues. This helps to avoid the need for drastic changes in public expenditure in response to cyclical economic events, with the government saving during booms, when it receives temporary income, and drawing on these resources during periods of weaker economic growth and/or relatively low copper prices<sup>1</sup>.

In order to implement a fiscal policy that ensures the sustainability of public expenditure over time and contributes to the economy's competitiveness, a Fiscal Responsibility Law (Law N° 20.128) was introduced in September 2006. This created the Pension Reserve Fund (PRF) and empowered the President of the Republic to create the Economic and Social Stabilization Fund (ESSF), which was officially established in February 2007. These two Funds receive the resources that result from the application of the structural balance rule.

11

## B. Objectives, rules and management of Funds

### Objectives

The two Funds created under the Fiscal Responsibility Law (the "Sovereign Wealth Funds" or "Funds") have clear but differing objectives. In the case of the PRF, its purpose is to serve as a complementary source of financing for future pension contingencies, as stipulated by Law N° 20.225 of 2008, while the main purpose of the ESSF is to finance possible future fiscal deficits and to pay down public debt.

---

<sup>1</sup> For a more detailed discussion of the application of the structural balance rule and its results, see Marcel et al. (2001), Rodríguez et al. (2006) and Velasco et al. (2010).

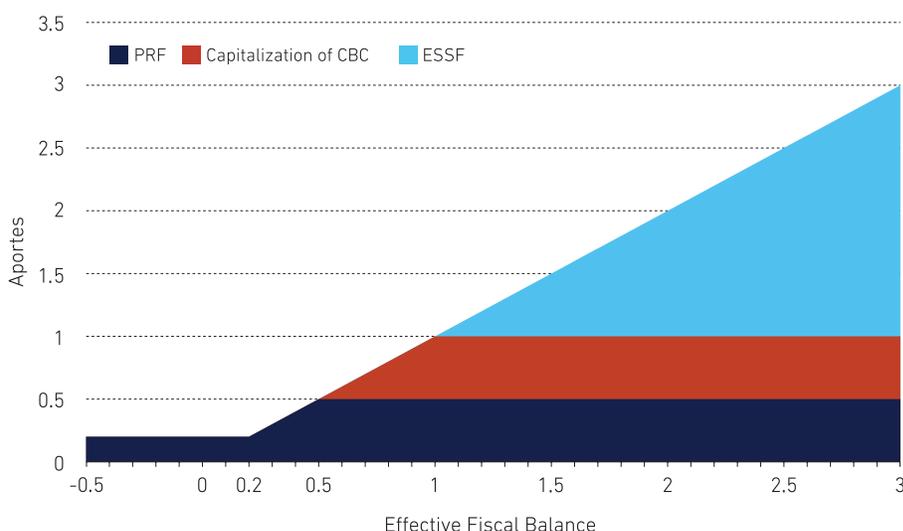
## Rules for contributions to Funds

The Fiscal Responsibility Law established the rules for the creation of the ESSF and the PRF and for contributions to the Funds as well as the option of capitalizing the Central Bank of Chile (CBC) during a period of five years. Figure 1 illustrates the operation of these rules for different levels of effective central government balance.

Under the law, the PRF increases each year by a minimum amount equivalent to 0.2% of the previous year's Gross Domestic Product (GDP). If the effective fiscal surplus exceeds this amount, the contribution to the PRF can rise to a maximum of 0.5% of the previous year's GDP. This policy will remain in force until the PRF reaches the equivalent of 900 million unidades de fomento (UF).

The law also authorized the government to capitalize the CBC by an annual amount equivalent to the difference between its contributions to the PRF and the effective fiscal surplus, providing this difference is positive, with an upper limit of 0.5% of the previous year's GDP. This capitalization can take place over a period of five years as from September 2006.

Finally, the remainder of the effective surplus, after payment into the PRF and capitalization of the CBC, must be paid into the ESSF. Repayments of public debt and provisional payments into the ESSF during the previous year can, however, be deducted from this contribution<sup>2</sup>.



**GRÁFICO 1**  
Fiscal savings rule and capitalization of the CBC (% of GDP)

**SOURCE:**  
Ministry of Finance.

<sup>2</sup> The law currently in force permits the use of resources from the current year's fiscal surplus, which must be deposited in the ESSF during the following year, to pay down public debt and make provisional contributions to the ESSF.

## Rules on use of the Funds

The PRF is designed exclusively to complement budget financing of fiscal liabilities arising from the state guarantee on basic old-age and disability solidarity pensions and old-age and disability solidarity pension contributions. Until 2016, annual withdrawals of up to the previous year's returns may be made and, as from 2016, of up to a third of the difference between expenditure on pension liabilities in the current year and expenditure on this item in 2008 adjusted by the change in the consumer price index during the intervening period.

The PRF will cease to exist in September 2021 if the withdrawals to be made in a calendar year do not exceed 5% of the sum of expenditure on the state guarantee on basic old-age and disability solidarity pensions and old-age and disability solidarity pension contributions as established in that year's budget. When the PRF ceases to exist, any balance in the Fund must be transferred to the ESSF.

The ESSF is designed to finance government expenditure if there is a fiscal deficit and/or to make normal or extraordinary repayments of public debt (including *bonos de reconocimiento*).

## Management policy

Under Decree N° 1.383 of 2006 (the "Agency Decree"), the Ministry of Finance appointed the CBC as Fiscal Agent to act in its name and on its behalf in the management and investment of the Funds' resources. The CBC must abide by specific instructions given by the Finance Minister ("Investment Guidelines") which establish the requirements and conditions necessary for the proper exercise of the functions entrusted to the CBC in its role as fiscal agent.

# Financial Committee's Mandate and Role

CHAPTER



## A. Functions

The Fiscal Responsibility Law (FRL) specified the creation of a Financial Committee to advise the Finance Minister on the investment of the resources of the PRF and the ESSF and the definition of the guidelines needed for their implementation.

On December 23, 2006, the Finance Minister announced not only the creation of the Funds but also, in compliance with this requirement, the establishment of an external advisory committee - the Financial Committee - formed by professionals with important economic and financial experience.

This Committee was officially established by Decree N° 621, issued by the Ministry of Finance in 2007 and published in the *Diario Oficial* (Official Gazette) on August 11, 2007. The Committee's initial members - Andrés Bianchi Larre, Martín Costabal Llonca, Ana María Jul Lagomarsino, Oscar Landerretche Moreno, Andrés Sanfuentes Vergara and Eduardo Walker Hitschfeld - were also appointed under this Decree, half of them to serve for a period of one year and the other three for a period of two years. The Finance Minister appointed Andrés Bianchi as the Committee's president and its members elected Ana María Jul as its vice-president. In August 2008, the Ministry of Finance officially announced the appointment of Martín Costabal, Oscar Landerretche and Eduardo Walker for a further two-year period<sup>3</sup>. In June 2009, Oscar Landerretche resigned from the Committee for personal reasons and, in July 2009, the Finance Minister appointed Klaus Schmidt-Hebbel Dunker for the remainder of Landerretche's period. In August 2009, Andrés Bianchi, Ana María Jul and Andrés Sanfuentes were reappointed for two years. In March 2010, Andrés Sanfuentes resigned from the Committee for personal reasons and, in July 2010, the Finance Minister appointed Cristián Eyzaguirre Johnston for the remainder of his period. In August 2010, Martín Costabal, Klaus Schmidt-Hebbel and Eduardo Walker were reappointed for a further two years.

The Financial Committee's functions and the norms of procedure required for its proper operation were also defined by Decree N° 621, under which its main functions and responsibilities are:

- To advise the Finance Minister, when so requested, on key issues related to the Funds' long-term investment policy such as the allocation of their investments by asset class, the incorporation of new investment alternatives, the benchmarks to be used, the limits to permitted deviations from their asset allocation and the limits of the Funds' investment possibilities;

---

<sup>3</sup> Under Decree N° 621, three seats on the Committee must be filled each year for a period of two years. As a result, these three members were initially appointed only for one year.

- To put to the Finance Minister, when so requested, instructions on the Funds' investments and their custody and proposals 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 so requested, on any matter related to the Funds' investment.

In addition, the Committee can express its views on other matters relating to the Funds' long-term investment policy. Both these views and its recommendations must take into account the principles, objectives and rules of the Funds as set out above.

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. For this purpose, a special section of the Ministry of Finance's website was created on which information on all these issues is posted<sup>4</sup>.

---

<sup>4</sup> <http://www.hacienda.cl/english/sovereign-wealth-funds.html>

## B. Meetings

In 2010, the Financial Committee held ten meetings. Its meetings are the main instances at which it agrees on recommendations to the Finance Minister about the Funds' investment policies. In the intervening periods, its members exchange information and analysis, principally via e-mail.

Under Decree N° 621, the Committee must meet at least every six months but, as in previous years, its members considered that more frequent meetings were necessary.

The Financial Committee is assisted by specialized group of Finance Ministry staff, led by Ignacio Briones, its coordinator for international finance, who acts as the Minister's representative before the Committee. This group also includes two senior economists, two other economists and two international finance lawyers.

In general, the Financial Committee's meetings are divided into four parts. In the first, issues relevant to the Committee's work are discussed, based on presentations by experts on the respective issue or prepared by the Finance Ministry staff or the CBC. In the second part, the Ministry staff present a detailed report on the situation of the Funds, including the amount of savings accumulated and their returns, as well as providing information, studies and international comparisons about the investment policies of other sovereign wealth funds (SWFs) and their results. In the third part, the Committee analyzes and assesses the performance of the ESSF and the PRF and its consistency with their investment policy. Finally, the Committee's members - if they deem it necessary - discuss and draw up specific recommendations to be presented to the Finance Minister.

The main topics analyzed in the meetings held in 2010 and a summary of the agreements adopted are presented below.

## MEETING 1

---

January 7

In the first meeting of 2010, CBC staff presented the main elements of the investment strategy they planned to implement in the first quarter of 2010 and explained the situation of the Funds' investments in Greece, which had ceased to be eligible at the end of 2009 following the reduction of its risk rating. The Committee also reviewed in detail the Funds' situation and performance in 2009 and examined the situation in international markets. Its members also agreed on a timetable for preparing the Financial Committee's annual report for 2009 and approved the preparation of a document setting out the main recommendations on the Funds' investment policy, made by the Committee since its creation, for analysis with the new economic authorities appointed in March 2010. In this document, special emphasis would be placed on the Committee's recommendation of mid-2009 to include equities and corporate bonds in the PRF's portfolio.

## MEETING 2

---

March 4

The Committee's second meeting focused on analysis of the content of the report that it must prepare annually about its activities. The members of the Committee agreed to maintain a similar structure to previous years, emphasizing the recommendation to implement a new investment policy for the PRF. At this meeting, the Committee thanked the Ministry of Finance's coordinator for international finance, Eric Parrado, for his work and, particularly, his efforts to strengthen the Funds' institutional framework and form a competent and dedicated technical team as well as for his contribution to other measures that helped to position the Funds among the most transparent in the world. Similarly, they highlighted his active role in developing and promoting the best practices code for SWFs known as the "Santiago Principles".

---

**MEETING 3****March 26**

In the Committee's third session, the new Finance Minister, Felipe Larraín, met its members and declared his willingness to advance in perfecting the Funds' investment policy. The Committee presented the document with its main recommendations since its creation, stressing the proposal to diversify the PRF's portfolio. The Committee also carried out a final review of the content of its annual report, setting out its main activities in 2009. Under the regulation in force, this report must be submitted to the Finance Minister in April and to the Finance Commissions of both houses of Congress and the Joint Budget Commission of Congress. Finally, note was taken of the resignation of Andrés Sanfuentes from the Committee and it welcomed Ignacio Briones as the Finance Ministry's new coordinator for international finance.

---

**MEETING 4****April 9**

The Committee devoted its fourth meeting to an examination of the first actuarial study of the PRF's sustainability. This report was prepared in compliance with the Fiscal Responsibility Law, which requires that the PRF's sustainability be analyzed every three years. The study was prepared by experts at the Centro de Microdatos of the Universidad de Chile with assistance from overseas experts. At this meeting, Professor Jaime Ruiz-Tagle - a member of the team responsible for the study - presented its main assumptions, characteristics and conclusions. The members of the Committee expressed their points of view and exchanged opinions about the model used, the assumptions on which the study was based and its conclusions. They also offered suggestions about these assumptions, the parameters to be modeled and the methodology that it would be advisable to use in the next study.

## MEETING 5

---

May 28

The Committee's fifth meeting focused on a detailed analysis of the situation of international markets - and, particularly, the situation of European economies which had been deteriorating in the preceding months - and the possible impact on the Funds' resources. CBC staff presented their opinion about the situation of international financial markets, particularly in Europe, and explained the measures taken to mitigate the effect of the credit deterioration in Europe on the Funds. The Committee expressed its agreement with these measures and, specially, the reduction of their exposure to the countries with greater problems. In this context, it reviewed their portfolios and verified that they did not include investments in Greece, Portugal or Spain.

## MEETING 6

---

20

July 9

At the Committee's sixth meeting, the Finance Minister welcomed Cristián Eyzaquirre Johnston as its new member. In this session, representatives of JPMorgan - the Funds' custodian bank - offered a presentation about the characteristics and possible alternatives of the securities lending program which it manages (Box 1). The members of the Committee also learned of the results of the Linaburg-Maduell Index calculated by the Sovereign Wealth Fund Institute, which measures the transparency of the world's main SWFs. In the first quarter of 2010, Chile's Funds obtained the maximum score awarded by this Index, positioning them among the most transparent in the world. In order to further improve their transparency standards, the Committee agreed to advise the Finance Minister to increase the coverage and disaggregation of the Funds' monthly reports, which is available on their website, and to include the Funds' returns in pesos and dollars in this report.

**MEETING 7****August 5**

At the seventh meeting, the Finance Ministry's coordinator for international finance informed the members of the Committee of the Finance Minister's decision to carry out an evaluation of the ESSF's investment policy and its consistency with its objectives. The Committee supported this initiative and, among other agreements, decided to regularly monitor progress of the evaluation. In addition, concluding its discussions at its previous meeting, it recommended accepting JPMorgan's proposal as custodian bank to increase the list of instruments that can be accepted as collateral for the securities lending program. Regarding the Finance Minister's proposal to eliminate the criterion of minimum net worth as a condition of eligibility for financial institutions and agencies, it requested additional information and proposals for alternative conditions. The Committee also reviewed in detail the list of financial institutions in which the Funds' resources were deposited, confirming that these deposits had not been affected by the problems experienced by some European countries.

**MEETING 8****September 24**

The Committee devoted its eighth meeting to analysis of the terms of reference drawn up by the Ministry of Finance for the study to evaluate the ESSF's investment policy. The Committee made comments and suggestions for improving these terms which defined the study's specific objectives, the tasks to be carried out and its timetable. In response to an earlier request by the Committee, CBC staff presented the main results to date of the Funds under its management and, in particular, compared their returns with those of their benchmark. In addition, they explained the operation of the CBC's International Markets Department which forms part of its Financial Operations Division and the process used to invest the Funds' resources. The Committee recognized the value of this presentation, particularly as regards understanding the results of the CBC's management. It recommended eliminating the minimum net worth condition for the eligibility of banks and agencies and agreed that it should be replaced by an upper limit on the percentage of the Funds' total value that can be deposited in these institutions in relation to their risk rating. This recommendation was based on the analysis of other international experiences and also on the fact that issuers' risk ratings already reflect their financial situation and relative importance within the system.

## MEETING 9

---

November 5

In its ninth meeting, the Committee reviewed issues that included the Funds' situation, the allocation of their portfolios and their recent performance. It verified that, as of the end of October, their value had increased in relation to end-2009, reflecting both financial gains and the contributions made to both Funds. In the case of the ESSF, the contributions corresponded to the transfer of part of the proceeds of the international bonds placed by the government (US\$1,000 million) and the transfer of US\$362 million corresponding to the final balance of the Oil-Derivative Fuel Price Stabilization Fund. The situation of international financial markets was also analyzed along with the possible effect on the Funds' investments of the measures taken by the US Federal Reserve to stimulate that country's economy.

## MEETING 10

---

22

December 10

At its last meeting of the year, the Committee made additional comments on the terms of reference for the evaluation of the ESSF's investment policy requested by the Finance Minister. In particular, it recommended holding two related seminars. At the first seminar of a technical nature, the evaluation's preliminary results would be discussed with local and international experts in financial investments in order to enrich the final version of the report. The second seminar would seek mainly to publicize the evaluation and its main conclusions among members of Congress, academics, journalists covering economic issues and representatives of Chile's principal economic sectors. The main contents of the annual report on the Committee's activities were also discussed. Finally, the Committee verified that, despite increased international market uncertainty due to the difficult situation faced by Ireland, the credit risk of the instruments included in the Funds' portfolio remained low.

## Custody of securities and securities lending program

A custodian institution is the body responsible for safeguarding an investor's financial assets. Its main role is to look after and conserve the securities entrusted to it, with the obligation to return them when their owner so requires. It is also responsible for facilitating operations involving the securities' transfer in accordance with purchase and sale instructions issued by the investor and for exercising all the rights conferred by their ownership such as collecting interest and dividend payments. It also represents the investor at shareholders' and bondholders' meetings.

Many investors use securities lending programs, a service typically offered by custodian institutions, in a bid to maximize their returns. In a securities lending program, the custodian, acting on behalf of the owner, lends the securities under its custody to a third party or counterpart who usually puts up other financial instruments or cash as collateral. In addition, the custodian often provides a second guarantee. When financial instruments are used as collateral, the counterpart is obliged to pay a fee to the owner of the securities lent through the custodian and to return them whenever requested or at the end of the agreed period. When the collateral takes the form of cash, the owner of the loaned securities must invest this through the custodian to generate a return and must pay interest to the counterpart on this cash. In both cases, the custodian receives part of the gains as compensation for managing the program.

In the case of Chile's SWFs, the custodian is J.P. Morgan Chase Bank N.A. and, in their securities lending operations, only financial instruments are accepted as collateral.

# Main Activities in 2010

CHAPTER



## A. Recommendation on the PRF's investment policy

Since the creation of the ESSF and the PRF, their resources have been invested in the same asset classes as those in which the CBC holds its international reserves (except for mortgage-backed securities<sup>5</sup>). The strategic asset allocation initially chosen by the Ministry of Finance comprised 30% in money market instruments, 66.5% in sovereign bonds and 3.5% in inflation-indexed sovereign bonds while the currency allocation was 50% in dollars, 40% in euros and 10% in yens<sup>6</sup>. Although this policy includes the same asset classes as for international reserves, it has different characteristics (for example, a longer duration) because the Funds have different objectives determined by the nature of the liabilities to be covered. This policy was of a temporary nature and it was expected that it would be modified according to the Financial Committee's recommendations.

At the end of 2007, the Committee proposed to the Finance Minister, Andrés Velasco, a gradual modification of the strategic asset allocation of the ESSF and PRF, shifting towards a more diversified investment structure. This recommendation took into consideration the characteristics and objectives of the Funds and their investment horizons. It was also based on the results of a study commissioned by the Finance Ministry from Mercer Investment Consulting (henceforth, Mercer) and on a review of different international experiences including the world's main SWFs, Chilean and Californian pension funds and the endowments of some US universities.

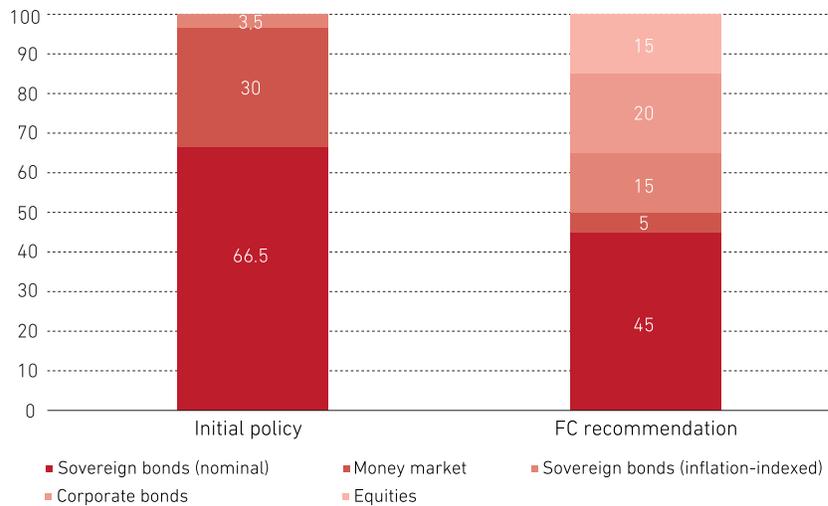
The Committee's recommendation - which constituted the first stage of an investment policy to be implemented gradually - was for the "global" investment of 15% of the Funds' portfolios in equities, 20% in corporate bonds, 45% in sovereign bonds, 15% in inflation-indexed bonds and 5% in money market instruments<sup>7</sup> (*Figure 2*). In the Committee's opinion, this greater portfolio diversification as regards both asset class and currencies would be reflected in higher expected returns over the Funds' investment horizons as compared to the initial policy. In order to capture scale economies in the Funds' management, this reference allocation would be identical for both in this first stage but would subsequently diverge in line with their different objectives and investment horizons. Under the Committee's recommendation, the new policy would have been implemented at the end of 2008. The Finance Minister agreed both with the proposal and with the suggested timetable for its implementation.

---

5 Mortgage-backed securities (MBS) are financial instruments that group together several individual mortgage loans. No investments were made in this type of instrument for operational reasons since it would have meant hiring additional managers.

6 In order to contribute to the economy's competitiveness (avoiding the so-called "Dutch disease") the Ministry of Finance decided that the resources accumulated in these Funds would be invested exclusively abroad and in instruments in foreign currency.

7 In this context, "global" means that the investments are made in the main international markets. For example, investments in equities would follow the Morgan Stanley Capital International All Country World Index (MSCI ACWI), which represents the stock markets of developed and emerging economies.



**FIGURE 2**  
Initial investment policy and Financial Committee (FC) recommendation  
(% of portfolio)

**SOURCE:**  
Ministry of Finance.

At the same time, the Committee recommended hiring external managers for the Funds' investments in equities and corporate bonds. It also proposed that several managers be selected for each asset class, that each be assigned specific amounts of investment and that an external consultant be hired to advise on the selection process. The Committee, furthermore, recommended that initial management should be predominantly passive<sup>8</sup>. After a selection process carried out jointly by the CBC and the Ministry of Finance, the Committee suggested hiring the consulting company Strategic Investment Solutions (henceforth, SIS) as an external consultant.

The process of selecting external managers was carried out in 2008 by the CBC with the participation of the Finance Ministry. The Committee cooperated in the process with proposals about the selection criteria and by monitoring its different stages. The CBC presented the result to the Committee, which agreed with the proposed selection.

<sup>8</sup> "Passive management" in this context means following an investment strategy whose purpose is to achieve a performance similar to that of the benchmark, without the manager actively opting for issuers or asset classes and, thereby, deviating from the benchmark.

At the end of 2008, however, in view of the almost unprecedented intensity and extent of the international economic and financial crisis as reflected in the extraordinary volatility and uncertainty prevailing in markets, the Committee recommended that the Finance Minister postpone implementation of the new investment policy and he accepted this recommendation. In this context, the Committee asked the Ministry of Finance's team to monitor and periodically inform them about international financial conditions in order to allow it to present a timely proposal on appropriate ways of implementing the diversification policy. The Finance Minister accepted these recommendations.

In August 2009, the Committee advised adoption of the investment policy proposed in 2007. This suggestion took into consideration the improvement in international economic conditions and in the main financial indicators including, in particular, risk indicators such as the TED spread<sup>9</sup>, the VIX index<sup>10</sup> and the spread<sup>11</sup> on corporate bonds. However, the Committee recommended that its implementation be confined to the PRF due to the longer time horizon of the liabilities it is designed to finance. It also suggested that the external managers to be hired for the new asset classes be selected from the group of finalists who had prequalified in 2008, once it was verified that their eligibility had not been affected by the international crisis. In the case of ESSF, the Committee recommended maintaining the current policy of investing only in fixed-income assets due to its shorter time horizon and the fact that, because of its nature and objectives, it might be necessary to use its resources to finance fiscal deficits. This was the case in 2009 when the Finance Minister decided to use resources from the ESSF to cover part of the central government's deficit.

At its meeting on November 9, 2009, the Committee was informed that the Finance Minister had opted to leave to the future economic authorities, who would take office in March 2010, the decision of whether to implement the new investment policy proposed for the PRF. The Committee took note of this decision and recommended that as much progress as possible be made on the work required to ensure that the new authorities would have opportune access to the necessary information for making this decision.

To this end, in early 2010, the Committee prepared a document setting out its main recommendations about the Funds' investment policy, the stages that had been completed by November 2008, the reasons for the suspension of the implementation process and the recommendation to resume the new policy only for the PRF (Box 2). This document was presented to the Minister of Finance in 2010<sup>12</sup>.

---

9 The TED spread is the difference between the interbank borrowing rate (LIBOR) and the risk-free rate (US Treasury bills)

10 The CBOE Volatility Index (VIX) represents the volatility of the Standard & Poor's 500 index (S&P500) expected by the market in the next thirty days.

11 The difference between the yield-to-maturity on two fixed-income instruments which is used to measure their relative risk level.

12 The Finance Minister accepted the Financial Committee's recommendation in January 2011.

## New PRF investment policy

The Committee recommended that, in a first stage, the PRF's investment policy consist of 15% in equities, 20% in corporate bonds, 45% in sovereign bonds, 15% in inflation-indexed bonds and 5% in money market instruments. The Committee considered it crucial that, initially, the policy should not excessively expose the fund to short-term volatility so as to mitigate reputational risk. For this reason, it recommended excluding alternative investments and reducing the exposure to equities and corporate bonds proposed by Mercer<sup>1</sup> and, while maintaining an important participation in sovereign bonds, to significantly diminish the allocation to money market instruments. At the same time, it suggested that, for each asset class (except money market instruments), global indicators be replicated, permitting investment in a greater number of countries and currencies. The Committee's recommendation, therefore, gave priority to diversification as generating higher medium-term returns than the initial policy. The Committee also considered that the investment policy should be reevaluated once more experience had been acquired as to the advantages and relative costs of investing in equities and corporate bonds and more detailed information had been gathered about the estimated amount of the liabilities the PRF would finance. Finally, it did not rule out the possibility that the PRF's portfolio could, in future, include alternative investments.

It should be noted that the diversification policy recommended by the Committee, while offering on average a higher long-term return, is more risky than the current policy. Consequently, if the policy were adopted, the market value of the PRF could temporarily decrease in a more pronounced way in the face of negative situations in international financial markets. Figure R2 presents the evolution of the asset classes included in the initial policy during the recent crisis and of the assets that would be included under the Committee's diversification recommendation. It shows that, under the diversification policy, the maximum loss experienced by the PRF would have been 18.2% as compared to only 4.4% under the current policy.<sup>2</sup> It should, however, also be noted that the subsequent recovery would have taken the value of the recommended portfolio to a higher level in December 2010 than that obtained under the current policy.

**FIGURE R2**

Trend of different financial assets during the international crisis. (March 18, 2008 = 100)

**SOURCE:**

Prepared by the Ministry of Finance on the basis of Barclays Capital indices and information from Bloomberg.

1 Mercer recommended a portfolio with a global allocation of 50% in equities, 35% in corporate bonds and 15% in alternative investments.

2 These figures are the result of comparing the maximum value that the PRF's new portfolio would have reached (which would have occurred on March 18, 2008) and its minimum value (March 9, 2009) and the variation in its value during the same period under the current policy.

## B. Review of conclusions of PRF actuarial study

At the beginning of 2010, the Committee examined the results of the PRF's first actuarial study<sup>13</sup> whose conclusions are of interest for the investment policy adopted by the Fund. This study was carried out in compliance with the Fiscal Responsibility Law - which requires that the PRF's sustainability be analyzed every three years - by a team of researchers at the Centro de Microdatos of the Universidad de Chile, coordinated by professors David Bravo and Jaime Ruiz-Tagle and also including Nicholas Barr, a professor at the London School of Economics, and Gilles Binet, an actuary at the Canadian Institute of Actuaries. Professor Jaime Ruiz-Tagle addressed the Financial Committee's meeting of April 9, presenting the study's methodology and conclusions.

The study developed a projection model for the PRF through to 2030, making it possible to analyze its behavior and sustainability under different scenarios. The base scenario considered annual GDP growth

13 For more detailed information, see Bravo et al. (2010).

of 4% and an annual 4% return on the Fund's investments while the optimistic scenario envisaged economic growth and a return of 6% and the pessimistic scenario assumed 2% for both variables. Two additional scenarios were also considered: one with two financial crises during the simulation horizon and the other with nil real annual growth of the solidarity benefits to whose financing the Fund will contribute. For all these scenarios, it was assumed that annual contributions to the PRF would reach 0.3% of GDP and solidarity benefits would increase in line with real wages (except in the last scenario under which they would not increase in real terms).

The study's results indicate that expenditure on the solidarity pillar of the pension system would represent between 1% and 1.7% of GDP in 2030, depending on the scenario considered. In the base scenario, this figure would be 1.3% of GDP. The base scenario indicates that, in 2030, the PRF's value would reach slightly over 2% of GDP, down from a peak of 3.1% in 2015. The only scenario that suggests sustained growth of the PRF is the optimistic one under which it would be equivalent to 2.5% of GDP in 2030. In the scenario with no growth of the solidarity benefits, the Fund would reach 3.7% of GDP in 2030 while, in the scenario with two financial crises, it would represent 1.7% of GDP in 2030.

In relation to evaluation of the limit of 900 million *unidades de fomento* (UF), the maximum size that the Fund can reach under the Fiscal Responsibility Law, it can be concluded that, under the most optimistic assumptions about growth and returns, it would reach half this legal limit. The study, therefore, concluded that the size limit would not constitute a restriction in the next 20 years.

The Committee's members valued the study's conclusions, agreeing that they support and are consistent with the diversification policy recommended for the PRF. While recognizing the study's terms of reference and its actuarial nature, the Committee suggested that the next study of the PRF's sustainability include a stochastic model to provide a better understanding of the impact of the relations between the main variables considered in the model. Finally, the Committee also recommended some changes in the assumptions used for this first study.

## C. Evaluation of the ESSF's investment policy

In mid-2009, as discussed above, the Committee advised that the new investment policy, initially proposed for both Funds in 2007 and suspended at the end of 2008, be implemented for the PRF. This recommendation took into account the horizon of the liabilities that the PRF is designed to finance. In the case of the ESSF, the Committee recommended maintaining the current policy, due to the Fund's nature, objectives and shorter investment horizon.

In view of this recommendation, the Finance Minister decided that an evaluation of the ESSF's investment policy be carried out in the first half of 2011. The Committee agreed with this initiative and cooperated with the Ministry of Finance in preparing the terms of reference for the study's objectives, content and timetable. Specifically, the Committee defined the following objectives and activities for this evaluation:

- i. To propose an investment policy for the ESSF. This investment policy will be presented for the Committee's consideration and must be consistent with the ESSF's objective of being a stabilization fund that permits compensation for the effect of cyclical fluctuations – principally in economic activity and the price of copper and other secondary factors - on fiscal income.
- ii. To develop financial models from which it is possible to derive the main parameters to be considered in the investment policy and the strategic asset allocation most consistent with that policy's objectives and restrictions.
- iii. To present the study's results in two seminars to be organized by the Ministry of Finance. In the first, of a technical nature, the preliminary results of the evaluation would be discussed with local and overseas experts in financial investments so as to enrich the final version of the report. The second would be geared mainly to making known the evaluation and its main conclusions.

## D. Passive management

The Financial Committee has, from the start, favored passive management for the ESSF and the PRF (Box 3). The main reason for this is that, in its opinion, the international evidence indicates that, in the most efficient markets, very few investors are capable of achieving results significantly above the indices representative of those markets, particularly when the costs of more active management are taken into account.

In view of this and the great volatility seen in many financial markets in recent years, the Committee recommended, in November 2010, that the CBC increase the passive emphasis of its management of the Funds. In other words, the CBC should reproduce, as far as possible, the returns of the benchmarks.

---

## Passive and active management

---

A portfolio manager who follows a passive strategy invests with the objective of offering the investor a return similar to that of an index representative of an asset class.<sup>1</sup> In this case, the investor seeks to obtain the return on the chosen asset class, accepting the risk associated with it. This implies that the manager must not deviate from the benchmark into individual instruments or other asset classes.

The main aim of active management, on the other hand, is to exceed the return on the benchmark. This kind of management is based on the ability to anticipate possible changes in market trends (“market timing”) and/or select instruments that, on average, will perform better than the representative index (“selectivity”). The evidence shows that, in those markets that are most efficient and liquid, few investors systematically obtain returns, net of management costs, that exceed those on corresponding index.

<sup>1</sup> For example, two indicators typically used for the stock market are Standard & Poor’s 500 and the Morgan Stanley Capital International All Country World Index (MSCI ACWI). The first is used when an investor wants to have a portfolio representative of the largest US companies since its return corresponds to that on the shares of that country’s 500 largest companies. The MSCI ACWI, on the other hand, is used as an index representative of the international stock market since its return is calculated on the basis of the performance of the shares of the main companies in developed and emerging countries.



# Situation of the Sovereign Wealth Funds

CHAPTER



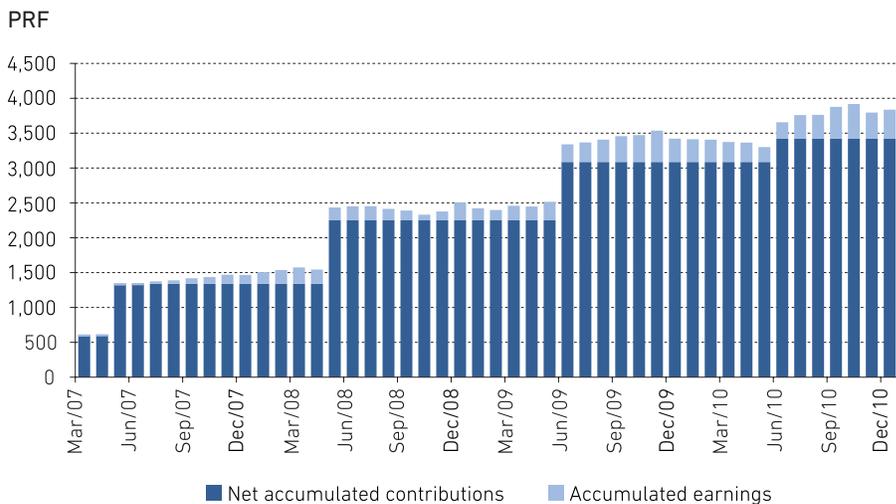
## A. Market value

At the end of 2010, the market values of the ESSF and the PRF reached US\$12,720 million and US\$3,837 million, respectively, as compared to US\$11,285 million for the ESSF and US\$3,421 million for the PRF at the end of 2009. The increase in the value of the ESSF was explained by net contributions for US\$1,212 million and net investment earnings of US\$223 million<sup>14</sup>. In the case of the PRF, the increase was explained by contributions for US\$337 million and net earnings of US\$79 million (Figure 3).



**FIGURE 3**  
ESSF and PRF: Market value, March 2007-December 2010 (US\$ million)

**SOURCE:**  
Ministry of Finance



14 Net contributions correspond to contributions less withdrawals

## B. Returns

### 1. Conceptual definitions

The return on the Funds' investments depends on a number of factors that have a positive or negative impact on the value of their portfolios. These include principally the level and movements of interest rates and movements in exchange rates.

#### BOX 4

### Rates of Return: Time-Weighted Rate of Return (TWR) vs. Internal Rate of Return (IRR)

There are two main methods of calculating the return on an investment portfolio: the Time-Weighted Rate of Return (TWR) and the Internal Rate of Return (IRR).

The former is used to measure returns that depend directly on the portfolio manager's investment decisions and excludes the effect of contributions and withdrawals since these are generally outside the manager's control. It is calculated using daily returns obtained from variations in the investments' market value. As a result, if contributions (withdrawals) are made on a particular day, the final value is adjusted by subtracting (adding) the contributions (withdrawals). The TWR, therefore, reflects the performance of an investor who makes all capital contributions at the beginning of the investment period and all withdrawals at the end of this period. The TWR is, for example, used to measure the return on pension and mutual funds in Chile and many other countries.

The IRR, on the other hand, is used to measure the returns actually obtained by an investor, taking into account the timing and amount of capital contributions and withdrawals. The IRR is the discounted rate at which the portfolio's final value is equal to the present value of all contributions and withdrawals. In most cases, the TWR is recommended to measure a fund manager's performance. There are, however, some cases in which the IRR is preferable as, for example, in private equity funds where the manager is responsible for determining the timing of capital contributions and withdrawals.

The return on short-term fixed-income instruments is determined basically by their rate of interest and tends to be stable while that on medium and long-term fixed-income instruments depends mainly on the level and movements of interest rates in the country where they are held. Movements in interest rates also affect the market value of fixed-income assets, particularly longer-term bonds. An increase in interest rates, for example, reduces bonds' market value while a drop in rates increases it. Returns that are the result of these factors are referred to as "return in local currency".

A fund's return also depends on changes in the value of the currency used to measure its performance against the other currencies in which it holds assets. In a fund whose return is measured in dollars, for example, the value in dollars of its investments denominated in euros (or yens) increases as a result of an appreciation of the euro (yen) against the dollar and decreases if they weaken against the dollar.

The total return on a fund is, therefore, a combination of the return obtained in local currency and the return generated by exchange-rate movements.

## 2. Returns in 2010 and 2007-2010

In 2010, the ESSF's net return in dollars, measured using the time-weighted rate of return (TWR), was 1.83% while that on the PRF was 1.81%. Measured using the internal rate of return (IRR), it reached 1.90% for the ESSF and 2.19% for the PRF.

These returns are explained mainly by a return of 2.94% on the ESSF and of 2.92% on the PRF generated by accrued interest earnings and the changes in the interest rates on the financial instruments included in their portfolios. The return was reduced by 1.11% due to variations in exchange rates, principally the depreciation of the euro against the dollar, which was partly by the appreciation of the yen against dollar (Table 1).

Fund	Component	Quarter				2010
		I	II	III	IV	
ESSF	Local currency	0.95%	1.69%	0.96%	-0.67%	2.94%
	Variations in exchange rates	-2.32%	-3.32%	5.09%	-0.36%	-1.11%
	<b>Total return (USD)</b>	<b>-1.37%</b>	<b>-1.63%</b>	<b>6.05%</b>	<b>-1.03%</b>	<b>1.83%</b>
PRF	Local currency	0.94%	1.70%	0.95%	-0.68%	2.92%
	Variations in exchange rates	-2.32%	-3.32%	5.09%	-0.36%	-1.11%
	<b>Total return (USD)</b>	<b>-1.38%</b>	<b>-1.62%</b>	<b>6.04%</b>	<b>-1.04%</b>	<b>1.81%</b>

**TABLE 1**  
ESSF and PRF: Determinants of returns (TWR), 2010 (%)

**SOURCE:**  
Ministry of Finance.

Although the returns of the ESSF and the PRF are analyzed mainly in dollars, they can also be expressed in Chilean pesos. In this case, their return depends not only on the factors discussed above but also on the peso-dollar exchange rate, with the value of their portfolios in pesos increasing (decreasing) when the peso depreciates (appreciates) against the dollar. In 2010, the peso appreciated strongly against the dollar and their return in pesos was -5.69% for the ESSF and -5.71% for the PRF.

Measured using the TWR, their mean annual return in dollars since March 31, 2007 reached 5.51% and 5.43% for the ESSF and the PRF, respectively<sup>15</sup>. The indices shown in Figure 4 are representative of each Fund's accumulated return. The index for the ESSF rose from 100 on March 31, 2007 to 122.3 at the end of 2010 while that for the PRF rose from 100 to 122.0 in the same period. The annualized IRR since the Funds' inception reached 5.26% for the ESSF and 4.42% for the PRF.<sup>16</sup>

15 Although the first contribution to the PRF was made on December 28, 2006 and the first contribution to the ESSF on March 6, 2007, the TWR is measured as from March 31, 2007 when the CBC's performance as their manager began to be measured.

16 The IRR is calculated as from the date at which the respective fund received its first contribution.

## ESSF

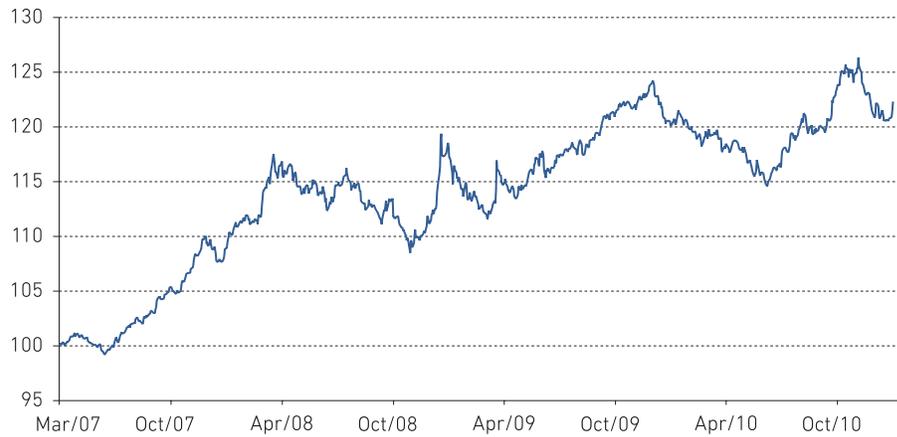


FIGURE 4

Index of ESSF and PRF, April  
2007-December 2010  
(March 31, 2007 = 100)

## SOURCE:

Ministry of Finance.

## PRF



The returns obtained by the ESSF and the PRF in 2010 were below their benchmarks by 16 basis points (bps) and 18 bps, respectively. Since March 31, 2007, the difference between their annualized returns and their benchmarks was -18 bps for the ESSF and -26 bps for the PRF<sup>17</sup>.

<sup>17</sup> This means that the instruments acquired by the fund manager on average generated lower returns than those included in the benchmark.

### 3. Returns in 2007-2010: International comparisons

The mean annual return (measured as the TWR) achieved by Chile's SWFs since their inception (5.5%) compares favorably with those of other countries' SWFs over the same period. Since the beginning of 2007, Ireland's fund, for example, has obtained a return in dollars of -0.6% while other results include Alaska (2.1%), Norway (3.4%), Trinidad and Tobago (4.1%), New Zealand (4.3%), East Timor (4.6%), Canada (5.2%) and Australia (9.8%) (Table 2).

Fund	Size (US\$ billion)	Type (a)	Asset allocation				Return in dollars					
			Money market instruments	Fixed-income	Equities	Alternative investments	2007	2008	2009	2010	2007-2010 (annualized) (c)	Standard deviation (annualized) (d)
Australia	71	P	19	19	35	27		-26.3	44.0	24.8	9.8	36
<b>Chile</b>	<b>17</b>	<b>P/ST</b>	<b>30</b>	<b>70</b>	<b>0</b>	<b>0</b>	<b>8.9</b>	<b>7.6</b>	<b>2.4</b>	<b>1.8</b>	<b>5.5</b>	<b>4</b>
Canada	15	SA	1	25	53	21	20.7	-31.7	28.7	15.7	5.2	27
East Timor	7	ST	1	99	0	0	7.4	6.9	0.6	3.8	4.6	3
New Zealand	14	P	1	8	69	23	15.1	-44.2	48.4	24.3	4.3	39
Trinidad and Tobago	4	ST	28	48	24	0	4.2	3.1	3.0	5.1	4.1	1
Norway	528	SA	0	39	61	0	10.2	-27.2	30.8	8.8	3.4	24
Alaska	39	SA	3	18	51	28	8.8	-24.7	18.9	11.9	2.1	19
Ireland	20	P	15	8	57	20	14.2	-33.3	23.6	3.8	-0.6	25

(a) "SA" = savings, "P" = pensions, and "ST" = stabilization.

(b) Alternative investments include principally private equity, hedge funds, commodities and real estate.

(c) In the case of Trinidad and Tobago, the figures correspond to the latest available information (September 2010). The return for Australia's SWF was estimated using information for 2008, 2009 and 2010. The return published by each SWF was converted into dollars using the variation of the dollar against the currency used to calculate the published return.

(d) Calculated on the basis of annual returns.

**TABLE 2**

Strategic asset allocation and returns in dollars (selected SWFs).

**SOURCE:**

Ministry of Finance.

In 2008, most SWFs suffered heavy losses which, in most cases, were offset by the high returns obtained on their investments in 2009 and 2010. The accumulated return in dollars obtained in 2009 and 2010 by the SWFs of Australia, Canada, New Zealand, Norway and Alaska, for example, reached 80%, 49%, 84%, 42% and 33%, respectively, exceeding their losses during 2008 (26%, 32%, 44%, 27% and 24%, respectively). In the case of Ireland, the accumulated return in dollars in 2009 and 2010 (28%) fell short of the losses experienced in 2008 (33%).<sup>18</sup> Trinidad and Tobago's SWF, on the other hand, which only started to invest in equities in August 2009, and other more conservative SWFs, like those of Chile and East Timor, obtained positive returns in the past three years.

The investment policy of the SWFs depends mainly on the objectives for which they were created (Box 5) since this determines factors that include their investment objectives, risk tolerance and investment horizon. For example, the investment policy of SWFs whose objectives are related to financing pensions - as in the case of Australia and New Zealand - or saving resources for future generations - as in Norway - have riskier investment policies that usually include equities and alternative investments in line with their longer-term investment horizons and greater risk tolerance. Other more conservative SWFs such as stabilization funds - as in the case of Chile's ESSF and East Timor's SWF - and whose main objectives are to support the financing of public spending when fiscal income decreases, include mainly fixed-income and monetary market assets.

The level of risk associated with each SWF's investment policies can be seen when comparing the volatility of their returns. For example, the volatility of the funds of Australia, Canada, New Zealand, Norway, Alaska and Ireland in the past four years is much greater than for more conservative funds, like those of Chile, East Timor and Trinidad and Tobago (Table 2).

These results are in line with the empirical evidence which suggests that, in the long term, more conservative strategies obtain better returns in periods of crisis and more modest results during periods of recovery.

---

18 In order to compensate for a negative return of, for example, 50% in one year, a return of 100% is required in the following year.

## Categories of Sovereign Wealth Funds

According to the classification of Das et al. (2009), there are five main categories of sovereign wealth funds:

- **Fiscal Stabilization Funds:** These are generally related to wealth obtained from exploiting natural resources (commodities). Extraordinary fiscal income received during commodity booms is typically saved in this type of fund for subsequent use when fiscal income decreases as a consequence of a drop in commodity prices or sales volume. Funds of this type usually have a conservative investment policy given their characteristically short-term horizon.
- **Fiscal Saving Funds:** These are used specially by countries with limited natural resources or where there is great uncertainty as to the future amount of these resources and they seek to replace future income from these non-renewable resources with returns generated by the fund's assets. In this way, part of the wealth from the current exploitation of natural resources is transferred to future generations. Their investment policies are generally more diversified than those of stabilization funds in line with their longer-term horizon.
- **Pension Reserve Funds:** These funds are set up to cover a country's pension obligations. They generally present more diversified investment policies than stabilization funds, reflecting the long-term horizon of their liabilities.
- **Reserve Investment Societies:** These funds seek to maximize the yield on reserves for a certain level of risk tolerance. The time horizon and risk tolerance of this type of fund are not typically defined explicitly.
- **Development Funds:** These funds seek to use their returns to foster development. They generally invest a large part of their resources internally, taking into account the country's macroeconomic policies.

Funds that are in the same category typically have similar investment policies, albeit adjusted to the specific requirements of each country. For example, pension reserve funds - such as those of Ireland, Australia and New Zealand - generally include bonds, equities and alternative investments in their portfolios. On the other hand, stabilization funds - like those of Chile and East Timor - prefer more liquid and short-term assets such as money market instruments and sovereign bonds.

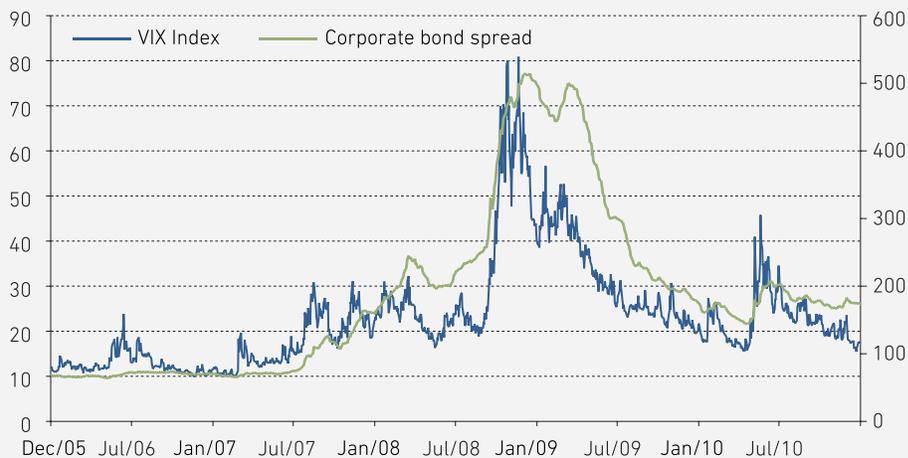


# Appendix 01

TRENDS IN KEY INTERNATIONAL FINANCIAL INDICATORS,  
2010

In 2010, the main international financial markets maintained their trend in the previous year and continued to recover from their heavy losses during the crisis. Despite this improvement, however, there were moments of high volatility due to the uncertainty that continued to affect many developed economies. This was explained principally by the debt crisis of some of the so-called peripheral euro zone countries, coupled with the market's doubts about the recovery of the United States and the quantitative easing measures implemented by the Federal Reserve.

This behavior is seen when analyzing the evolution of the stock market's volatility as reflected in the CBOE Volatility Index (VIX). After experiencing large increases between May and August, it then decreased and closed the year at levels similar to those seen at the end of 2009 (*Figure 5*). The trend of the spread between rates on corporate bonds and US Treasury bills was similar, although less marked. After reaching a low of 144 bps in April, it rose to an annual maximum of 208 bps in June and closed in December at a value similar to the previous year (174 bps)<sup>19</sup>.



**FIGURE 5**  
Stock market volatility (VIX) and corporate bond spread, 2006-2010 (left axis, %; right axis, bps)

**SOURCE:**  
Ministry of Finance, Bloomberg, Barclays Capital.

Market liquidity remained stable in 2010 and this was reflected in the relatively minor changes in the difference between interbank lending interest rate (LIBOR) and the risk-free rate (US Treasury bills). This difference, known as the TED spread, was running at close to 30 bps (0.3%) at the end of 2010 and was also similar to its level at the end of the previous year (0.32%). However, it was much lower than its historic average for 1985-2010 (56 bps) and far below the 450 bps it reached in the third quarter of 2008 at the worst point of the crisis (*Figure 6*).

<sup>19</sup> Calculated using the Barclays Capital Global Aggregate: Corporate Bond Index.



**FIGURE 6**  
TED spread, 2006 - 2010  
(bps)

**SOURCE:**  
Bloomberg.

As a result of the considerable volatility seen in markets, the prices of equities showed marked instability, particularly in the first nine months of the year. However, in the last quarter, they showed a sustained increase and closed the year with important gains. As a result, the Standard and Poor's 500 Index (S&P500) rose by almost 13% in 2010 while the Morgan Stanley Capital International All Country World Index (MSCI ACWI) showed an increase of more than 10% (Figure 7).



**Stock Market, 2010**  
S&P500 and MSCI ACWI (in local  
currency)  
(January 2009 = 100)

Bloomberg.

Corporate bonds also benefitted from the recovery of markets, despite suffering an important setback in the last months of the year and the Barclays Capital Global Aggregate: Corporate Bond Index (hedged) increased by more than 7% in 2010 (Figure 8)<sup>20</sup>.

20 The Barclays Capital Global Aggregate: Corporate Bond Index represents the value of a portfolio of fixed-income securities issued by companies in different countries and economic sectors. The hedged version of the Index is shown in order to exclude exchange-rate effect, thereby better reflecting the effect of movements in interest rates and spreads on the price of corporate bonds.



**FIGURE 8**  
Corporate bond market, 2010  
Barclays Capital Global Aggregate:  
Corporate Bond Index (hedged)  
(January 2010 = 100)

**SOURCE:**  
Barclays Capital.

Nominal sovereign bonds showed lower returns than other asset classes in 2010. This is explained mainly by the historically low level of interest rates seen throughout the year. As a result, the Barclays Global Aggregate: Treasury Bond Index (hedged) closed the year with a return of 3.6% (*Figure 9*)<sup>21</sup>.



**FIGURE 9**  
Nominal sovereign bond market,  
2010  
Barclays Capital Global Aggregate:  
Treasury Bond Index (hedged)  
(January 2010 = 100)

**SOURCE:**  
Barclays Capital.

<sup>21</sup> The Barclays Capital Global Aggregate: Treasury Bond Index measures the performance of the sovereign fixed-income instruments of most investment-grade countries.

The evolution of the price of inflation-indexed bonds was similar to that of nominal sovereign bonds, and the Barclays Capital Global Inflation-Linked Index (hedged) showed an annual return of close to 5% (Figure 10)<sup>22</sup>.



**FIGURE 10**  
Inflation-indexed sovereign bond market, 2010  
Barclays Capital Global Inflation-Linked Index (hedged)  
(January 2010 = 100)

**SOURCE:**  
Barclays Capital.

22 The Barclays Capital Global Inflation-Linked Index measures the performance of inflation-indexed bonds in the main markets.





**BRAVO, D., RUIZ-TAGLE, J. (2010).**

“Estudio sobre la sustentabilidad del Fondo de Reserva de Pensiones”, Centro de Microdatos, Departamento de Economía, Universidad de Chile.

**DAS, U., Y. LU, C. MULDER AND A. SY (2009).**

“Setting up a Sovereign Wealth Fund: Some Policy and Operational Considerations”. International Monetary Fund.

**MARCEL M., M. TOKMAN, R. VALDÉS AND P. BENAVIDES (2001).**

“Balance Estructural del Gobierno Central, Metodología y Estimaciones para Chile; 1987-2000”, Serie de Estudios de Finanzas Públicas N°1, Budget Office, Finance Ministry, Chile.

**RODRÍGUEZ J., C. TOKMAN AND A. VEGA (2006).**

“Política de Balance Estructural: Resultados y Desafíos tras seis años de Aplicación en Chile”, Estudios de Finanzas Públicas, N° 7, Budget Office, Finance Ministry, Chile.

**VELASCO A., A. ARENAS, J. RODRÍGUEZ, M. JORRATT AND 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, Budget Office, Finance Ministry, Chile.

**ASSET CLASS:** a specific investment category such as equities, corporate bonds, sovereign bonds or money market instruments. Assets of the same class are generally similar as regards risk, have similar market reactions and tend to be subject to the same regulation.

**BASIS POINT:** one hundredth of a decimal point.

**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 capital but also to pay an agreed interest rate at a specific date(s).

**CASH:** cash in hand and bank demand deposits.

**CORPORATE BOND:** a bond issued by a corporation or company.

**DURATION:** a measure of the exposure of a bond's price to changes in interest rates; the longer the duration, the greater its sensitivity to changes in interest rates.

**FISCAL RESPONSIBILITY LAW:** Law N° 20.128 published in Chile's Official Gazette on September 30, 2006.

**FIXED-INCOME:** assets with a yield over a given period of time that is known at the time of their acquisition; bonds and bank deposits are fixed-income assets.

**INFLATION-INDEXED BOND:** a bond whose value varies in line with an inflation index; in the US, these securities are known as Treasury Inflation-Protected Securities (TIPS).

**INTERNAL RATE OF RETURN (IRR):** the effective yield on an investment calculated taking the present value of all net cash flows as zero.

**INVESTMENT POLICY:** the criteria, guidelines and instructions that regulate the amount, structure and dynamics of an investment portfolio.

**LIBID:** London Interbank Bid Rate, the interest rate paid on interbank deposits; by definition, this rate is equal to LIBOR minus 0.125%.

**LIBOR:** London Interbank Offered Rate, the interest charged on interbank borrowing.

**LIQUIDITY:** the ease 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 up to a year, that can readily be converted into cash and is less volatile than other asset classes.

**PORTFOLIO:** the combination of investments acquired by an individual or institutional investor.

**RETURN GENERATED BY EXCHANGE-RATE MOVEMENTS:** the part of return 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 that part of returns associated with the level of interest rates and their movements.

**RETURN (TOTAL):** the combination of return in local currency and that generated by exchange-rate movements.

**RISK:** the possibility of suffering a 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.

**SANTIAGO PRINCIPLES:** the voluntary code of principles and practices drawn up by the International Working Group of Sovereign Wealth Funds (IWG-SWF) and agreed upon in Santiago in 2008.

**SOVEREIGN BOND:** a bond issued by a government.

**SPREAD:** the difference between the yield-to-maturity of two fixed-income securities; used to measure their relative risk level.

**STOCKS:** securities that represent the ownership or capital of a company; buyers of stock become owners or shareholders of the company and, therefore, have earnings or losses depending on its results.

**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, therefore, excludes the effect of net cash flows.

**US FINANCIAL AGENCY:** a US mortgage institution with explicit or implicit government backing.

**VARIABLE-INCOME:** see Stocks.

**VOLATILITY:** a measure of an asset's risk, representing the variation shown by its price over a period of time.



[WWW.HACIENDA.CL](http://WWW.HACIENDA.CL)