Annual Report

# SOVEREIGN WEALTH FUNDS

# 2009

Fondos Soberanos

Chile futuro

Fondos Soberanos

March 2010, Santiago, Chile

This publication corresponds to the Finance Ministry's 2009 Annual Report on Sovereign Wealth Funds. The electronic version of this document is available on the Ministry of Finance's website at www.hacienda.cl/english/fondos_soberanos.

Intellectual Property Register N° 189,060
ISSN: 0718-7424
800 copies printed
March 2010, Santiago, Chile


Design and layout: Zet Arts & Facts
Illustrations: Vicente Martí
Printing: World Color Chile SA

# ANNUAL REPORT
# SOVEREIGN WEALTH FUNDS

MINISTRY OF FINANCE

2009

# CONTENTS


Minister's Remarks 6

Summary 9

1 **SOVEREIGN WEALTH FUNDS** 12

Fiscal policy 13

Purposes of the PRF and the ESSF 16

Policy on capital contributions 16

Use of the funds 17

2 **INSTITUTIONAL FRAMEWORK** 18

Ministry of Finance and Central Bank 20

Financial Committee 21

3 **ANALYSIS OF THE INTERNATIONAL ECONOMY** 24

Economic activity 25

Inflation 26

Commodity prices 27

Exchange rates 27

Monetary policy interest rates 28

Liquidity 28

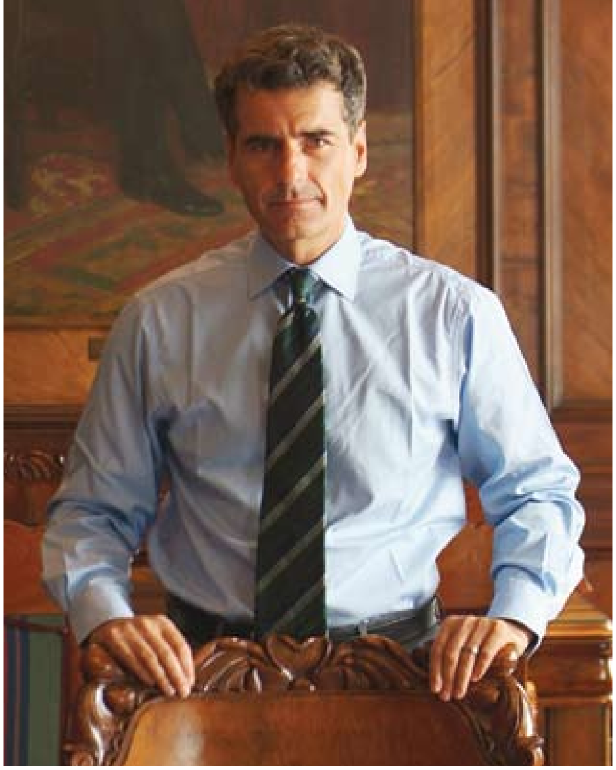
Sovereign interest rates 29

4 **PRF AND ESSF** 30
Investment policy 31
Market value and analysis of returns 35
Administration and custody costs 41
Portfolio allocation and characteristics 42

5 **DESCRIPTION OF FINANCIAL RISKS** 46
Market risk 47
Credit risk 48
Liquidity risk 49
Active risk 50
Operational risk 50
Volatility and other indicators 51

6 **OVERVIEW 2006 - 2009** 52
Building an institutional framework 54
Defining a long-term investment policy 55
Fund management during the financial crisis 55
Returns 56
Transparency 56

**APPENDICES** 63
Index of tables, figures and boxes 64
Glossary 66
Abbreviations 69



## MINISTER'S REMARKS

One of the key undertakings and, perhaps, most important legacies of Concertación governments was a responsible fiscal policy that put the interests of the country's citizens first. This policy resulted in steady gains in quality of life and benefits that do not depend on the short-term situation in the global economy or change with swings in export prices.

In Chile, public spending is determined by long-term fiscal revenues and remains stable over time. This allows us to take a countercyclical position, maintaining and even increasing spending to stimulate activity and protect growth in years when the economy is weaker.

This approach to fiscal policy is no accident. It is the result of our efforts to create rules, institutions and mechanisms that guide fiscal policy in a predictable way, insulating social spending and public investment from economic fluctuations.

A first key step in this direction was taken by the government of President Ricardo Lagos. It tied the management of fiscal policy to the structural budget balance, devoting the long-term and stable component of revenues to public spending and saving part of extraordinary revenues.

The government of President Michelle Bachelet took a second important step by establishing rules for managing the savings generated by the application of this rule. To this end, it set up two sovereign wealth funds with different characteristics but a common aim: that of administering prudently and responsibly resources that belong to all Chileans and putting them at the service of a fiscal policy that safeguards economic and social stability from a long-term standpoint.

But we did not just create these two funds; we also developed a solid and highly technical institutional framework for managing their resources under strict standards of transparency, disclosure and returns. We established a Financial Committee, formed by independent experts of recognized prestige who, with their valuable advice, have guided the investment policy of both funds. The Central Bank has also contributed its great expertise to the task of managing the resources efficiently and safely while, at the Ministry of Finance, we created a specialized unit to monitor the performance of our sovereign wealth funds and represent Chile in the growing international debate about how to manage these new investment and savings vehicles. We also created a system through which to systematically inform the country's citizens and specialized bodies about the state of the funds and any important developments in their performance. In other words, we set ourselves rigorous transparency and management standards so as to implement this new stage in our fiscal policy in an exemplary way.

The results speak for themselves and are reflected in high returns as well as other indicators. From their creation through to the end of 2009, the two funds generated earnings of US$2,797 million and reached a total of US$14,706 million at the close of the year. This performance is the result of a prudent investment policy that allowed us to achieve earnings even in the midst of the worst international financial crisis since World War II. This was in contrast to the significant losses suffered by most of the world's other sovereign wealth funds during this period.

The results of Chile's funds can also be measured in terms of their contribution to mitigating the effects of the recent global economic crisis. The measures taken by Chile to contain the crisis were among the most ambitious in the world, using resources equivalent to 2.8% of GDP to assist families, boost public investment, stimulate private investment, make financing available to small and mid-sized businesses and protect jobs. Thanks to the Economic and Social Stabilization Fund, we could finance these measures without recourse to borrowing.

Despite the crisis and the resources needed to address it, the fiscal situation we will leave to the next government is better than that left by any other government in Chile's history. Moreover, the savings to finance future pension liabilities, including those created by the ambitious reform introduced by President Michelle Bachelet, continue to accumulate securely in the Pension Reserve Fund.

Thanks to our adoption of best international practices, we have quickly risen to the top places in international rankings of transparency and sound management in sovereign wealth funds. Our leadership as regards how to manage these resources so that they contribute to financial stability and the free movement of investment has also received recognition. Indeed, it was in Chile that a specialized working group supported by the International Monetary Fund adopted the voluntary principles for the international management of these funds that, in global discussions, are known as the "Santiago Principles". Countries that are planning to set up their own funds have also sought Chile's advice in order to benefit from our experience.

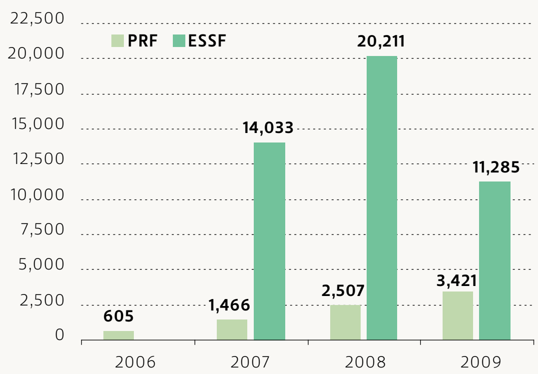
But the best tribute to the benefits of our sovereign wealth funds is the backing and appreciation of the Chileans to whom they belong. What once seemed controversial is now established wisdom: it is advantageous to set aside some extraordinary income so as to be better prepared to face future economic difficulties and to have greater peace of mind in old age and more opportunities for our children.

This important progress in developing the institutional framework for Chile's fiscal policy is the result of the work of many excellent professionals in the Ministry of Finance, the Financial Committee, the Central Bank of Chile and other public bodies. I would like to thank all of them for the great job they have done. This is not, however, the task of one day or one government. As Chileans, we must continue to strengthen this framework, guided by the criteria that have served us so well until now: prudence, transparency, technical rigor and a long-term vision.

Andrés Velasco
MINISTER OF FINANCE

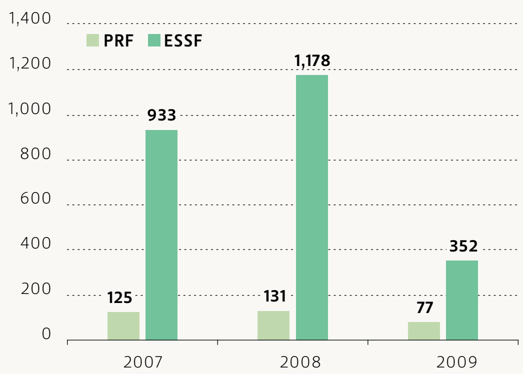
# SUMMARY

Figure 1_ PRF and ESSF: Market value
(US$ million)




*Source: Ministry of Finance*

Figure 2_ PRF and ESSF: Net financial earnings
(US$ million)




*Source: Ministry of Finance*

**The Pension Reserve Fund (PRF) and the Economic and Social Stabilization Fund (ESSF) together reached a market value of US$14,706 million in 2009 and a return since their inception of 6.86%.** [1]

## PERFORMANCE OF THE SOVEREIGN WEALTH FUNDS

In 2009, the ESSF was used to help finance fiscal stimulus plans and the fiscal deficit, initiatives that allowed Chile to successfully address global financial and economic turbulence.

As of December 31, 2009, the PRF and the ESSF were worth US$3,421 million and US$11,285 million, respectively *(Figure 1)*. The change in the value of the assets under management with respect to 2008 was explained by net capital withdrawals and financial earnings generated by the return on their investments.

Net financial earnings on the two funds amounted to US$429 million in 2009.

In the case of PRF, net financial earnings reached US$77 million while, in the ESSF, they reached US$352 million *(Figure 2)*.

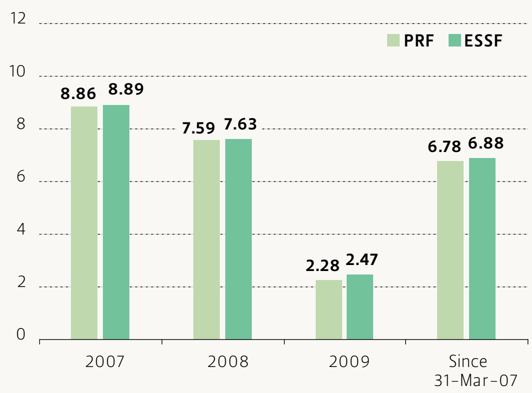
The funds obtained a net annualized return of 2.44% in 2009.

In 2009, return in dollars reached 2.28% and 2.47% for the PRF and the ESSF, respectively, taking their annualized return accumulated since March 31, 2007 to 6.78% for the PRF and 6.88% for the ESSF[2] *(Figure 3)*. The annualized internal rate of return (IRR) since the funds' inception reached 5.70% and 6.16% for the PRF and the ESSF, respectively.

1 Unless the internal rate of return (IRR) method is specifically indicated, returns reported in this document are calculated using the time-weighted rate of return (TWR) method. For further information, see Section 4.2 and Box 2.

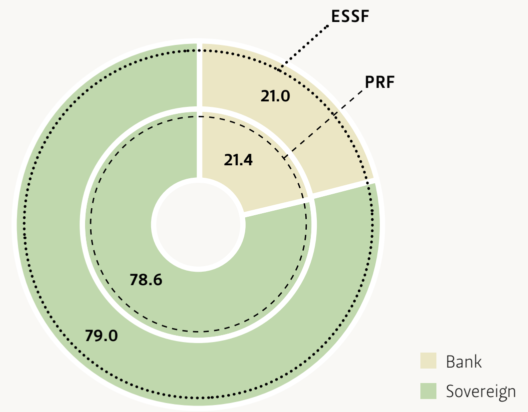
2 The time-weighted rate of return (TWR) has been used to measure returns since March 31, 2007 when the performance of the Central Bank of Chile (CBC) began to be measured.

Figure 3_ PRF and ESSF: Net returns
(%)




*Source: Ministry of Finance*

Figure 4_ PRF and ESSF: Composition of credit risk, December 31, 2009
(% of portfolio)




*Source: Ministry of Finance*

**Since the funds' creation, their investments have generated earnings of US$2,797 million.**

As of December 2009, approximately 21% of both funds' assets were held as bank deposits and 79% as sovereign instruments.

Exposure to the banking sector increased slightly from 18% at the end of 2008 while exposure to sovereign instruments dropped from 82% *(Figure 4)*.

## INVESTMENT POLICY

In view of the international economic recovery seen during 2009, the Financial Committee recommended that the Finance Minister resume the investment diversification policy only in the PRF, given the longer-term nature of the liabilities that it is designed to finance. However, given that the results would only be seen under the next government, the Minister deemed it appropriate for the future authorities to take the decision about this change of strategic asset allocation.

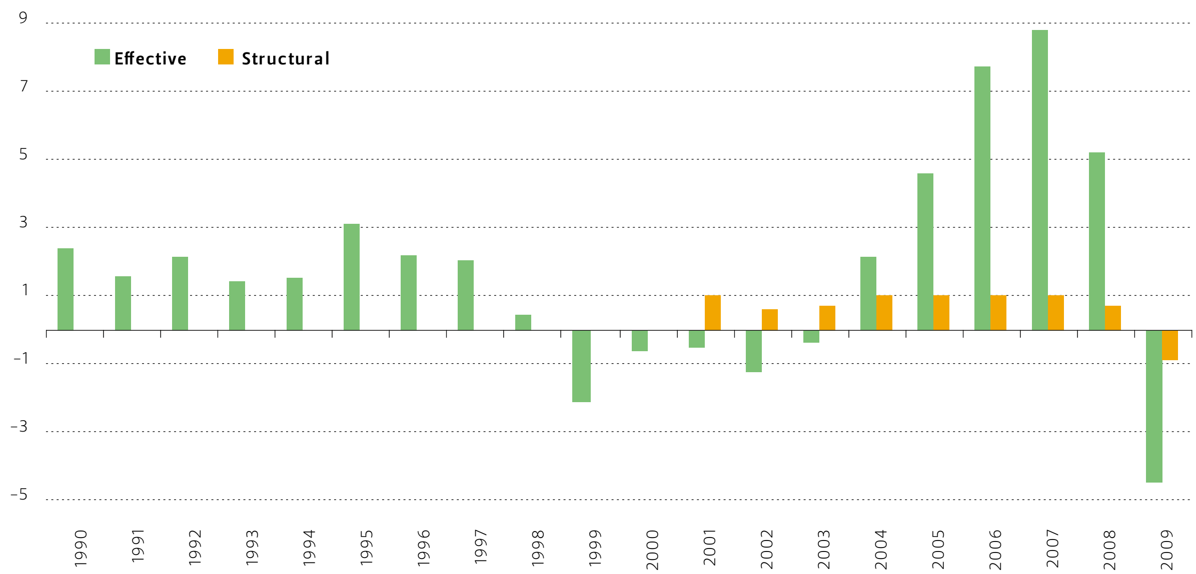
# 1 Sovereign Wealth Funds

## 1.1 FISCAL POLICY

In recent years, fiscal policy in Chile has been characterized by constant efforts to strengthen its institutional framework. In 2001, a structural balance rule was introduced with a view to managing the central government flows and, in 2006, this rule was complemented by the creation of the country's two sovereign wealth funds as vehicles for saving the resources resulting from the application of this rule.

The structural balance rule was designed to estimate a level of fiscal expenditure that is consistent with the central government's structural income or, in other words, not influenced by fluctuations in revenues caused by cyclical swings in economic activity, the price of copper and other variables that determine effective fiscal income. This implies that the government saves during upswings and can avoid the need for drastic adjustments in fiscal spending in downturns such as that which occurred in late 2008 and part of 2009. In this way, the structural balance rule seeks to stabilize the growth of public expenditure. In 2001, a target of a structural surplus of 1% of GDP was established and, under the fiscal budget for 2008, this was reduced to 0.5% of GDP. This was followed in 2009 by an ex ante reduction to 0% in order to address the crisis.

Figure 5_ Structural and effective fiscal balance
(% of GDP)




*Source: Ministry of Finance*

During the government of President Bachelet, both phases of the economic cycle were acutely apparent. Chile enjoyed three years of historically high copper prices followed by a year that was overshadowed by the worst international economic crisis since World War II. The first phase of the cycle was reflected in an important increase in the effective fiscal surplus as from 2005 and, in 2007, this reached 8.8% of GDP *(Figure 5)*. However, in 2009, fiscal revenues dropped sharply as a result of the economic crisis and, combined with the introduction of fiscal stimulus programs, this resulted in an effective fiscal deficit of 4.5% of GDP *(Box 1)*.

The Fiscal Responsibility Law, which came into effect in the second half of 2006, established norms and an institutional framework for the accumulation and management of fiscal savings. It stipulated the creation of two sovereign wealth funds: the Pension Reserve Fund (PRF), into which the first payment was made on December 28, 2006, and the Economic and Social Stabilization Fund (ESSF), which was officially established under Decree with Force of Law (DFL) N° 1, issued by the Ministry of Finance in 2006. This decree merged into a single fund the savings accumulated under Decree Law (DL) N° 3.653 (1981) and those held in the Copper Income Compensation Fund. The first payment into the ESSF was made on March 6, 2007.

## BOX 1 Withdrawals from the ESSF in 2009

Given the dramatic contraction of world demand and the global credit squeeze, Chile was not immune to the international financial crisis. However, it was better prepared than ever before to deal with its financial and real effects. Thanks to a prudent fiscal policy, based on the structural balance rule and the management of the savings that it generated, it was able to reduce public debt to an insignificant level and accumulate an important level of resources in its sovereign wealth funds.

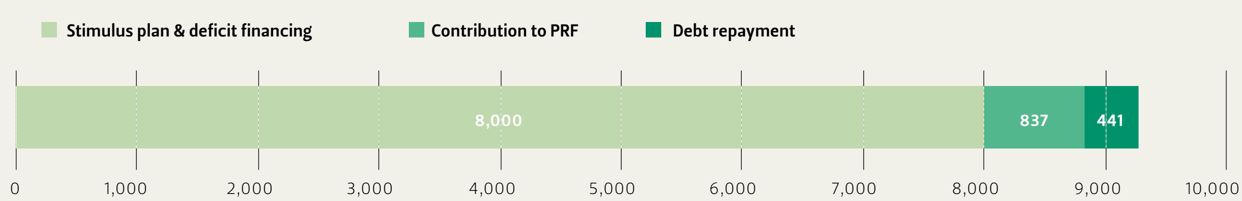
The assets accumulated in the ESSF allowed the government to implement a fiscal stimulus plan to compensate for the sharp drop in private demand, thereby reinvigorating the economy and the labor market. This plan, which was announced at the beginning of 2009, included measures for US$4,000 million, equivalent to 2.8% of GDP. At the time of its announcement, it was the second largest in the world in terms of the extraordinary resources relative to GDP earmarked for reactivating the economy in 2009. Among its principal measures, it included a special program of public investment worth US$700 million while, in the case of subsidies, a special grant of 40,000 pesos per dependent was paid to the country's poorest families in March 2009, followed by another similar grant in August 2009. The plan also envisaged some tax reductions: stamp tax on all loan operations was temporarily lifted in 2009, the reversal of part of an earlier temporary cut in fuel tax was postponed, provisional monthly tax payments were temporarily reduced and the reimbursement of excess income tax provisioned by individuals on account of the 2010 tax year was brought forward. In addition, the plan included a capital injection of US$1,000 million for Codelco, paid in December 2009, to support its investment plans.

In line with the key purpose of the ESSF, an additional US$4,000 million was also withdrawn from the fund as from the third quarter to help finance the effective fiscal deficit caused by the drop in tax revenues and in fiscal income from copper mining. In addition, US$441 million was used to pay down public debt and US$837 million was withdrawn for payment into the PRF *(Figure R 1.1)*. As a result, withdrawals from the ESSF in 2009 totaled US$9,278 million.

Government policy minimized the effect of the inflow of dollars from the ESSF on the exchange rate by also using domestic borrowing to finance the deficit and launching a process of daily auctions so as to provide the market with a framework of predictable and transparent sales. In order to finance expenditures in pesos under the stimulus plan (equivalent to some US$3,000 million), daily auctions of US$50 million were held between March 27 and June 23, 2009. Afterward, auctions of US$40 million were held daily from July 1 to November 20, 2009, for a total of US$4,000 million.

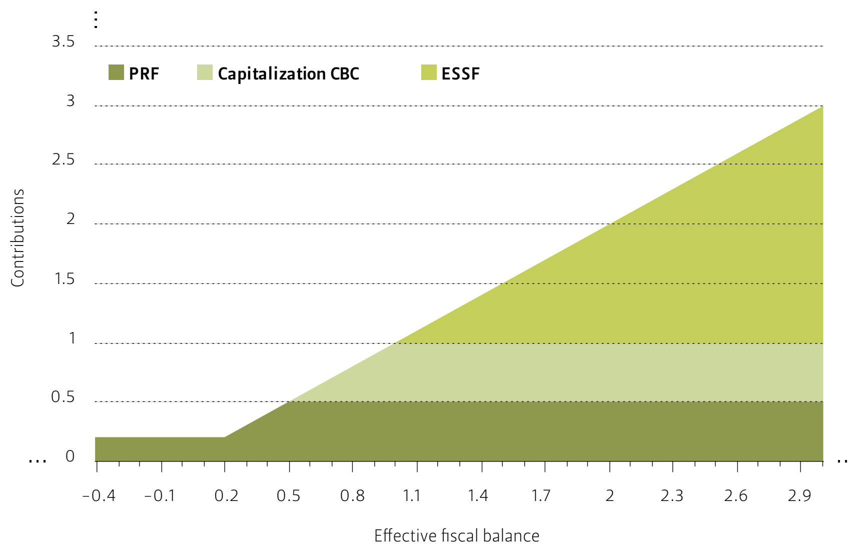
At a time when many countries faced restrictions on access to credit, Chile was able to finance its fiscal program almost exclusively out of its own resources. In this situation, the existence of the ESSF vindicated the prudence of a policy of saving during boom periods in order to use these resources at times of international economic weakness.

Figure R 1.1_ ESSF: Breakdown of withdrawals in 2009
(US$ million)




*Source: Ministry of Finance*

Figure 6_ Fiscal savings rule
(% of GDP)




*Source: Ministry of Finance*

## 1.2 PURPOSE OF THE PRF AND THE ESSF

The Pension Reserve Fund (PRF) was designed to complement financing of fiscal pension and social security liabilities. Specifically, it is earmarked as backing for the state guarantee of basic old-age and disability solidarity pensions and solidarity pension contributions for low-income pensioners.

The Economic and Social Stabilization Fund (ESSF) was created to finance the fiscal deficits that may occur during periods of weak growth and/or low copper prices and can also be used to pay down public debt and to finance the PRF. In this way, it helps to reduce cyclical variations in fiscal spending, ensuring long-term financing for social programs.

## 1.3 POLICY ON CAPITAL CONTRIBUTIONS

The minimum annual amount paid into the PRF is equivalent to 0.2% of the previous year's GDP although, if the effective fiscal surplus exceeds this amount, the contribution can rise to a maximum of 0.5% of the previous year's GDP. The transfer of resources must be made during the first half of the year. This policy will remain in force until the PRF reaches the equivalent of 900 million *unidades de fomento*.

Under the Fiscal Responsibility Law, the government was authorized to capitalize the Central Bank of Chile (CBC) during five years as from 2006 by an annual amount of up to the difference between its contributions to the PRF and the effective fiscal surplus, with an upper limit of 0.5% of GDP. In 2006, 2007 and 2008, this capitalization was equivalent to 0.5% of GDP.

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 advance payments into the ESSF during the previous year can, however, be subtracted from this contribution[3] *(Figure 6)*.

3 The law 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 advance contributions to the ESSF.

## 1.4 USE OF THE FUNDS

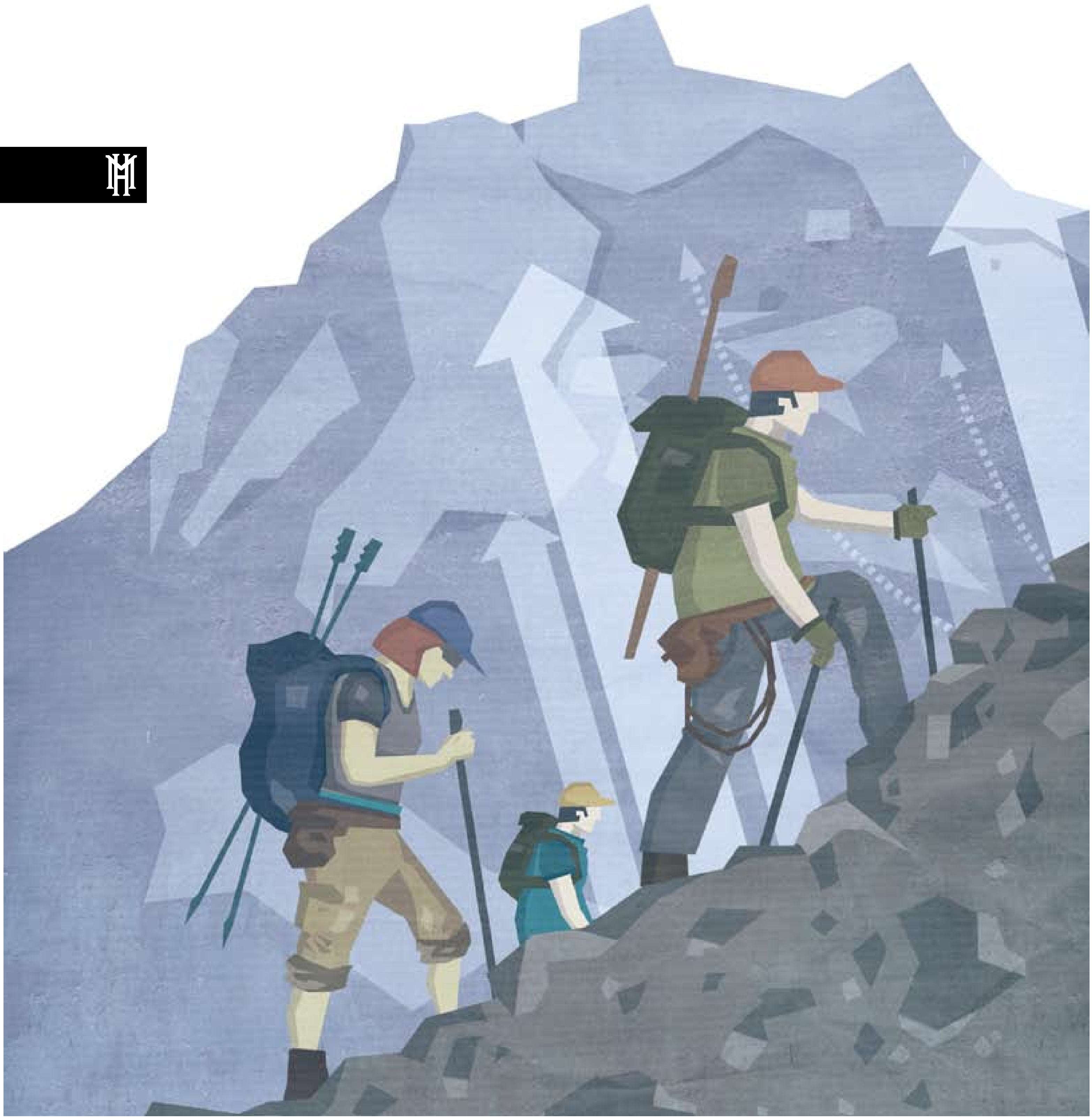
The different uses of the PRF and the ESSF are established under the Fiscal Responsibility Law, DFL N° 1, discussed above, and the Pension Reform Law. This makes for their transparent management and provides a legal framework that contributes to Chile's macroeconomic and financial stability.

The assets of the PRF can only be used for the purposes set out in Section 1.2 or, in other words, to complement financing of pension and social security liabilities. Until 2016, annual withdrawals of up to the fund's returns in the previous year 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 inflation-adjusted expenditure on that item in 2008. As from September 2021, the PRF will cease to exist if the withdrawals to be made in a calendar year do not exceed 5% of the sum of expenditure on the state guarantee of basic old-age and disability solidarity pensions and the old-age and disablement solidarity pension contributions established in that year's budget.

In the case of the ESSF, its assets may be used to finance fiscal deficits and to pay down public debt (including *Bonos de Reconocimiento*).

It is important to note that the expected long-term return on the PRF and the ESSF is considered structural income and is, therefore, used to calculate the level of fiscal spending.

# 2 Institutional Framework



Investment of the assets of the PRF and the ESSF calls for a clear and transparent institutional framework that provides the necessary structure for taking and implementing decisions, monitoring risk and controlling investment policy. The basis for this framework was established in the Fiscal Responsibility Law which, in articles 12 and 13, regulates the investment of fiscal resources. In addition, Supreme Decree N° 1.383, issued by the Ministry of Finance in 2006, appointed the CBC – subject to the approval of its governing board – as the fiscal agent for the management of the resources of both funds and established the general framework for their administration.[4] In addition, Supreme Decree N° 621, issued by the Ministry of Finance in 2007, created the Financial Committee to advise the Finance Minister on the investment of the assets of the ESSF and the PRF.[5]

4 This decree was published in the Diario Oficial (Official Gazette) on February 17, 2007 and the decision of the CBC's governing board to accept this responsibility was published in the Official Gazette on February 24, 2007.

5 Published in Official Gazette on August 11, 2007.

## 2.1 MINISTRY OF FINANCE AND CENTRAL BANK

The Fiscal Responsibility Law and Supreme Decree N° 1.383 (2006) empowered the Finance Minister to make decisions about the investment and management of the assets of the sovereign wealth funds. It also expressly authorized the Finance Minister to delegate operational management of assets of the PRF and the ESSF to the CBC or other external managers. In March 2007, the Finance Minister entrusted this task to the CBC as fiscal agent in view of its prestige and experience in the management of international reserves.

The functions of the CBC and norms on procedures for the funds' management were also established by Supreme Decree N° 1.383, under which the main functions that the CBC can carry out at the Finance Minister's request are:

- *a.* To directly manage all or part of these fiscal resources in representation and on behalf of the Republic;
- *b.* To tender and delegate the administration of all or part of these fiscal resources to external managers in representation and on behalf of the Republic;
- *c.* To open separate current accounts for the exercise of its role as fiscal agent;
- *d.* To maintain a register of the transactions and other operations carried out in the management of the fiscal resources;
- *e.* To hire the services of a custodian institution;
- *f.* To supervise and evaluate the performance of external managers and custodian institutions;
- *g.* To report daily on the position of the funds' investments and prepare monthly, quarterly and annual reports on the management of their portfolios, as well as an annual report on the services provided by the custodian institution(s); and
- *h.* To make the payments corresponding to the exercise of its role as fiscal agent.

In fulfilling these functions, the CBC must comply with the investment guidelines established by the Ministry of Finance. These specify the assets considered eligible, the strategic asset allocation of the funds' portfolios, the benchmarks for evaluating the CBC's performance and investment limits and restrictions to control the funds' risk exposure.

The Ministry of Finance reports on the state of the PRF and ESSF to the Chilean Congress and the general public through the presentation of monthly, quarterly and annual reports.

## 2.2 FINANCIAL COMMITTEE

The Financial Committee (FC) was officially created under Supreme Decree N° 621, issued by the Ministry of Finance in 2007. Its role is to advise the Finance Minister on the analysis and design of the investment strategy of the PRF and the ESSF. The Financial Committee is an external advisory body, formed by professionals with vast experience in economic and financial matters. As of end-2009, its members were Andrés Bianchi Larre (President), Ana María Jul Lagomarsino (Vice-President), Martín Costabal Llona, Andrés Sanfuentes Vergara, Klaus Schmidt-Hebbel Dunker and Eduardo Walker Hitschfeld.

The FC's main functions and responsibilities are:

*a.* To advise the Finance Minister, when so requested, on the funds' long-term investment policy including the selection of asset classes, benchmarks, range of deviations permitted, eligible investments and the inclusion of new investment alternatives;

*b.* To recommend to the Finance Minister specific instructions on the funds' investments and their custody, the process of selecting managers and the structure and content of reports;

*c.* To express an opinion, at the request of the Finance Minister, about the structure and content of the reports presented to the Ministry of Finance by the institutions responsible for the funds' management and custody, and its views about their management and its consistency with their investment policies;

*d.* To express an opinion about the structure and content of the reports prepared quarterly by the Ministry of Finance; and

*e.* To advise the Finance Minister, when so requested, on all the matters related to the funds' investment.

From left to right:
Andrés Sanfuentes,
Martín Costabal,
Klaus Schmidt-Hebbel,
Andrés Velasco,
Andrés Bianchi,
Ana María Jul
and Eduardo Walker.

**Principal activities in 2009**[6]

The FC focused on monitoring the funds' investments and international financial conditions in order to determine the right moment to resume implementation of the new investment policy. This policy was drawn up in late 2007 but, at the end of 2008, its implementation was postponed in view of the financial crisis and its impact on international markets.[7]

6 For further information, see the Financial Committee's 2009 Annual Report.

7 Further information about this new investment policy can be found in Section 4.1.

## ACTIVITIES AND RECOMMENDATIONS

### A. Publication of the Financial Committee's Annual Report.

In compliance with legal requirements, the Financial Committee prepared its second annual report, setting out its main activities and recommendations in 2008. This report was presented to the Finance Commissions of the lower house of Congress and the Senate and to the Special Joint Budget Commission of Congress. It is available on the Ministry of Finance's website at www.hacienda.cl/english/fondos_soberanos.

### B. Supervision of situation of the funds

The Committee periodically analyzed the situation of the funds' investments, their returns and portfolio allocation. It paid particular attention to their exposure to credit risk, permanently monitoring the institutions in which their assets were invested.

### C. Monitoring of international financial markets

At each of its eight meetings during the year, the Committee analyzed the situation in international markets and the main financial indicators.

### D. Incorporation of new eligible investment instruments

At the beginning of the year, the Committee recommended that local banks be added to the list of institutions eligible to receive foreign-currency time deposits from the ESSF. This recommendation, made on the basis of an analysis prepared at the request of the Finance Minister, reflected the lower administration costs associated with the credit risk analysis as compared to similar operations with overseas banks as well as more attractive interest rates for similar risk levels.

### E. Resumption of investment diversification policy

In mid-2009, the improvement in the economic situation of many countries and in financial markets led the Committee to recommend a resumption of the proposed investment diversification policy in the PRF, given the longer time horizon of its liabilities. In the case of the ESSF, it recommended maintaining the existing policy of investing only in fixed-income assets. This reflected the ESSF's shorter investment horizon as well as the fact that, due to the fund's nature and purpose, it could be necessary to use it in the short term to finance fiscal deficits. However, since the first results of the PRF's new investment policy would only be seen once a new government had taken office, the Finance Minister took the view that it would be reasonable to leave this decision to the future authorities.

# 3 Analysis of the International Economy

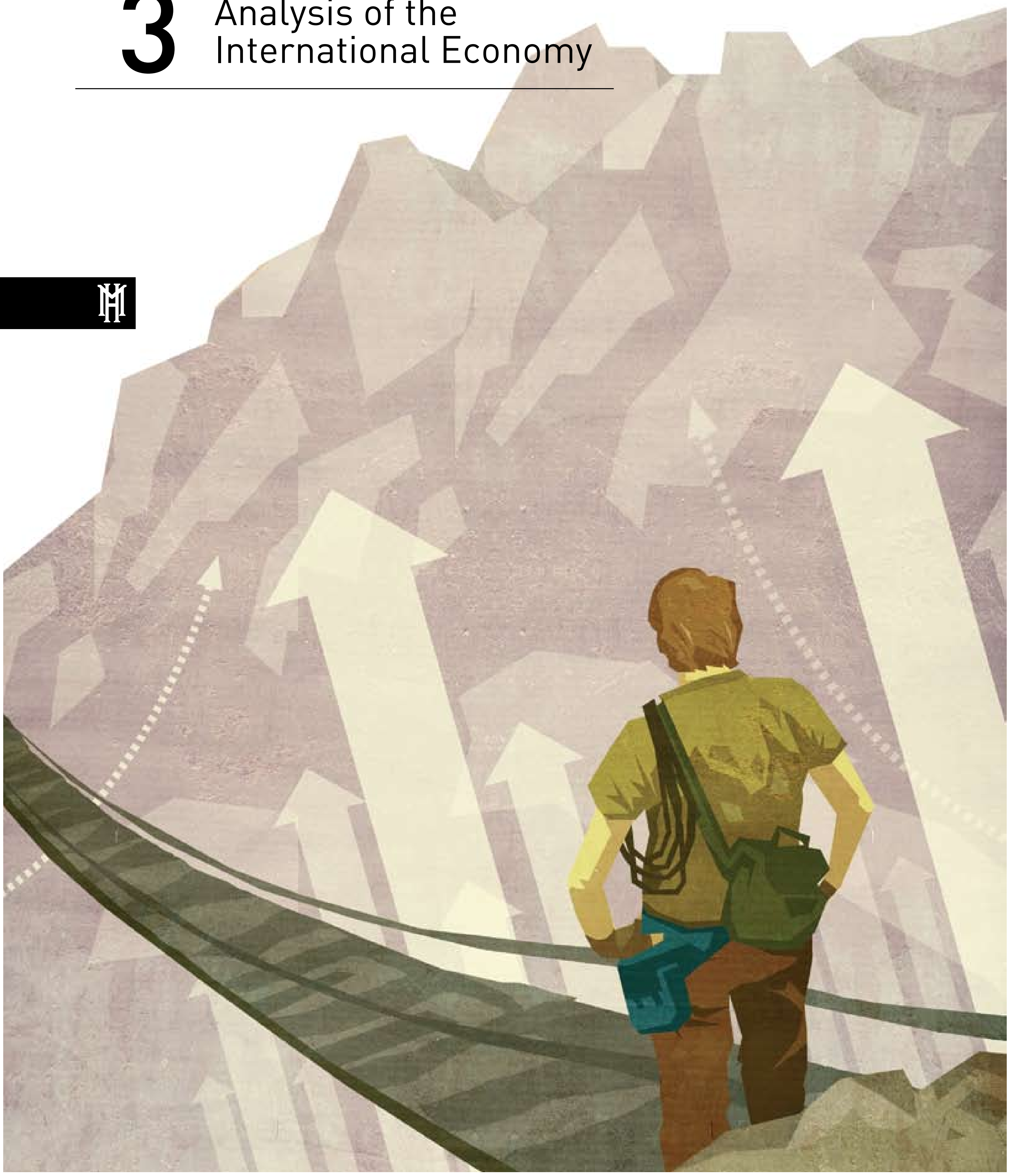


Table 1_ Growth of economic activity[a]
(%)

| | 2008 | 2009 | | | | |
|---|---|---|---|---|---|---|
| | Year | Q I | Q II | Q III | Q IV | Year |
| United States | 0.4 | -6.4 | -0.7 | 2.2 | 5.9 | -2.4 |
| Euro Zone | 0.6 | -9.5 | -0.5 | 1.7 | 0.4 | -4.0 |
| Japan | -1.2 | -12.3 | 5.2 | 0.0 | 4.6 | -5.0 |

*(a) Deseasonalized,annualized rates.*
*Sources: BEA, ECB, COJ, JPM*

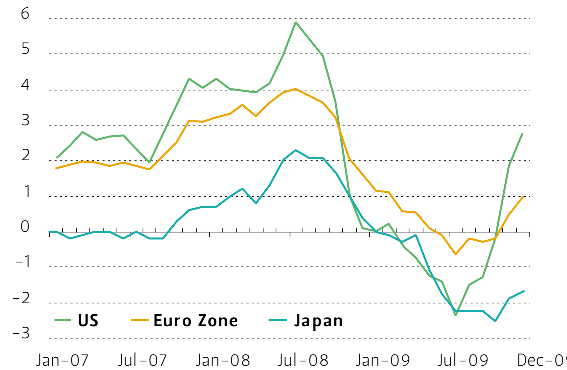
## 3.1 ECONOMIC ACTIVITY

In 2009, the international economy began to recover from the previous year's severe economic and financial crisis. As from the second quarter, share prices rose vigorously in an early sign of the subsequent recovery of the real sector of the economy. Encouraged by historically low interest rates, investors began to seek more risky assets, pushing up their price. This also affected the dollar which depreciated against other currencies during most of the year. However, growth in developed countries, although returning to positive territory in mid-year, was not sufficient to alleviate the large increase in unemployment seen during the crisis. Towards the end of the year, the weak fiscal situation in which some European countries had been left prompted a resurgence of fears that the international economy could experience a second dip. All these events had an impact on the economic variables that affect the performance of Chile's sovereign wealth funds.

The most important variables of the economies relevant to their investments are analyzed below in order to facilitate understanding of the funds' performance in 2009.

During the first half of 2009, in the midst of the economic crisis, the economies of the main developed countries continued to contract, due to factors that included a drop in demand, the collapse of international trade, high unemployment and financial uncertainty. In this context, the US economy experienced a sharp contraction in the first quarter, with output dropping at an annualized rate of 6.4%, while, in the Euro zone, the contraction reached 9.5% and, in Japan, 12.3% *(Table 1)*. However, an important upturn in China and other Asian countries, fiscal stimulus policies to reactivate domestic demand and the different measures that stabilized financial markets, restoring access to credit for the real sector of the economy, revived private-sector confidence and laid the foundations for economic recovery. This was reflected in the positive growth rates seen in many countries as from the third quarter. However, in most developed countries, this recovery did not compensate for the sharp deceleration of the first quarter. As a result, the United States saw a contraction of 2.4% over the whole year while the Euro zone and Japan contracted by 4.0% and 5.0%, respectively. Despite the incipient recovery, the outlook for the labor market remained negative at the end of the year, with unemployment reaching 10.0% in the US and European economies while, in Japan, it closed the year at 5.1%.

Figure 7_ Inflation, 2007-2009
(%)

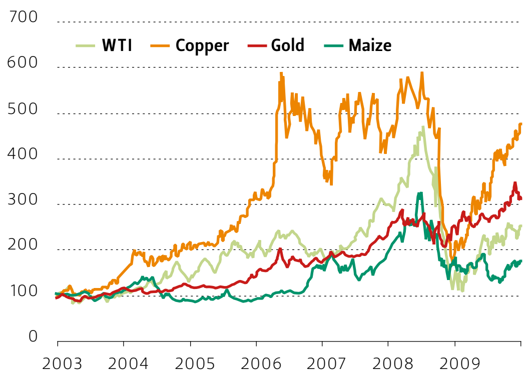



*Source: CBC*

## 3.2 INFLATION

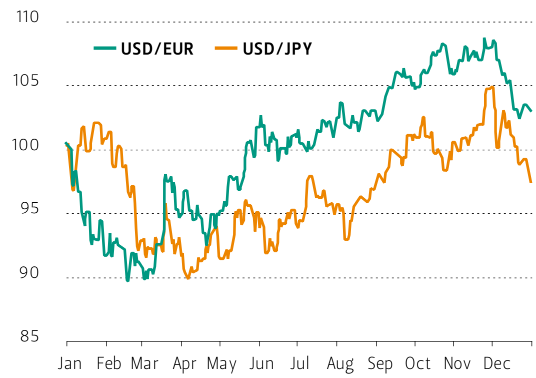
With the contraction of the international economy, the inflationary pressures seen in 2008 disappeared and, as commodity prices fell sharply and the world's main economies decelerated, they were replaced by a fear of deflation. In the United States, for example, the 12-monthly inflation rate dropped to -2.4% in mid-2009 while, in the Euro zone, it reached -0.6% and, in Japan, -2.2%. However, the highly expansionary measures implemented by central banks in a bid to reactivate their economies made it possible to control this potentially deflationary outlook. At the same time, the unstoppable growth of China and other emerging economies and international economic recovery increased the demand for raw materials, raising their prices. As a result, the year closed with annual inflation of 2.7% in the United States and 0.9% in the Euro zone while Japan experienced deflation of 1.7% *(Figure 7)*.

Figure 8_ Commodity price indexes, 2003–2009
(January 2003 = 100)




*Source: Bloomberg*

Figure 9_ Exchange rates, 2009
(January 2009 = 100)




*Source: Bloomberg*

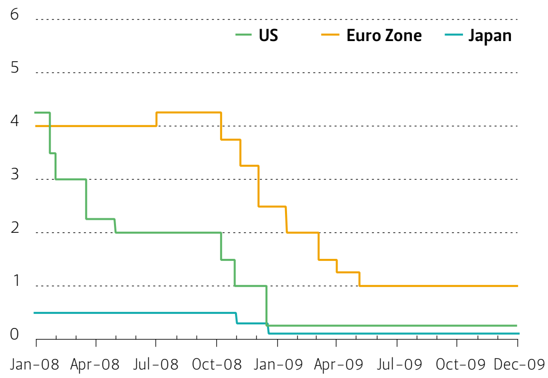
## 3.3 COMMODITY PRICES

After the collapse of commodity prices at the end of 2008, marking the end of a period of historic records, these showed a sustained increase in 2009 *(Figure 8)*. This was explained by strong demand from China where, despite the international economic crisis, output continued to expand rapidly. The depreciation of the dollar also contributed, although to a lesser extent, to an increase in commodity prices expressed in this currency. At the beginning of the year, the WTI oil price was running at around US$44.6/barrel while copper was around US$1.40/lb. However, by the end of the year, the WTI price had reached US$79.4/barrel and copper was up at US$3.33/lb.

## 3.4 EXCHANGE RATES

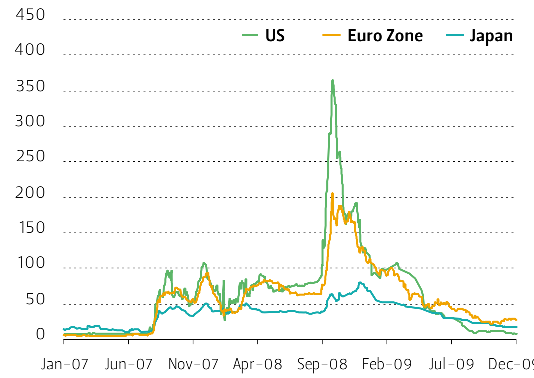
In the first quarter of 2009, the euro and the yen weakened against the dollar as investors took refuge in low-risk dollar-denominated assets in response to fears about the state of the world economy. However, as market agents began to anticipate an end to the crisis as a result of the measures taken by governments and central banks, their demand for more risky assets began to increase, leading to a marked depreciation of the dollar through to the middle of the third quarter. However, it again appreciated suddenly at the end of the year when news of the difficult fiscal situation of some European countries began to emerge. As a result, the dollar lost 2.5% against the euro over the whole year, but gained 2.5% against the yen *(Figure 9)*.

Figure 10_ Monetary policy interest rates, 2008-2009
(%)




*Source: Bloomberg*

Figure 11_ Libor-Overnight indexed swap spread, 2007-2009
(basis points)




*Source: Bloomberg*

## 3.5 MONETARY POLICY INTEREST RATES

In 2009, central banks maintained their expansionary monetary policies in a bid to reactivate their economies. The US Federal Reserve (Fed) and the Bank of Japan (BJ) not only held their monetary policy rates at minimum levels throughout the year (in the range of 0-0.25% in the case of the Fed and 0.1% in the case of the BJ) but also indicated that they had no intention of raising them in the short term. In the Euro zone, the monetary policy rate opened the year at 2.5% but was gradually reduced by the European Central Bank (ECB) to 1% in May *(Figure 10)*. It should be noted that central banks have already designed strategies for the gradual withdrawal of this extraordinary stimulus, thereby mitigating the risk of inflationary pressures.

## 3.6 LIQUIDITY

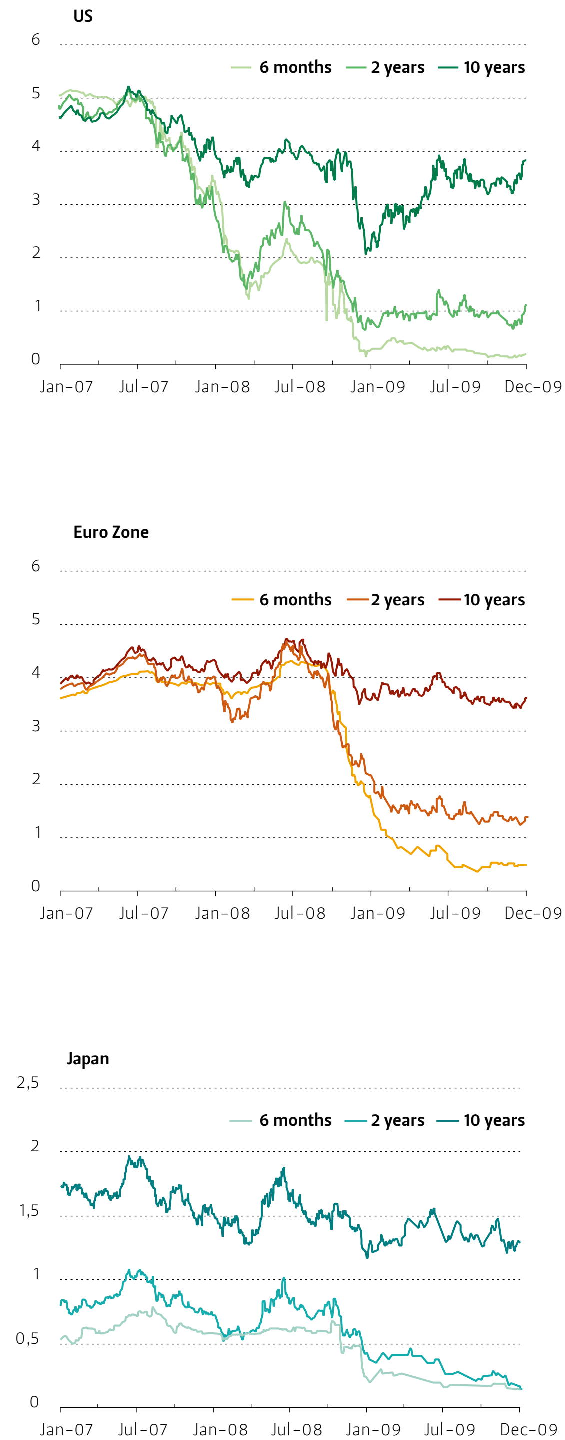
At the end of 2008, the central banks of many countries took a range of emergency measures to inject liquidity into the financial system and bailout institutions hit by the crisis. The most important measures included a reduction in monetary policy interest rates and the purchase of different types of short and medium-term instruments in order to reduce the cost of financing and provide liquidity (quantitative easing). This coordinated effort was unprecedented and reassured investors, allowing liquidity and the flow of credit to gradually return to markets.

The spread between LIBOR and the overnight indexed swap rate serves as an indicator of financial market liquidity. After the historically low level of liquidity seen at the height of the crisis, when this spread reached 365 basis points (bps), it dropped to below 27 bps at the end of 2009 in all the economies analyzed. This is comparable to the levels seen before the crisis *(Figure 11)*.

## 3.7 SOVEREIGN INTEREST RATES

In 2009, there were no great changes in interest rates on the short and medium-term government securities of the US, Europe or Japan. This reflected principally the fact that their central banks held their reference interest rates steady. In the US, the interest rate on two-year bonds rose by a mere 37 bps, closing the year at 1.14%, while in the Euro zone, it dropped by 76 bps to close the year at 1.37% and, in Japan, decreased by 23 bps to a year-end level of 0.15%. Long-term rates showed a high level of volatility in response to news about the health and recovery of the international economy. The largest variation was in the United States where the ten-year rate rose by more than 160 bps, closing the year at 3.84% *(Figure 12)*.

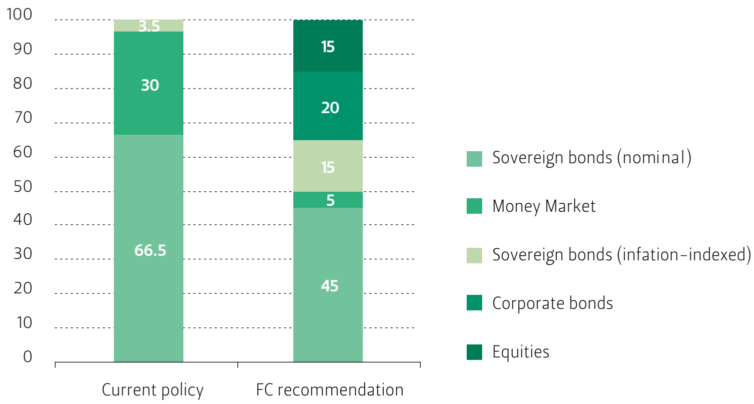
Figure 12_ Sovereign interest rates (6-month, 2-year and 10-year), 2007-2009
(%)




*Source: Bloomberg*

# 4 PRF and ESSF

Figure 13_ Current investment policy vs. FC recommendation
(% of portfolio)




*Source: Ministry of Finance*

## 4.1 INVESTMENT POLICY

Since their inception, the PRF and ESSF investment policy has involved asset classes similar to those used by the CBC for international reserves. This policy was initially intended to be temporary, pending the recommendations of the Financial Committee, and was chosen principally on the grounds of prudence and because of the CBC's vast experience in managing these asset classes.

In the first quarter of 2008, the Finance Minister defined a new investment policy, based on the Committee's recommendations and more closely aligned with the funds' characteristics. However, its implementation was postponed due to the economic and financial crisis in the latter part of the year. In 2009, the Financial Committee recommended that this investment diversification policy be implemented in the case of the PRF, but the Finance Minister preferred not to do so since its results would only be seen once his term of office had concluded. Thus the original investment policy remained in force *(Figure 13)*.

Under this policy, 66.5% of the funds' assets are held as nominal sovereign bonds, 30% as money market instruments — such as short-term bank deposits and Treasury bills — and 3.5% as inflation-indexed sovereign bonds *(Table 2)*. This is a conservative policy in that it does not include asset classes with a higher level of risk such as equities, corporate bonds and alternative investments.[8]

This policy permits variations in the strategic asset allocation. However, there are limits on maximum exposure to each type of credit risk associated with the instruments *(Table 3)*.

In addition, a reference allocation by currency was established, specifying 50% in US dollars, 40% in euros and 10% in yens, with a limit of a maximum variation of 5% in these values *(Table 4)*. The funds' guidelines also permit investment in instruments in another nine currencies but, in this case, require exchange-rate coverage tied to one of the reference currencies.[9]

In order to assess the CBC's management performance, a benchmark was defined using market indexes, specific to each currency, for nominal sovereign bonds, the money market and inflation-indexed bonds. In the case of the money market, the benchmarks are the Merrill Lynch indexes for LIBID and Treasury bill rates while, for nominal sovereign bonds, the subindexes of the Barclays Capital Global Treasury Index for the US, German and Japanese markets[10] are used and, for inflation-indexed sovereign bonds, the 1-10 year Barclays US Government Inflation-Linked Index *(Table 5)*.

Table 2_ Strategic asset allocation
(%)

| Asset class | Allocation |
|---|---|
| Sovereign bonds (nominal) | 66.5 |
| Money market | 30.0 |
| Sovereign bonds (inflation-indexed) | 3.5 |

*Source: Ministry of Finance*

8 Alternative investments include principally hedge funds, private equity, commodities and real estate.

9 The other eligible currencies are sterling, the Canadian, Australian, New Zealand and Singapore dollars, the Norwegian, Swedish and Danish krones and the Swiss franc.

10 The nominal sovereign bond indexes for each currency are calculated from subdindexes using different maturity ranges as follows: 1-3 years, 45%; 3-5 years, 30%; 5-7 years and 7-10 years, 12.5% each.

Table 3_ Maximum allocation by type of credit risk
(%)

| Issuer | Maximum allocation |
|---|---|
| Sovereign | 100 |
| Multilateral | 60 |
| Banks | 50 |
| Agencies | 30 |

*Source: Ministry of Finance*

Table 4_ Currency allocation
(%)

| Currency | Allocation | Range of variation |
|---|---|---|
| USD | 50 | 45 – 55 |
| EUR | 40 | 35 – 45 |
| JPY | 10 | 5 – 15 |

*Source: Ministry of Finance*

Table 5_ Benchmark indexes
(%)

| Benchmark | USD | EUR | JPY | Total |
|---|---|---|---|---|
| **Money Market** | **15.0** | **12.0** | **3.0** | **30.0** |
| Merrill Lynch Libid 6-Month Average | 7.5 | 6.0 | 1.5 | 15.0 |
| Merrill Lynch Treasury Bills Index | 7.5 | 6.0 | 1.5 | 15.0 |
| **Nominal Sovereign bonds** | **31.5** | **28.0** | **7.0** | **66.5** |
| Barclays Capital Global Treasury: US | 31.5 | — | — | 31.5 |
| Barclays Capital Global Treasury: Germany | — | 28.0 | — | 28.0 |
| Barclays Capital Global Treasury: Japan | — | — | 7.0 | 7.0 |
| **Inflation-indexed sovereign bonds** | **3.5** | | | **3.5** |
| Barclays Capital US Treasury: US TIPS 1-10 years | 3.5 | | | |
| **Total** | **50.0** | **40.0** | **10.0** | **100.0** |

*Source: Ministry of Finance*

**BOX 2** Methods used to calculate returns

Returns on the sovereign wealth funds are measured using two methods: the time-weighted rate of return (TWR) and the internal rate of return (IRR). The criterion used is based on best practices as established by the Global Investment Performance Standards of the CFA Institute and other international standards applied in different markets.

### Time-Weighted Rate of Return (TWR)

The TWR is generally used to measure the return on investments and the performance of the portfolio manager or, in other words, the manager's ability to generate returns in excess of a benchmark. Its method of calculation neutralizes the distortions that can be caused by inflows and outflows which are outside the manager's control.

In the case of the ESSF and the PRF, the net value of their portfolio at market prices can be expressed as:

$$V_t^{net} = V_t^{gross} - C_t^{administration} - C_t^{custody} - C_t^{others} + G_t^{seclend},$$

where

$V_t^{net}$ = *net market value of funds on day t*

$V_t^{gross}$ = *gross market value of funds on day t*

$C_t^{administration}$ = *cost of services for administering the resources on day t*

$C_t^{custody}$ = *custody costs (fixed and variable) on day t*

$C_t^{others}$ = *consultancy and other costs on day t, and*

$G_t^{seclend}$ = *earnings on securities lending program*[(a)] *on day t.*

Assuming that both contributions and withdrawals take place at the end of the day, the formula used for daily calculation of the TWR is:

$$TWR_t = \frac{V_t^{net} - Fn_t}{V_{t-1}^{net}},$$

$$Fn_t = Contributions_t - Withdrawals_t - C_t^{custody} - C_t^{others} + G_t^{seclend},$$

where

$Fn_t$ = *adjustment flow on day t*

$Contributions_t$ = *capital contributions on day t, and*

$Withdrawals_t$ = *capital withdrawals on day t.*

The $Fn_t$ adjustment removes from the calculation of the TWR all those variables that affect daily variations in market value caused by flows outside the manager's control such as, for example, capital contributions and withdrawals. In addition, it excludes payments for the custody of securities and consultancy services on which the manager does not, in general, take decisions as well as earnings from the lending of securities, which are not related to investment decisions. However, it does include administration costs since these depend largely on the manager's style or strategy.

Once a series of values for $TWR_t$ with $t=t_0...T$ has been obtained, the return for the period can be calculated as:

$$R_{t_0}^T = \left[\prod_{t=t_0}^{T} (1 + TWR_t)\right] - 1$$

The annualized return is obtained as follows:

$$(1 + R_{t_0}^T)^{\frac{365}{(T-t_0)}} - 1$$

### Internal Rate of Return (IRR)

The IRR is the actual return on investments, including the effects of cash flow. Returns during periods with more resources under management will, therefore, have a greater impact on this indicator. Its method of calculation takes account of all the costs related to administration and investment of the portfolio. The IRR between $t_0$ and $T$ is obtained by resolving the following equation:

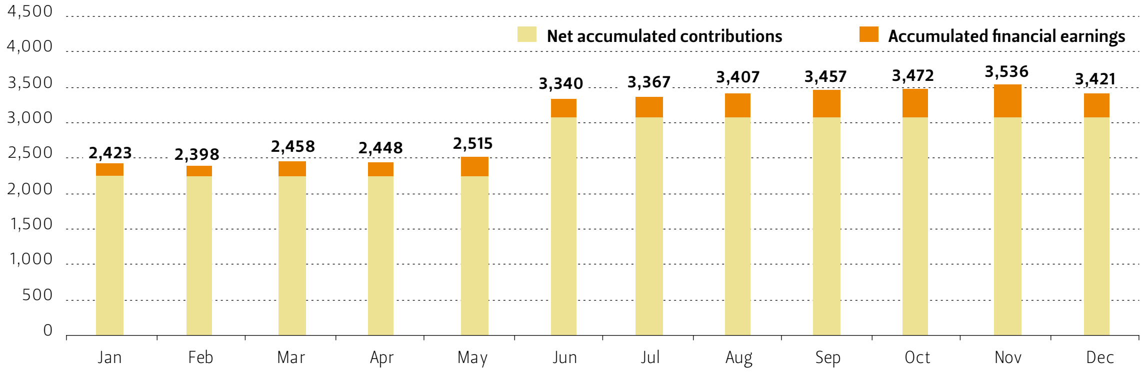
$$V_{t_0}^{net} + \sum_{t=t_0}^{T} \frac{Fn_t}{(1+IRR)^{\frac{(t-t_0)}{365}}} = \frac{V_T^{net}}{(1+IRR)^{\frac{(T-t_0)}{365}}},$$

where

$$Fn_t = Contributions_t - Withdrawals_t - C_t^{administration} - C_t^{custody} - C_t^{others} + G_t^{seclend}.$$

(a) This income is generated by the loan of financial instruments held in custody. In the case of the PRF and the ESSF, these loans are backed by collateral.

Figure 14_ PRF: Contributions and financial earnings, 2009
(US$ million)




*Source: Ministry of Finance*

Table 6_ PRF: Annual contributions
(US$ million)

| Period | Amount | % of previous year's GDP |
|---|---|---|
| 2006 | 604.5 | 0.5 |
| 2007 | 736.4 | 0.5 |
| 2008 | 909.1 | 0.5 |
| 2009 | 836.7 | 0.5 |

*Source: Ministry of Finance*

## 4.2 MARKET VALUE AND ANALYSIS OF RETURNS

This section examines the market value and returns of the PRF and the ESSF in 2009. It should be noted that their investments are valued using the marked-to-market method and returns are measured in US dollars using the time-weighted rate of return (TWR). Returns for periods of more than one year are compound annualized rates while those for less than a year correspond to the change seen in the stated period *(Box 2)*.

### Pension Reserve Fund (PRF)

As of December 31, 2009, the PRF had a market value of US$3,421 million, up by US$914 million on a year earlier. This increase was explained by a contribution of US$837 million and net financial earnings of US$77 million. In 2009, the investment portfolio of the PRF yielded interest of US$72 million.

Between the PRF's inception on December 28, 2006 and end-2009, contributions to the fund totaled US$3,087 million *(Table 6)* and its net financial earnings reached US$334 million *(Figure 14)*. Accrued interest in this period reached US$189 million.

Table 7_ PRF: Net return in local currency and exchange-rate return
(%)

| | Q I | Q II | Q III | Q IV | 2009 |
|---|---|---|---|---|---|
| Local currency | 0.58 | -0.69 | 1.04 | 0.05 | 1.00 |
| Exchange-rate return | -2.52 | 2.52 | 2.47 | -1.09 | 1.28 |
| **Total (US$)** | **-1.94** | **1.83** | **3.51** | **-1.04** | **2.28** |

*Source: Ministry of Finance*

Table 8_ PRF: Net returns
(%)

| Return | 2007 | 2008 | 2009 | Since fund inception (annualized) |
|---|---|---|---|---|
| TWR | 8.86 (a) | 7.59 | 2.28 | 6.78 (b) |
| IRR | 12.05 | 6.42 | 2.65 | 5.70 |

*(a), (b) Calculated as from March 31, 2007.*
*Source: Ministry of Finance*

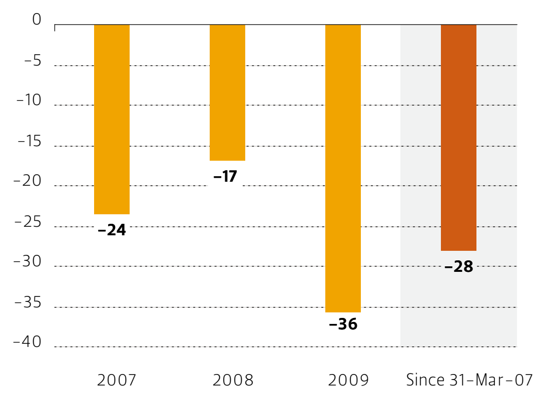
The return on the PRF in 2009 was 2.28%, comprising 1.00% explained by earnings in the local currency of its investments and 1.28% due to exchange-rate variations *(Table 7)*.[11] This result was due largely to the exceptionally low level of international interest rates and was augmented by the greater appetite for risk shown by investors, who sold more secure instruments such as those held by the PRF in a quest for higher returns. Quarterly returns on the PRF showed significant variations in 2009, due principally to exchange-rate movements. Its return was lowest in the first quarter (-1.94%), reflecting an important depreciation of the euro and the yen against the dollar. This effect was partly offset, however, by the strong performance of its investments in their local currency, due to demand for less risky assets in the face of uncertainty about the duration of the crisis. In the second quarter, the fund's return rose to 1.83%, reflecting a depreciation of the dollar against the euro which was partly offset by higher interest rates in the US, with an impact on the return on this country's sovereign bonds. In the third quarter, the fund showed its highest return of the year (3.51%) due to the marked appreciation of the euro and the yen against the dollar. Finally, its fourth-quarter return of -1.04% reflected the appreciation of the dollar against the euro and the yen, in a context in which interest rates showed no significant variation.

11 The return on the sovereign wealth funds is affected principally by interest rates and exchange rates. The level of interest rates and their movements largely determine the local-currency value of their assets. However, since the funds invest in dollars, euros and yens but their return is measured in dollars, the value of the dollar against other currencies also affects their results.

Figure 15_ PRF: Index of returns
(March 31, 2007 = 100)


*Source: Ministry of Finance*

Figure 16_ PRF: Returns vs. benchmark
(basis points)



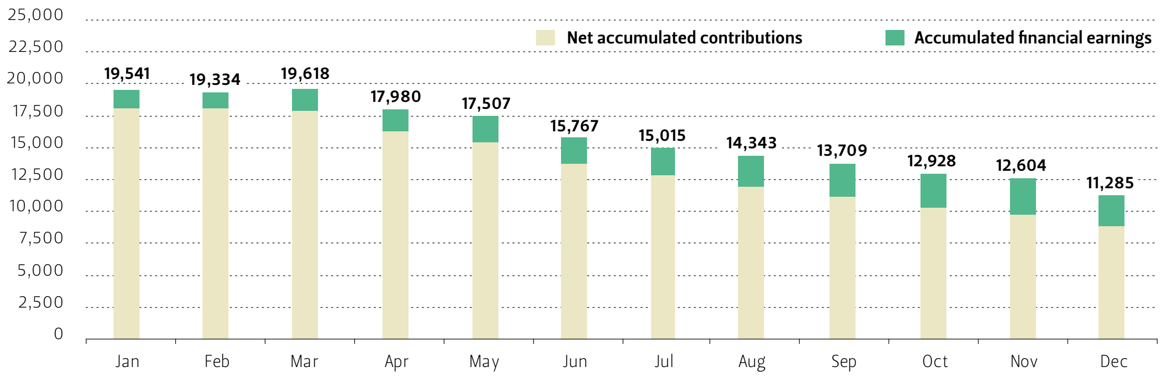

*Source: Ministry of Finance*

The return on the PRF in 2009 is in contrast to that achieved in 2008 when investors' risk aversion meant higher demand and prices for its instruments and, therefore, a higher return. Since March 31, 2007, when the CBC began to measure management performance, the fund has obtained an average annual return of 6.78%. In 2009, its IRR was 2.65% and, as from the fund's inception, reached an annual rate of 5.70% *(Table 8)*.

The PRF's performance can be illustrated using an index whose value varies according to daily returns on its portfolio. At the end of 2009, this index reached 119.82 points, up from 117.15 points and 108.86 at end-2008 and end-2007, respectively *(Figure 15)*.

The CBC's performance, measured as the difference between the PRF's return and its benchmark, was -36 bps in 2009 and -28 bps in annualized terms since March 31, 2007 *(Figure 16)*.

Figure 17_ ESSF: Contributions and financial earnings, 2009
(US$ million)




*Source: Ministry of Finance*

Table 9_ ESSF: Contributions and withdrawals
(US$ million)

| Period | Contributions | | Withdrawals | |
|---|---|---|---|---|
| | Amount | % of previous year's GDP | Amount | % of previous year's GDP |
| 2007 | 13,100 | 8.9 | – | – |
| 2008 | 5,000 | 3.1 | – | – |
| 2009 | – | – | 9,278 | 5.5 |

*Source: Ministry of Finance*

Table 10_ ESSF: Net returns in local currency and exchange-rate return
(%)

| | Q I | Q II | Q III | Q IV | 2009 |
|---|---|---|---|---|---|
| Local currency | 0.58 | -0.57 | 1.03 | 0.13 | 1.19 |
| Exchange-rate | -2.52 | 2.52 | 2.47 | -1.09 | 1.28 |
| **Total (US$)** | **-1.94** | **1.95** | **3.50** | **-0.96** | **2.47** |

*Fuente: Ministerio de Hacienda*

**Economic and Social Stabilization Fund (ESSF)**

At the end of 2009, the ESSF had a market value of US$11,285 million, down by US$8,926 million on a year earlier. This drop was explained by withdrawals for US$9,278 million which were partly offset by net financial earnings of US$352 million. No new contributions were made to the fund since those corresponding to 2009 had already been paid in, either as a capital advance or on account of returns. In 2009, the investment portfolio of the ESSF yielded interest of US$404 million.

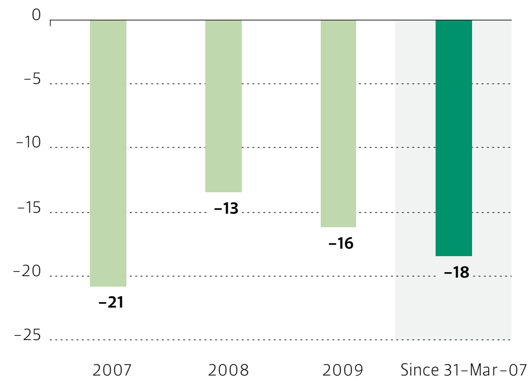
Between the launch of the ESSF on March 6, 2007 and end-2009, contributions totaled US$18,100 million *(Table 9)* while withdrawals reached US$9,278 million, of which US$2,278 million corresponded to the capitalization of Codelco, debt repayments and transfers to the PRF. During this period, it generated net financial earnings of US$2,462 million *(Figure 17)* and yielded interest of US$1,354 million.

The net return on the ESSF in 2009 was 2.47%, comprising a return of 1.19% in local currency and 1.28% as a result of exchange-rate variations *(Table 10)*. It should be noted that, through to end-2009, the returns of both the ESSF and the PRF were very similar since they have had the same investment policy since their inception. The return on the ESSF in 2009 was heavily affected by exchange-rate variations. In the first quarter, a generalized appreciation of the dollar meant a drop in its return to a low of -1.94% while, in the second and third quarters, its positive returns of 1.95% and

Figure 18_ ESSF: Index of returns
(March 31, 2007 = 100)


*Source: Ministry of Finance*

Figure 19_ ESSF: Returns vs. benchmark
(basis points)




*Source: Ministry of Finance*

3.50%, respectively, were due mainly to the appreciation of the euro against the dollar in response to the recovery of financial markets. In the last quarter, its return of -0.96% was explained largely by the depreciation of the euro and the yen against the dollar.

The accumulated return on the ESSF since March 31, 2007 reached an annual rate of 6.88% *(Box 3)* while its IRR in 2009 was 2.17% and, since the fund's inception, reached an annual 6.16% *(Table 11)*.

The ESSF's performance can be illustrated using an index whose value varies according to daily returns on its portfolio. At the end of 2009, this index reached 120.12 *(Figure 18)* up from 117.22 and 108.89 at the end of 2008 and 2007, respectively.

The CBC's performance, measured as the difference between the return on the ESSF's portfolio and its benchmark, was -16 bps in 2009 and -18 bps in annualized terms since March 31, 2007 *(Figure 19)*.

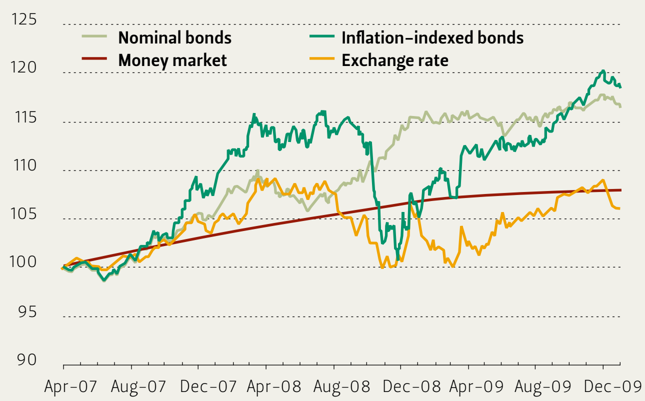
Table 11_ ESSF: Net returns
(%)

| Return | 2007 | 2008 | 2009 | Since fund inception (annualized) |
|---|---|---|---|---|
| TWR | 8.89[(a)] | 7.63 | 2.47 | 6.88[(b)] |
| IRR | 10.20 | 6.80 | 2.17 | 6.16 |

*(a), (b) Calculated as from March 31, 2007.*
*Source: Ministry of Finance*

BOX 3 Behavior of the asset classes of the sovereign wealth funds' investment policy since their inception

Figure R 3.1_ Asset classes in local currency and exchange rate
(March 31, 2007 = 100)




*Source: Ministry of Finance using indexes provided by Barclays Capital*

The sovereign wealth funds' portfolios comprise different asset classes whose combined performance determines the final result of their investments. Given that the funds invest passively, the origin of their returns by type of instrument can be inferred from an analysis of the behavior of their benchmarks *(Figure R 3.1)*.

Measured since the funds' inception, US Treasury Inflation-Protected Securities (TIPS) are the asset class that has registered the highest return. In local currency, this reached an annual 6.4% although, in nominal terms, these securities showed a high level of volatility, due to changes in expectations of inflation in the US before, during and after the crisis.

This return was followed by an annual 5.7% on nominal sovereign bonds over the same period. Their strong performance was explained mainly by a generalized drop in interest rates and net investment flow into more conservative assets during the economic and financial crisis of 2008. Since this asset class represented over 65% of the funds' portfolio, it was a key factor in their overall returns.

Money market instruments showed an annual return of 2.8% in local currency during the period analyzed. This asset class — Treasury Bills and bank deposits — generally has a low level of volatility and returns are determined largely by short-term interest rates.

Finally, in terms of currency parities, the performance of the funds' portfolios reflected the depreciation of the dollar against the euro and the yen since their inception. This accounted for an annual return of approximately 2.2%.

Table 12_ Investment costs and securities lending income
(US$ thousand)

**PRF**

| Item | 2007 | 2008 | 2009 |
|---|---|---|---|
| Custody services (J.P. Morgan) | — | 211.8 | 192.9 |
| Management (CBC) | 49.2 | 97.5 | 155.4 |
| Other costs | — | 10.7 | — |
| **Total costs** | **49.2** | **320.0** | **348.3** |
| **Securities lending** | **—** | **338.9** | **205.7** |

**ESSF**

| Item | 2007 | 2008 | 2009 |
|---|---|---|---|
| Custody services (J.P. Morgan) | — | 972.3 | 816.7 |
| Management (CBC) | 465.8 | 791.2 | 804.6 |
| Other costs | — | 84.3 | — |
| **Total costs** | **465.8** | **1,847.7** | **1,621.3** |
| **Securities lending** | **—** | **3,504.1** | **924.8** |

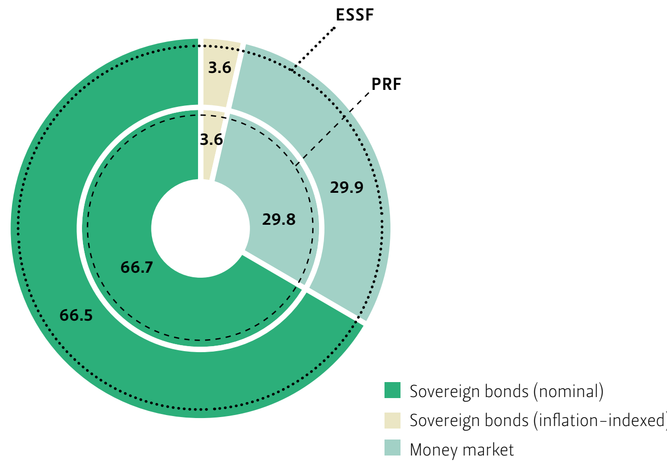
*Source: Ministry of Finance*

## 4.3 ADMINISTRATION AND CUSTODY COSTS

In 2009, the funds' total management costs reached US$1,969.6 thousand, of which US$348.3 thousand corresponded to the PRF and US$1,621.3 thousand to the ESSF. These expenditures were partly offset by income of US$1,130.5 thousand from their securities lending program.

In the case of the PRF, the total management cost comprised US$192.9 thousand for custody services and US$155.4 thousand in management fees paid to the CBC. This latter item was equivalent to 0.52 bps of the fund's portfolio. These administration and custody costs were partly offset by income of US$205.7 thousand from the securities lending program *(Table 12)*. In the ESSF, the total management cost comprised US$816.7 thousand for custody services and US$804.6 thousand in fees for the CBC, which represented 0.51 bps of its portfolio. Income from the ESSF's securities lending program reached US$924.8 thousand, partly mitigating its management costs.

Figure 20_ PRF and ESSF: Composition by asset class, December 31, 2009
(% of portfolio)




*Source: Ministry of Finance*

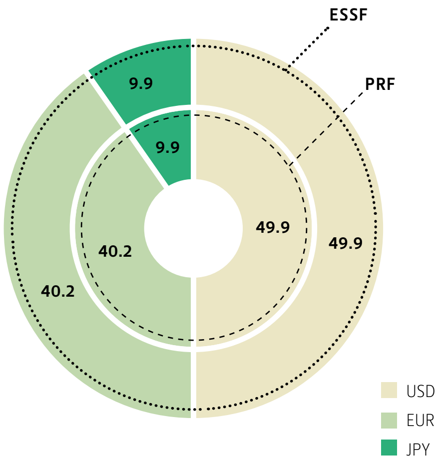
## 4.4 PORTFOLIO ALLOCATION AND CHARACTERISTICS

The composition of the investment portfolios of the PRF and the ESSF is fairly conservative in that they include only fixed-income assets with a high credit rating. This means stable returns and a low probability of losses as a result of default by an issuer.

As of December 2009, the PRF's composition by asset class consisted of 66.7% (US$2,280 million) in nominal sovereign bonds, 29.8% (US$1,019 million) in money market instruments[12] and 3.6% (US$122 million) in inflation-indexed sovereign bonds. Similarly, the ESSF held 66.5% of its assets (US$7,509 million) as nominal sovereign bonds, 29.9% (US$3,374 million) as money market instruments and 3.6% (US$402 million) as inflation-indexed sovereign bonds *(Figure 20)*. The composition of both funds by asset class at the end of the year was similar to that of their benchmark.

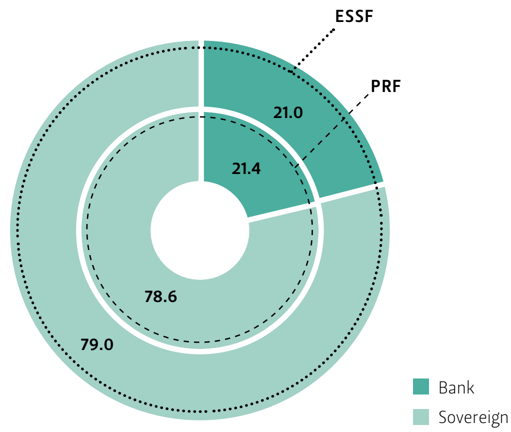
12 Includes sovereign securities with a maturity of less than a year.

Figure 21_ PRF and ESSF: Composition by currency, December 31, 2009
(% of portfolio)




*Source: Ministry of Finance*

Figure 22_ PRF and ESSF: Composition by type of credit risk, December 31, 2009
(% of portfolio)




*Source: Ministry of Finance*

In 2009, their currency composition remained stable and was similar to the target established under their investment policy. As of December 31, 2009, both funds held 50% of their assets in dollars, 40% in euros and 10% in yens *(Figure 21)*.

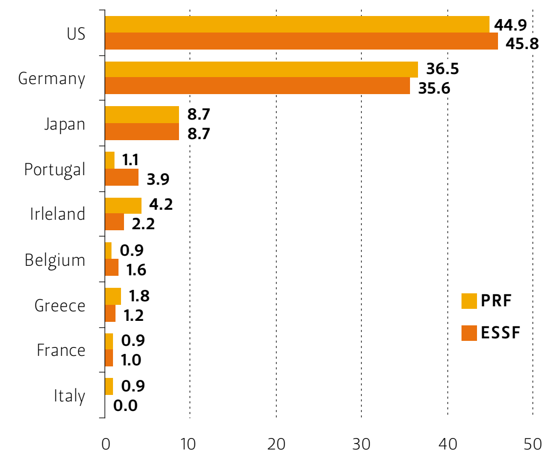
The funds' exposure to the banking sector increased marginally in 2009. This was due mainly to the improved financial situation of these institutions as compared to 2008 and the fact that they offered a slightly higher return than sovereign instruments of the same duration. As a result, term deposits rose from around 18% of the funds' portfolios at the end of 2008 to close to 21% in 2009 while their exposure to sovereign risk decreased from 82% at the end of 2008 to approximately 79% in 2009 *(Figure 22)*.

Table 13_ PRF and ESSF: Credit risk exposure, December 31, 2009
(% of portfolio)

| Issuer | Risk rating | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| | AAA | AA+ | AA | AA− | A+ | A | A− | BBB+ |
| **PRF** | | | | | | | | |
| Sovereign | 64.8 | 0.7 | 11.0 | 0.7 | — | — | — | 1.5 |
| Bank | — | — | 1,5 | 7,4 | 9,7 | 2,8 | — | — |
| **ESSF** | | | | | | | | |
| Sovereign | 65.1 | 1.3 | 11.6 | — | — | — | — | 1.0 |
| Bank | — | — | 1.7 | 12.2 | 4.8 | 2.3 | — | — |

*Source: Ministry of Finance*

Figure 23_ PRF and ESSF: Composition of sovereign bonds by issuer
(% of total)




*Source: Ministry of Finance*

The CBC actively monitored the credit exposure of the funds' assets, preferring issuers with a lower relative level of risk. This was reflected in the fact that, in December 2009, investments in bank deposits with a risk rating of between A+ and A represented only 12.5% of the PRF and 7.1% of the ESSF while the remainder corresponded to institutions with higher ratings *(Table 13)*. It should be noted that the majority of banking institutions receiving the funds' resources were located in Europe *(Table 14)*. In the case of the funds' exposure to sovereign instruments, most of these investments were in bonds issued by the United States, Germany and Japan or, in other words, countries that maintained solid risk ratings *(Figure 23)*. However, at the end of 2009, they also held minor positions in short-term instruments issued by Greece, Portugal and Ireland, whose bonds were negatively affected by a rise in interest rates in response to their fragile fiscal situation. In the particular case of Greece, a reduction in its risk ratings by both Fitch and Standard & Poor's meant that, on December 16, it exceeded the minimum risk level required under the guidelines for the PRF and the ESSF and ceased to be an eligible issuer (see Section 5.2 Credit Risk). The CBC, in coordination with the Ministry of Finance, took the necessary measures to reduce their exposure to this country.[13]

13 At the date of publication of this report, neither fund had positions in instruments issued by the Greek government.

Table 14_ PRF and ESSF: Bank deposits, December 31, 2009

| Bank | Country | PRF | ESSF |
|---|---|---|---|
| ABN AMRO Bank NV | Netherlands | X | X |
| Allied Irish Banks | Ireland | X | X |
| Banco Santander Central Hispano SA | Spain | X | X |
| Bank of Ireland | Ireland | | X |
| Bank of Scotland PLC | UK | X | X |
| Barclays Bank PLC | UK | X | X |
| Bayerische Hypo- und Vereinsbank AG | Germany | X | X |
| Bayerische Landesbank | Germany | X | X |
| Caja de Ahorros y Monte de Piedad de Madrid | Spain | X | X |
| Dexia Bank Belgium SA | Berlgium | X | X |
| Erste Group Bank AG | Austria | X | X |
| Fortis Bank NV/SA | Berlgium | X | X |
| ING Bank NV | Netherlands | X | X |
| KBC Bank NV | Berlgium | X | X |
| Landesbank Baden-Wuerttemberg | Germany | X | X |
| Lloyds TSB Bank PLC | UK | X | X |
| Mizuho Corporate Bank LTD | Japan | X | X |
| Raiffeisen Zentralbank Oesterreich AG | Austria | | X |
| Royal Bank of Scotland (The) PLC | UK | X | X |
| Société Générale | France | | X |

*Source: Ministry of Finance*

# 5 Description of Financial Risks

The investments of the PRF and the ESSF in different financial instruments expose them to different types of risks, which can be classified as market, credit, liquidity, active and operational risk. In a bid to limit the funds' exposure, the investment guidelines provided by the Ministry of Finance include restrictions that the CBC must respect. Its compliance is monitored by an independent department within this institution, by the custodian institution and, ultimately by the Ministry of Finance. In addition, the CBC's institutional framework and infrastructure provide the controls required to mitigate operational risk.

Table 15_ PRF and ESSF: Portfolio and benchmark duration, December 31, 2009
(years)

| Fund | Portfolio | Benchmark |
| --- | --- | --- |
| PRF | 2.47 | 2.51 |
| ESSF | 2.46 | 2.51 |

*Source: Ministry of Finance*

## 5.1 MARKET RISK

Losses in the market value of financial instruments can arise as a result of changes in market conditions. In the specific case of international fixed-income investors, interest rates and exchange rates are the financial variables with the greatest impact on the prices of their assets.

**Interest-rate risk**

Changes in interest rates have a direct impact on the price of fixed-income instruments. An increase in interest rates means a drop in their price while a reduction in interest rates has the inverse effect. A portfolio's duration is the parameter that measures its sensitivity to parallel changes in interest rates, with a longer duration implying a greater risk of loss in the face of an increase in interest rates.

In the case of the funds, reference duration was defined on the basis of the indexes that comprise their benchmark. At the end of 2009, this reached 2.51 years while for the PRF and ESSF the actual duration was 2.47 and 2.46 years, respectively. The funds' investment guidelines stipulate that their actual duration must not exceed the benchmark by more than five months *(Table 15)*. The CBC complied with this restriction throughout 2009 and, as of December 31, the difference was no more than one month.

Table 16_ Minimum requirements and limits by issuer and credit risk

| Credit risk | Risk rating(a) (b) | | | | | | | Minimum requirements |
|---|---|---|---|---|---|---|---|---|
| | AAA | AA+ | AA | AA– | A+ | A | A– | |
| Sovereign | 100% | | 90% | | | 30% | | A– over previous 24 months |
| Multinational | 800 | | 600 | | | 0 | | Long-term AA– |
| Bank | 600 | | 400 | | | 300 | | Long-term A– / Minimum capital of US$1,000 million |
| Agencies in US | 800 | | 0 | | | 0 | | Long-term AAA / Minimum capital of US$1,000 million |

*(a) By at least two of Fitch, Moody´s and Standard & Poor´s.*
*(b) In US$ million unless specifically indicated as percentage of portfolio.*
*Source: Ministry of Finance*

**Exchange-rate risk**

Since the performance of the PRF and the ESSF is measured in dollars and both funds also have investments in euros and yens, their value is affected by exchange-rate variations. For example, the dollar value of a sovereign bond issued in euros is a function of the dollar/euro exchange rate, with an appreciation (depreciation) of the dollar meaning losses (gains) additional to those caused by changes in interest rates. The PRF and the ESSF have a 50% exposure to exchange-rate risk measured in dollars due to their investments in euros (40%) and yens (10%).

## 5.2 CREDIT RISK

The issuer of a fixed-income instrument can default if prevented from meeting its obligations by a lack of liquidity or capital. As a result, the credit risk to which a fund is exposed increases with the probability of default by an institution or government whose securities it holds, or with changes in market perception of an issuer's solvency which may lead to a drop in the market value of its instruments. Exposure to this risk is controlled by establishing minimum ratings requirements and limits on the amount and percentage of total portfolio allocated to an asset class and/or issuer *(Table 16)*.

The risk arising from the execution of a transaction — or, in other words, the losses that may occur if the counterpart in the transaction does not pay for a security or does not hand it over when it has been acquired — is mitigated by using payment-on-delivery transactional or post-transactional systems. Finally, the risk of holding the funds' securities at a custodian institution is addressed by registering them separately in the name of the Republic of Chile.

## 5.3 LIQUIDITY RISK

Liquidity risk arises from the losses that would occur from the premature sale of securities in order to cover cash-flow needs. At times of economic uncertainty, investments can be exposed to important discounts as a result of a sharp drop in prices in response to lack of demand or market depth and to the need to sell medium-term securities at an inopportune time.

In the PRF and the ESSF, this risk is mitigated by maintaining a high percentage of liquid short-term assets. As of December 31, 2009, money market instruments accounted for 29.8% of the PRF and 29.9% of the ESSF. Liquid assets are defined as time deposits, certificates of deposit and Treasury bills, all of which are less sensitive to changes in interest rates and have a market in which they can be sold rapidly without heavy penalization.

## 5.4 ACTIVE RISK

A fund can be managed actively or passively, depending on the characteristics, objectives and degree of specialization of its administrator. Under a passive strategy, the administrator invests in instruments that are very similar to those of its benchmark and, therefore, also similar in terms of risk and return. On the other hand, if the administrator takes positions that are different to the benchmark — as regards, for example, duration or currency composition — in a bid to achieve a higher return, this is considered an active strategy. This adds an additional element of risk that is referred to as active risk.

Active risk can be measured by the tracking error (TE) which indicates the extent to which a portfolio differs from the benchmark. The more active an investment strategy, the higher is the TE. At the end of 2009, the TE of the PRF and the ESSF was close to 19 bps. This is a low figure and indicates a passive strategy. It should, however, be noted that, according to the industry norm, a fund needs a life of at least three years in order to accurately estimate its TE and, since the PRF and the ESSF do not fulfill this criterion, their TE informed is only an approximation.

## 5.5 OPERATIONAL RISK

Operational risk refers to the losses that can occur as a result of mistakes in internal processes and systems, external events or human error. Examples of this type of risk include transactional errors, fraud and failures to comply with legal obligations (contracts), etc.

In the case of the PRF and the ESSF, this risk is mitigated by delegating their operation to the CBC and, specifically, its International Investments Division, thereby taking advantage of its infrastructure for the management of international reserves. The CBC also has controls in place to provide a proper division of responsibilities and functions, software in line with market quality standards and back-up systems that ensure operational continuity as well as internal and external auditing systems to evaluate the effectiveness of these controls.

Table 18_ PRF and ESSF: Historic maximum and minimum returns
(%)

| Range | Month | | Quarter | |
|---|---|---|---|---|
| | PRF | ESSF | PRF | ESSF |
| Maximum | 5.49 (Dec-08) | 5.46 (Dec-08) | 7.36 (I 08) | 7.31 (I 08) |
| Minimum | -3.34 (Jan-09) | -3.31 (Jan-09) | -2.51 (III 08) | -2.52 (III 08) |

*Source: Ministry of Finance*

Table 17_ PRF and ESSF: Annualized monthly volatility vs. benchmark
(%)

| Volatility | 1 year | Inception |
|---|---|---|
| PRF | 7.0 | 6.7 |
| ESSF | 6.9 | 6.6 |
| Benchmark | 7.0 | 6.7 |

*Source: Ministry of Finance*

## 5.6 VOLATILITY AND OTHER INDICATORS

One of the indicators typically used to measure a portfolio's risk level is the volatility of its returns calculated as their standard deviation. In 2009, the annual volatility of the returns of the PRF and the ESSF was 7.0% and 6.9%, respectively, and, measured as from March 31, 2007, 6.7% for the PRF and 6.6% for the ESSF *(Table 17)*. Exchange-rate fluctuations (7.1%) were a key cause of the funds' volatility in 2009.

The PRF's highest monthly return since its inception was 5.49% and, in the case of the ESSF, 5.46% (both in December 2008) while the lowest was -3.34% for the PRF and -3.31% for the ESSF (both in January 2009). Similarly, the highest quarterly returns were 7.36% for the PRF and 7.31% for the ESSF (first quarter of 2008) and the lowest were -2.51% for the PRF and -2.52% for the ESSF (third quarter of 2008) *(Table 18)*.

Finally, value-at-risk (VaR) can be used to quantify a fund's potential losses in a given period of time and with a given probability. At the end of December 2009, the monthly VaR, calculated on the basis of daily portfolio volatility with an 84% level of confidence, was US$45 million for the PRF and US$147 million for the ESSF.

# 6 Overview 2006-2009

By perfecting fiscal policy and rules on fiscal savings, the government of President Michelle Bachelet left an important legacy that will stand Chile in good stead on its road to becoming a developed country. The creation of the sovereign wealth funds and the resources accumulated during the commodity price boom proved particularly relevant during the recent international crisis since they helped the government maintain the level of social spending by protecting those who were potentially most vulnerable to the crisis.

The solid institutional framework created by President Bachelet's government ensures responsible and long-term management of the resources belonging to all Chileans. The importance of this legacy is reflected not only in the positive results achieved by the funds' investments, but also in the professionalism of their investment processes and the transparency of their operations.

These achievements are the consequence of the government's adherence to strict standards of portfolio management and general administration. These standards are, in turn, reflected in the very high regard in which the funds are held internationally.

## 6.1 BUILDING AN INSTITUTIONAL FRAMEWORK

Chile's structural balance rule has been in use since 2001 but, when President Bachelet took office, there was still no legal framework formally establishing norms on the saving and administration of the fiscal surpluses resulting from its application. One of her government's first measures as regards fiscal policy was the introduction of the Fiscal Responsibility Law in September 2006. This created the PRF and laid the foundations for the ESSF, establishing rules for the saving of these surpluses and an institutional framework for the management of the funds' assets.

Subsequently, a series of decrees issued by the Minister of Finance at the end of 2006 implemented some of this law's provisions. In the case of the institutional framework, these included the creation of the ESSF under Decree with Force of Law (DFL) N° 1 issued by the Ministry of Finance in 2006, the delegation of the funds' administration to the Central Bank of Chile in order to ensure an appropriate operational framework, and the creation of the Financial Committee in January 2007 and its formalization in May 2007.

In other words, the Fiscal Responsibility Law and these decrees are the basis of the institutional framework for the administration of Chile's sovereign wealth funds.

The creation of the Financial Committee and the appointment of its members, all with vast economic and financial experience, ensured access to independent advice of high technical quality during the process of designing the funds' investment policy. The regular meetings of this Committee also meant the development of a practice of disclosure of its deliberations and main recommendations, including an annual report that is presented to Congress and posted on the Ministry of Finance's website.

Along with this process of establishing norms for the funds' institutional framework, the Ministry of Finance strengthened its International Finance Division in order to: i) improve monitoring and supervision of the funds' investments; ii) reinforce support for the work of the Financial Committee; iii) increase the availability and quality of the information provided to the general public and specialized bodies; and iv) participate actively in international debate about best practices for SWFs and support the development of global guidelines.

Due to the positive performance of Chile's funds and the country's participation in global debate about management of these vehicles, some countries that are planning to set up their own SWFs have asked this specialized division of the Ministry of Finance for assistance and collaboration in their design. These include Mongolia which sent a delegation to Chile in 2009 to study the process of creation of the PRF and the ESSF.

As part of their work, the Financial Committee and ministry's International Finance Division prepare and publish press reports about the funds in order to make information available to the community. In addition, they write opinion columns and give interviews to local and international media. This confirms public interest in these vehicles and the legitimacy of official spokespersons as reliable sources of information.

In this way, the government's commitment went beyond setting up the funds and also included sustained efforts to provide them with a solid institutional framework and perfect their administration by formalizing supervision procedures and the design of their investment policies.

## 6.2 DEFINING A LONG-TERM INVESTMENT POLICY

Once the funds had been created, the Ministry of Finance focused on defining a long-term investment policy that would be consistent with their nature and purpose. At the beginning of 2007, their resources were invested conservatively in asset classes similar to those used by the CBC for international reserves, generating additional resources in the interim while a new investment policy was defined.

At the request of the Finance Minister, the Financial Committee subsequently reviewed studies and technical advice about their investment policy as well as successful international experiences in the management of public and pension assets. At the end of 2007, once it had completed this exhaustive analysis, it proceeded to propose a new investment policy for the funds.

At the beginning of 2008, the Finance Minister went on to define an investment policy that took into account the Committee's recommendation. By diversifying their portfolios in terms of both asset class and currencies, this sought to generate a higher medium and long-term return than the original policy, thereby increasing the country's expected wealth. This change was seen as a first step towards achieving an optimum allocation among different asset classes. For reasons of economy of scale, the benchmark allocation would initially be identical for both funds with a view to their subsequent differentiation in line with their different purposes. It was expected that this new investment policy would be implemented towards the end of 2008.

In view of the fact that this new investment policy would, as recommended by the Financial Committee, include equities and corporate bonds, the Minister decided to hire external managers. In 2008, with advice from an international consultancy firm and the supervision of the Financial Committee and Ministry of Finance staff, the CBC designed and managed a process for the selection of these external managers.

## 6.3 FUND MANAGEMENT DURING THE FINANCIAL CRISIS

Although the financial crisis had its origins in 2007 when the first effects of the subprime crisis became apparent, international investors did not then foresee that the deterioration in the mortgage sector would spread to the rest of the economy and have global consequences.

As from the beginning of 2008, in the face of the worsening economic situation, the Ministry of Finance increased the monitoring of the funds' investments and international markets in order to minimize risk and have at its disposal all the information needed to decide whether to implement the new diversification policy. However, it maintained its plan of work during most of the year, particularly as regards the selection of external managers. In response to the crisis, it reduced the portfolio allocated to bank deposits from 30% at the end of September 2008 to 18% by the end of the year, while actively monitoring the funds' exposure to this sector and avoiding investments in institutions that could have problems, preferring those with a lower relative level of risk.

After the collapse of Lehman Brothers in September 2008, financial market volatility reached levels without recent precedent and the impact on the real sector of the economy became evident. As a result, following a recommendation from the Financial Committee, the Finance Minister opted to postpone implementation of the new investment policy and to halt the process for the selection of external managers.

These decisions meant that, during the crisis, Chile maintained a very prudent investment policy, protecting the funds' resources, particularly at a time of great uncertainty about the depth and duration of the crisis.

From a macroeconomic point of view, the countercyclical measures taken by the government to reactivate the economy and the labor market, drawing principally on the ESSF in line with the purpose for which it had been created, allowed Chile to address the financial turbulence much better than many other emerging economies.

For Chilean public opinion, the handling of the crisis and the demonstration of the wisdom of a policy of fiscal saving validated the existence and importance of the country's sovereign wealth funds.

## 6.4 RETURNS

Between the funds' inception and the end of 2009, their investment policy generated income of US$2,797 million, equivalent to an annual return of 6.86%. This positive result reflected a prudent investment policy that allowed the funds to respond successfully to the financial crisis. The funds' returns were boosted by a rebalancing by many investors of their portfolios, moving from riskier positions to safer assets. As a result, the Chilean funds enjoyed excellent returns in 2008 which allowed them to record one the highest returns when compared to other SWFs that year, many of which have not yet recovered their losses *(Box 4)*.

## 6.5 TRANSPARENCY

The commitment of President Bachelet's government to developing and perfecting all aspects of the funds' management included the transparency of their decisions and access to information about their administration. In order to guarantee systematic public access to all relevant information about the ESSF and the PRF, the Ministry of Finance created a special website (www.hacienda.cl/fondos) where it posts the funds' monthly, quarterly and annual reports, the Financial Committee's recommendations and its annual report, the legal and institutional framework for the funds, press releases and other important information.

**BOX 4** International comparison of SWFS

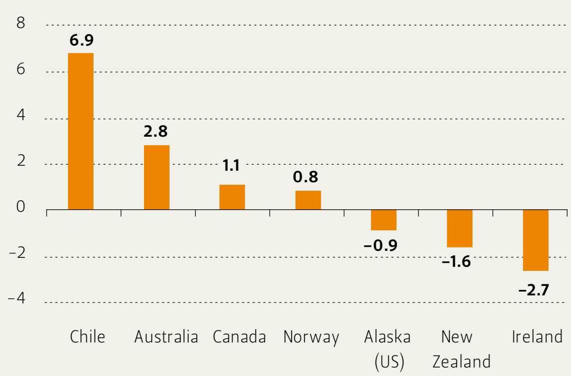
The investment polices of sovereign wealth funds reflect the purpose for which they were created. Many have aggressive policies, usually justified on the grounds of a long investment horizon. This allows them to tolerate the greater volatility of instruments like equities or the liquidity restrictions associated with alternative assets in a bid to achieve higher returns. Other funds' strategies are more conservative, due to their possible need for liquidity, a greater aversion to risk or shorter horizon, a lower target return or other restrictions.

Chile's SWFs have, since their inception, adopted a policy that is fairly conservative as compared to other countries' funds. Ireland's SWF, for example, held 72% of its portfolio as equities at the end of 2009 while the figure reached 60% in the case of Norway, 54% in Alaska (US), 53% in New Zealand, 49% in Canada and 40% in Australia. Moreover, some of these funds also held alternative assets which, for example, represented 29% of the portfolio of New Zealand's fund, 25% in the case of the Canadian and Alaskan funds, 19% in Australia and 6% in Ireland. By comparison, at the end of 2009, 100% of Chile's SWFs were invested in fixed-income assets.

As a result, the Chilean funds coped successfully with the global financial crisis, delivering returns that set them apart from other SWFS *(Figure R 4.1)*. At 6.9% between 2007 and end-2009, their returns were the highest internationally while Ireland, New Zealand and Alaska reported losses of 2.7%, 1.6% and 0.9%, respectively, and Norway, Canada and Australia obtained returns of 0.8%, 1.1% and 2.8%, respectively. It should be noted that the funds with the most aggressive strategies suffered important losses in 2008.

The excellent results of Chile's SWFS reflect their prudent investment policy, the dedicated support provided by a committee of top-level experts and the work of the CBC and the staff of the Ministry of Finance.

Figure R 4.1_ Average returns on SWFS, 2007-2009[(a)]
(%)




*Source: Ministry of Finance using public information about selected funds*

(a) For Canada, Ireland and Norway, the latest available information was used (September 2009). Australia's return was estimated using the information available for 2008 and 2009. To calculate these returns, published figures were converted into dollars using the variation in its value against the currency in which the returns were published.

As part of Chile's commitment to best international practices, the government decided to participate actively in international initiatives seeking to establish an operational framework for SWFS and promote their transparency. In particular, both the Ministry of Finance and the CBC played an active role in the International Working Group of Sovereign Wealth Funds (IWG-SWF), set up in May 2008 under the auspices of the International Monetary Fund (IMF). This initiative was created to draw up and promote a common set of voluntary principles for SWFs, based on existing practices, in order to help maintain the free flow of cross-border investment and the openness and stability of financial systems.

In 2008, the IWG-SWF held a number of meetings during which its members exchanged views about the development and definition of these voluntary principles. The key meeting in this process took place in Santiago, Chile in September 2008 when broad agreement was reached on a series of Generally Accepted Principles and Practices endorsed by the main countries with SWFS. This agreement is known internationally as the Santiago Principles.

In order to share valuable international experience in SWFs and the views of international organizations on their role in the global economy, the Ministry of Finance organized an international seminar "Sovereign Wealth Funds: Responsibility to Our Future" in 2008. This was attended by representatives of the world's main SWFs, of some governments and of international organizations such as the IMF and the Organisation for Economic Co-operation and Development (OECD). During this high-level meeting, countries from all continents, at different stages of development and with different forms of government and economic and social policies, exchanged views on the creation, management and future development of SWFS as vehicles that contribute to the stability of their economies and the welfare of their citizens.

In October 2009, the Ministry of Finance also participated actively in the International Forum of Sovereign Wealth Funds, created by the IWG-SWF *(Box 5)*. The government supported the principal agreements reached by this Forum in a bid to improve administration of SWFS and the framework within which they make investments. These agreements seek to foster a favorable investment environment for SWFS in countries to which they commit assets, to systematically evaluate the implementation of the Santiago Principles, to continue to draw attention to the importance of proper risk management, and to promote the development of the technical capabilities of the bodies responsible for managing these funds.

The Chilean government's efforts to administer its SWFS as transparently as possible were reflected in a ranking published by the Sovereign Wealth Fund Institute. In the third quarter of 2009, it

**BOX 5** Forum of Sovereign Wealth Funds

The Forum of Sovereign Wealth Funds was created in April 2009 by the International Working Group of Sovereign Wealth Funds (IWG-SWF). A voluntary group, it brings together representatives of the world's main SWFs for the purpose of sharing and exchanging views on issues of common interest, and facilitating an understanding of SWF activities and the Santiago Principles.

Under its terms of reference, the Forum is a platform for:

*a.* Exchanging ideas and views among SWFs and with other relevant parties. The issues it will cover include trends and developments related to SWF activities, risk management, investment regimes, market and institutional conditions for investment operations, and the funds' interactions with the economic and financial context;
*b.* Sharing views on the application of the Santiago Principles including operational and technical matters; and
*c.* Encouraging cooperation with investment recipient countries, international organizations and market agents to identify potential risks that could affect cross-border investments, and to foster a non-discriminatory, constructive and mutually beneficial investment environment.

The Forum's inaugural meeting, held in Baku, Azerbaijan in October 2009, was attended by representatives of 20 SWFs, of different countries in which they invest, the European Commission, the IMF, the OECD, the World Bank and the private sector. Discussions at this first meeting focused on issues that included the implications of macroeconomic policies for investment decisions and the context of the international crisis, changes and prospects in the investment regulatory regime of recipient countries, and the domestic policy role of SWFs during the crisis. Several members reported having initiated steps towards implementing the Santiago Principles while many other countries are also using them domestically as a tool for monitoring the use and investment of public money. Finally, in the Baku Statement, the Forum's members reaffirmed their commitment to continue contributing to a stable global financial system and the free flow of capital and investment.

The next meeting will take place in Sydney, Australia, in May 2010.

awarded Chile the maximum score in the Linaburg-Maduell Index through which it measures the transparency of the world's main SWFs *(Box 6)*. This followed the ESSF's 6th place for transparency and responsibility, out of 34 SWFs, in the ranking released by the Peterson Institute for International Economics in April 2008 which gave the fund 82 points out of a maximum of 100.

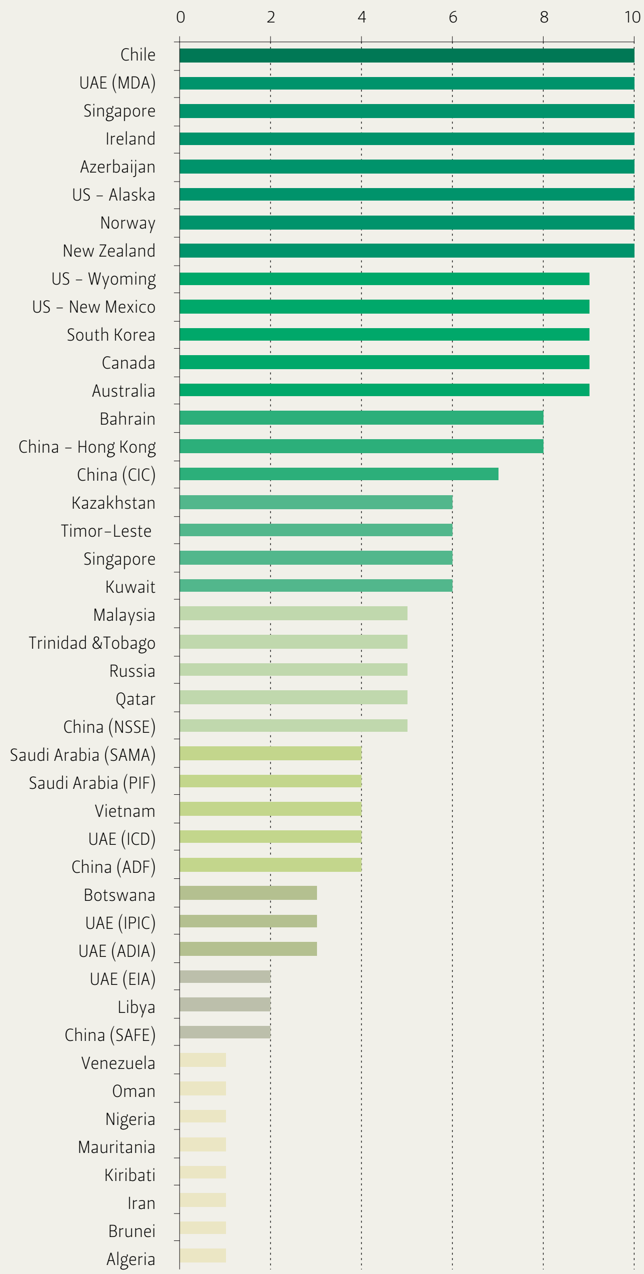
BOX 6 International ranking of SWF transparency, 2009

Many governments accumulated significant reserves during the commodity price boom and created sovereign wealth funds as a vehicle for managing these resources. Prior to the international crisis, they began to play an ever more important role in financial markets and, as a result, a number of international initiatives were launched to encourage their transparency and foster their role as long-term investors in stabilizing markets.

Chile has sought to increase the transparency of its funds from the moment of their inception and, as a result, they are among the most transparent in the world. This reflects the public nature of these resources and the obligation to report to their owners. Chile's efforts in this field have received international recognition from the U.S.-based Sovereign Wealth Fund Institute. Since the third quarter of 2009, Chile has shared top place in its Linaburg-Maduell Transparency Index, up from sixth place in the second quarter *(Figure R 6.1)*. With the maximum score awarded by this Index, it shares this top position with SWFs from Alaska, Azerbaijan, the United Arab Emirates, Ireland, Norway, New Zealand and Singapore.

This Index measures the availability and quality of information about a fund's institutional framework, history, investment policy, financial situation, portfolio composition and other indicators.

Figure R 6.1_ Linaburg-Maduell Transparency Index, 3rd quarter, 2009




*Source: Sovereign Wealth Fund Institute*

# APPENDICES

- Index of Tables, Figures and Boxes
- Glossary
- Abbreviations

# INDEX OF TABLES, FIGURES AND BOXS

## TABLES


| Nº | | pg. |
|---|---|---|
| 1 | Growth of economic activity | 25 |
| 2 | Strategic asset allocation | 32 |
| 3 | Maximum allocation by type of credit risk | 33 |
| 4 | Currency allocation | 33 |
| 5 | Benchmark indexes | 33 |
| 6 | PRF: Annual contributions | 35 |
| 7 | PRF: Net return in local currency and exchange-rate return | 36 |
| 8 | PRF: Net returns | 36 |
| 9 | ESSF: Contributions and withdrawals | 38 |
| 10 | ESSF: Net return in local currency and exchange-rate return | 38 |
| 11 | ESSF: Net returns | 39 |
| 12 | PRF and ESSF: Investment costs and securities lending income | 41 |
| 13 | PRF and ESSF: Credit risk exposure, December 31, 2009 | 44 |
| 14 | PRF and ESSF: Bank deposits, December 31, 2009 | 45 |
| 15 | PRF and ESSF: Portfolio and benchmark duration | 47 |
| 16 | Minimum requirements and limits by issuer and credit risk | 48 |
| 17 | PRF and ESSF: Annualized monthly volatility vs. benchmark | 51 |
| 18 | PRF and ESSF: Historic maximum and minimum returns | 51 |


## BOXES


| Nº | | pg |
|---|---|---|
| 1 | Withdrawals from the ESSF in 2009 | 15 |
| 2 | Methods used to calculate returns | 34 |
| 3 | Behavior of the asset classes of the sovereign wealth funds' investment policy since their inception | 40 |
| 4 | International comparison of SWFS | 57 |
| 5 | Forum of Sovereign Wealth Funds | 59 |
| 6 | International ranking of SWF transparency, 2009 | 60 |

## FIGURES


| Nº | | pg |
|---|---|---|
| 1 | PRF and ESSF: Market value | 10 |
| 2 | PRF and ESSF: Net financial earnings | 10 |
| 3 | PRF and ESSF: Net returns | 11 |
| 4 | PRF and ESSF: Composition of credit risk, December 31, 2009 | 11 |
| 5 | Structural and effective fiscal balance | 14 |
| R1 .1 | ESSF: Breakdown of withdrawals in 2009 | 15 |
| 6 | Fiscal savings rule | 16 |
| 7 | Inflation, 2007–2009 | 26 |
| 8 | Commodity price indexes, 2003–2009 | 27 |
| 9 | Exchange rates, 2009 | 27 |
| 10 | Monetary policy interest rates, 2008–2009 | 28 |
| 11 | LIBOR–Overnight indexed swap spread, 2007–2009 | 28 |
| 12 | Sovereign interest rates (6-month, 2-year and 10-year), 2007–2009 | 29 |
| 13 | Current investment policy vs. FC recommendation | 31 |
| 14 | PRF: Contributions and financial earnings, 2009 | 35 |
| 15 | PRF: Index of returns | 37 |
| 16 | PRF: Returns vs. benchmark | 37 |
| 17 | ESSF: Contributions and financial earnings, 2009 | 38 |
| 18 | ESSF: Index of returns | 39 |
| 19 | ESSF: Returns vs. benchmark | 39 |
| R3.1 | Asset classes in local currency and exchange rate | 40 |
| 20 | PRF and ESSF: Composition by asset class, December 31, 2009 | 42 |
| 21 | PRF and ESSF: Composition by currency, December 31, 2009 | 43 |
| 22 | PRF and ESSF: Composition by type of credit risk, December 31, 2009 | 43 |
| 23 | PRF and ESSF: Composition of sovereign bonds by issuer | 44 |
| R4.1 | Average returns on SWFS, 2007–2009 | 57 |
| R6.1 | Linaburg-Maduell Transparency Index, 3rd quarter, 2009 | 61 |

## GLOSSARY

**Agency**_ a government or private financial entity with explicit or implicit government backing.

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

**Basis points**_a basis point is equal to 0.01%.

**Benchmark**_ a market index representing an asset class invested passively; used to measure the performance of a fund manager.

**Bond**_a financial liability of an organization (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 specific dates.

**Bonos de Reconocimiento**_bonds issued by the *Instituto de Previsión Social* (ex INP) on account of contributions made by workers to the former pay-as-you-go pension system prior to joining the current AFP system.

**Commodities**_tangible goods such as oil, precious metals and/or foodstuffs that are traded on different international markets.

**Corporate fixed-income security**_a debt security issued by a private 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.

**Equity**_a security representing ownership of part of a company and the right to participate in its profits/losses.

**Exchange-rate return**_the return on a financial instrument that is generated by variations in exchange rates; this only exists when a portfolio is valued in a currency different from that in which its securities are denominated.

**External manager**_a financial entity responsible for investing assets according to guidelines established by their owner; an external manager is usually used when an investor lacks the capacity or necessary experience to invest in a particular asset class or wants to diversify management style.

**Financial Committee**_the body created by the Ministry of Finance's Supreme Decree N° 621 in 2007 to assist and advise the Finance Minister in analyzing and designing Chile's sovereign wealth funds' investment strategy.

**Fiscal agent**_an entity appointed by a government to act on its behalf or on behalf of one of its agencies in any type of financial transaction; the Central Bank of Chile (CBC) serves as the fiscal agent for Chile's sovereign wealth funds.

**Fiscal Responsibility Law**_a law, which came into force in the second half of 2006, establishing norms and the institutional framework for the accumulation and management of fiscal savings arising from the structural balance policy.

**Hedge fund**_an alternative investment that is generally structured in such a way as not to be subject to the regulation and restrictions that typically apply to other investment vehicles; many different types of hedge fund exist such as equity market neutral, convertible arbitrage, fixed-income arbitrage, distressed securities, merger arbitrage, etc.

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

International Working Group of Sovereign Wealth Funds (IWG-SWF)_the entity created under the auspices of the IMF to promote transparency and the development of institutional frameworks for sovereign wealth funds around the world.

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 rate charged on interbank borrowing.

Market value_the value at which financial instruments are traded.

Money market instrument_a short-term liquid asset, without a significant risk of changes in its value; these instruments are tradable and have a maturity of up to a year.

Multilateral_refers to international organizations such as the World Bank, the International Monetary Fund, the Inter-American Development Bank, etc.

Overnight indexed swap_a fixed-variable interest rate swap in which the variable part is paid according to an index linked to the overnight reference rate.

Private equity_a type of alternative asset in which an investor holds a stake in a non-traded company; these investments may be made directly or indirectly through a private equity fund.

Return_synonym of profitability or yield; the level of earnings produced by an investment, generally measured as a percentage.

Return in local currency_the return generated by a financial instrument in the currency in which it is denominated.

Risk rating_an indicator of the credit risk of a security, institution or country, issued 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 (nominal)_a bond issued by governments.

Sovereign bond (inflation-indexed)_a bond issued by governments whose value varies in line with an inflation index; in the US, these securities are known as Treasury Inflation-Protected Securities (TIPS).

**Spread**_the difference between the yield-to-maturity of two fixed-income securities; used to assess the comparative performance of different assets.

**Strategic asset allocation**_the percentage of a portfolio allocated to each asset class, defining a fund's long-term investment policy.

**Time-weighted rate of return (TWR)**_a measure of return that, unlike the IRR, excludes the effect of net cash flows; calculated as the geometric mean of daily returns excluding contributions and withdrawals.

**Tracking error**_the standard deviation of the difference between a portfolio's return and that of its benchmark; used to measure the active risk arising from active positions taken by a portfolio manager as compared to totally passive management as represented by the benchmark.

**Treasury bill**_a financial liability entered into by the US government with a maturity of less than a year which is sold at a discount on its face value.

**Value at risk**_an indicator used by the market to define the amount that could be lost over a given period of time with a given probability.

**Volatility**_a measure of an asset's risk, representing the variation shown by its price over a given period of time; values can fluctuate with market swings due to events such as variations in interest rates, unemployment and economic changes in general.

# ABBREVIATIONS

| | |
|---|---|
| Bps | Basis points |
| BEA | Bureau of Economic Affairs |
| BJ | Bank of Japan |
| CBC | Central Bank of Chile |
| COJ | Cabinet Office of Japan |
| ECB | European Central Bank |
| ESSF | Economic and Social Stabilization Fund |
| EUR | Euro |
| FC | Financial Committee |
| Fed | US Federal Reserve |
| GDP | Gross domestic product |
| IMF | International Monetary Fund |
| IRR | Internal rate of return |
| IWG-SWF | International Working Group of Sovereign Wealth Funds |
| JPM | J.P. Morgan |
| JPY | Japanese yen |
| LIBID | London Interbank Bid Rate |
| LIBOR | London Interbank Offered Rate |
| PRF | Pension Reserve Fund |
| SWF | Sovereign wealth fund |
| TE | Tracking error |
| TWR | Time-weighted rate of return |
| UF | Unidad de Fomento (an inflation-indexed currency unit) |
| US | United States |
| USD | US dollar |
| US$ | US dollar |
| VaR | Value at risk |

**MINISTRY OF FINANCE**

TEATINOS 120 - 12 FLOOR

SANTIAGO DE CHILE

POSTAL CODE_8340487

TELEPHONE_(56.2) 473 2000

www.hacienda.cl

GOBIERNO DE CHILE
MINISTERIO DE HACIENDA