ANNUAL REPORT
FINANCIAL COMMITTEE

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

2022

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April 2023, Santiago, Chile

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Preface

As stipulated in the Fiscal Responsibility Law of 2006, the Financial Committee was created in 2007 to advise the Finance Minister on the investment of Chile's two Sovereign Wealth Funds: The Economic and Social Stabilization Fund (ESSF) and the Pension Reserve Fund (PRF). The Financial Committee is an independent external advisory board, whose members have a vast experience in economic and financial areas. The Committee meets periodically to analyze matters relating to the investment of the funds. This Report—the sixteenth prepared by the Committee—describes its work and activities in 2022.

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

The Committee

Executive summary

At the close of 2022, the market value of the funds was US$ 13,989 million, of which US$ 7,514 million was in the Economic and Social Stabilization Fund (ESSF) and US$ 6,475 million was in the Pension Reserve Fund (PRF). Based on the guidelines established in the respective investment strategies and the unusual behavior of the international financial markets, the net return in dollars in the year was -12.37% for the ESSF and -16.88% for the PRF,[1] while in pesos it was -11.41% and -15.97%, respectively. This is in line with what happened in international equity and fixed income markets, which experienced declines in their returns of close to -18%, the worst for equities since the 2008 global financial crisis and for US sovereign bonds since 1928. In the case of the ESSF, the strategic asset allocation was 96.3% in sovereign bills and bonds and 3.7% in inflation-linked sovereign bonds. For the PRF, the strategic asset allocation was 34% in sovereign and government-related bonds, 8% in inflation-linked sovereign bonds, 6% in U.S. agency MBS, 13% in corporate bonds, 8% in high-yield bonds, and 31% in equities.

1 The returns published in this report are based on the time-weighted rate of return (TWR) methodology, unless the use of the internal rate of return (IRR) is explicitly identified. Returns for periods greater than one year are annualized. For periods of less than one year, the return corresponds to the change during the period. Net returns reported are net of management fees.

Members of the Financial Committee

President Juan Andrés Fontaine

Mr. Fontaine holds a degree in Business Administration from the Universidad Católica de Chile and a Master's degree in Economics from the University of Chicago, where he also undertook doctoral studies. He has previously served as Minister of Economy, Minister of Public Works, Research Director at the Central Bank of Chile, and board member for various companies. He was a Professor at the Universidad Católica de Chile and the Universidad de Chile, as well as a Visiting Professor at the University of California, Los Angeles (UCLA). He currently works as an economic and financial consultant. Mr. Fontaine joined the Committee in August 2021.

Vice President Macarena Pérez Ojeda

Ms. Pérez holds a degree in Business Administration from the Universidad Católica de Chile. She is currently a partner of Econsult, where she works as an investment advisor for families, individuals, and institutions. She is also a board member for Bbosch, Fundación Mujer Impacta, and Fundación la Fuente; a member of the development council of the Universidad Finnis Terrae, and a mentor for Women in Finance. Her previous positions include CEO of IM Trust AGF, Institutional Distribution Manager at IM Trust, Partner and CFO of Credicorp Capital, and board member of Empresas Volcán SA and Credicorp Capital. She joined the Committee in August 2021.

Member Pablo Castañeda Navarrete

Mr. Castañeda holds a degree in Business Administration from the University of Chile and a PhD in Economics from Boston University. He was Vice-Dean of the Business School of the Adolfo Ibáñez University, Senior Economist of the Superintendence of Pensions, and Advisor to the Ministry of Finance. He has been a Professor at the University of Chile. He is currently a professor of Finance at the Business School of the Adolfo Ibáñez University and carries out economic and financial consulting work. He joined the Committee in August 2022.

Member Nicolás Eyzaguirre Guzmán

Mr. Eyzaguirre holds a degree in Business Administration and a Master's degree in Economics from the Universidad de Chile, and a Master's degree in Economics from Harvard University, where he also undertook doctoral studies. He previously served as Minister of Finance, Secretary-General of the Presidency, Minister of Education, Research Manager and Director at the Central Bank of Chile, Executive Director and Director of the Western Hemisphere Department at the International Monetary Fund, Chairman of the Chilean National Innovation Council for Competitiveness, Chairman of the Canal 13 corporate group, and Professor at the Universidad de Chile, Universidad de Santiago de Chile, Harvard University, and other universities. He currently works as a consultant. He joined the Committee in August 2021.

Member Jennifer Soto Urra

Ms. Soto holds a degree in Business Administration and Master in Finance from the University of Chile. She currently serves as Director of different companies, including Banco Bice, Bicecorp, Bicevida, Paz Corp, and Fundación Camino. She is a lecturer on the Master's Degree in Finance at the University of Chile and the Executive Master's Degree in Finance and Investments at the ESE Business School. In addition, she is a member of the Circle of Directors and Women Corporate Directors. Previously, she was Fixed Income Manager at Bice Vida Compañía de Seguros. She joined the Committee in August 2022.

Member Marcela Valenzuela Bravo

Ms. Valenzuela holds a degree in Industrial Civil Engineer and Master of Science in Engineering from the Pontificia Universidad Católica de Chile, PhD in Finance from the London School of Economics and Political Science. She is currently a professor at the School of Management of the Pontificia Universidad Católica de Chile, an Associate Researcher at the Center for Systemic Risk at the London School of Economics and Political Science and an Associate Researcher at the Millennium Institute on Market Imperfections and Public Policies. In addition, she was a professor in the Department of Industrial Engineering at the University of Chile and a researcher at the Institute of Infrastructure and Environment of the School of Engineering of the University of Edinburgh. He joined the Committee in August 2022.

CHAPTER 1

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

A. Fiscal policy

Since 2001, Chile's fiscal policy is guided by a structural balance rule or, more precisely, a cyclically adjusted balance rule,[2] which mitigates the effect on public finances of fluctuations in economic activity and the copper price. This implies saving in boom times and being able to use those savings during periods of lower economic activity. On the other hand, as of 2022,[3] fiscal policy is anchored to a medium-term debt level to provide predictability to debt dynamics in that term.[4] Based on the above, the aim is to achieve fiscal sustainability. As a result, the fiscal rule has a stabilizing effect on public finances and the economic cycle and improves access to financing for both the public and private sectors.

B. Objectives and rules on the use of the funds

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

Objectives

The funds created by the Fiscal Responsibility Law (henceforth, the Sovereign Wealth Funds) have specific objectives. In the case of the ESSF, the objectives are to accumulate resources to finance potential fiscal deficits and to amortize public debt, thereby contributing to cushioning fiscal spending against fluctuations in the world economy and the volatility of revenues from taxes and copper. The ESSF resources can also be used to finance the PRF if necessary. In the case of the PRF, the objective is to complement the financing of fiscal obligations derived from the Universal Guaranteed Pension, the basic solidarity disability pension and the solidarity pension contribution for disability.[5] The PRF thus complements the financing of future pension-related contingencies.

Rules on fund contributions

The rules on establishing the funds and accumulating resources therein are established by law (see Figure 1).[6]

The PRF is increased each year by a minimum of 0.2% of the previous year's GDP. If the effective fiscal surplus exceeds 0.2% of GDP, the PRF receives a contribution equivalent to the surplus, up to 0.5% of GDP. PRF contributions only have to be made until the fund reaches UF 900 million (Unidad de Fomento, UF).[7]

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2 The structural balance rule (or cyclically adjusted balance rule) has undergone some changes since it was first implemented. For a detailed discussion of its design, modifications, application and results, see Marcel, Tokman, Valdés and Benavides (2001); García, García and Piedrabuena (2005); Rodríguez, Tokman, and Vega (2006); Velasco, Arenas, Rodríguez, Jorratt and Gamboni (2010); Comité Asesor para el diseño de una política fiscal de balance estructural de segunda generación para Chile (2011); Larraín, Costa, Cerda, Villena and Tomaselli (2011); Schmidt Hebbel (2012); Velasco and Parrado (2012) and the Budget Office (2013, 2014, 2015, 2016, 2017, 2018, 2019, 2020, and 2021).

3 Decree 755, of 2022, which establishes the bases of fiscal policy in accordance with the provisions of Article 1 of Law N° 20,128 on fiscal responsibility.

4 The current administration established that the structural balance rule is anchored to a gross debt level of 45% of the Gross Domestic Product (GDP).

5 Law No. 21,419, which created the Universal Guaranteed Pension, modified the objective of the PRF in the Fiscal Responsibility Law in January 2022. Prior to this reform, the objective of the fund was to support the financing of the fiscal obligations arising from the 2008 Pension Reform, specifically, basic solidarity pensions for old age and disability, as well as solidarity pension contributions for old age and disability.

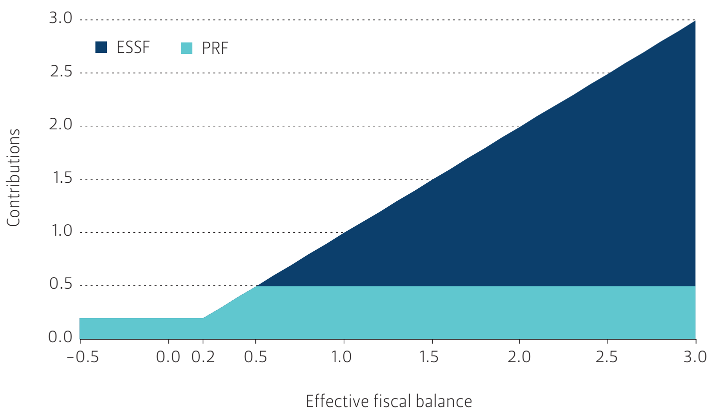
6 For the PRF, the Fiscal Responsibility Law; for the ESSF, Statutory Decree (DFL) N° 1, issued by the Ministry of Finance in 2006.

7 Within the framework of the health emergency, Law No. 21,225, which established measures to support families and micro, small and medium-sized enterprises due to the impact of the COVID-19 disease, in its fourth article suspended contributions to the PRF in the years 2020 and 2021.

The yearly contribution to the ESSF corresponds to the balance of the effective fiscal surplus (if positive) after subtracting the PRF contribution, less public debt pays downs and any advance contributions to the fund.[8] Additionally the fund can receive extraordinary contributions from the sale of assets or debt issue.

FIGURE 1

Fiscal savings rule
(percent of GDP)



SOURCE: Ministry of Finance of Chile

Rules on the use of the funds

As of 2022, the amount of PRF resources that can be used annually should not exceed 0.1% of the previous year's Gross Domestic Product.[9]

The PRF will be extinguished by operation of law if, as of 2021, the transfers to be made in a calendar year do not exceed five percent of the sum of the expenditure on the Universal Guaranteed Pension, basic solidarity disability pension and solidarity pension contribution for disability of the Budget Law of each year.[10] When the PRF is eliminated, the remaining balance will be transferred to the ESSF.

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

9 Law N° 21,419, which created the Universal Guaranteed Pension, modified in January 2022 the PRF withdrawal rule established in the Fiscal Responsibility Law. Prior to this reform, the amount of PRF resources that could be used annually should not exceed one-third of the difference between the respective year's expenditure on pension obligations to the Fisco and the inflation-adjusted pension expenditure in 2008. Notwithstanding the foregoing, within the framework of the pandemic, Article 19 of Law No. 21,227 established that the amount of resources to be withdrawn from the PRF during the years 2020 and 2021 would correspond to the total difference between the social security obligations expenditure for the respective year and the total expenditure made for this concept in 2008, adjusted for inflation.

10 Law N° 21,419, which creates the Universal Guaranteed Pension, modified in January 2022 the PRF term rule established in the Fiscal Responsibility Law. Prior to this reform, the PRF was automatically extinguished if, as of 2021, the transfers to be made in a calendar year did not exceed five percent of the sum of the expenditure on the basic solidarity old-age pension, the basic solidarity disability pension, the old-age solidarity pension contribution and the disability solidarity pension contribution of the Budget Law of each year.

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

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

It should be noted that the current administration has presented in Congress some indications to the Fiscal Responsibility Law that could impact the ESSF and PRF (see Box 1).

BOX 1: Amendments to the Fiscal Responsibility Law that could impact the rules of contributions, withdrawals and termination in sovereign wealth funds

Some amendments that could impact funding and that were sent to Congress in August 2022 are presented below:

PRF

- Contribution rule: The obligation to always pay an annual contribution of 0.2% of the GDP of the previous year is eliminated.
- PRF Term Rule: If the amendment submitted were approved, the fund would be extinguished by operation of law if, fifteen years having elapsed from the year of entry into force of the Fiscal Responsibility Law,[1] the total value of the assets of the PRF valued as of July of the respective year does not exceed 0.5% of the Gross Domestic Product of the previous year.[2]

ESSF

- Objective of the fund: It is established that the main objective of the fund will be the stability of public finances and the provision of public goods and services over time, in the face of abrupt changes in the economic cycle and extraordinary events.
- Contribution Rule: The Natural Disaster Fund (hereinafter, Foden), created from the amendments of the Fiscal Responsibility Law, will receive a contribution equivalent to the effective surplus after deducting the contributions to be made to the PRF, with a limit of 0.1% of the Gross Domestic Product of the previous year. If the market value of the Foden at the end of the first quarter of each year is equal to or greater than the equivalent of 0.5% of the GDP of the previous year, this contribution should not be made. In other words, the ESSF will receive the balance of the effective surplus after contributing to the PRF and Foden. In addition, it is added the indication that if the effective surplus is lower than the structural balance, the contribution to the ESSF will be optional.
- Withdrawals: The amendments establish that the higher fiscal expenditure associated with the Automatic Emergency Family Income in the Event of Confinement[3] may be financed from the ESSF, without prejudice to the other resources that are allocated for these purposes.

1 As of 2021.

2 Currently, the PRF termination rule, modified by Law No. 21,419, which creates the Universal Guaranteed Pension, establishes that the fund will be extinguished by operation of law if, fifteen years after the year of entry into force of the Fiscal Responsibility Law, the transfers to be made in a calendar year do not exceed five percent five per cent of the sum of the expenditure on the Universal Guaranteed Pension, the basic solidarity disability pension and the solidarity pension contribution for disability of the Budget Law of that year.

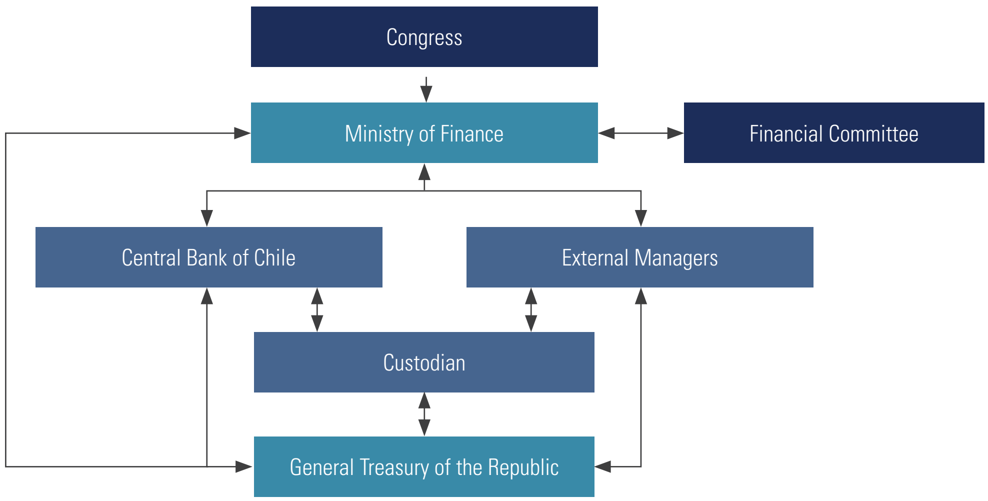
3 In the amendments to the Fiscal Responsibility Law, the Automatic Emergency Family Income in Case of Confinement is created, which corresponds to a monetary and extraordinary benefit in the event that all or part of the national territory is threatened by an emergency (including pandemics) that poses a serious risk to the health of the inhabitants, causes a significant decrease in household income, and mobility restrictions are in place.

C. Institutional framework

The legal framework establishes a clear division of roles and responsibilities in order to ensure accountability and operational independence in the management of the funds. This section provides a brief description of the roles of each of the bodies involved in fund management (see Figure 2).

FIGURE 2

Institutional framework for Chile's Sovereign Wealth Funds



SOURCE: Ministry of Finance of Chile

Ministry of Finance and dependent bodies

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

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

Central Bank of Chile

Through Decree N° 1,383 of 2006 ("Agency Decree"), modified by Decree N° 1,618 of 2012, the Ministry appointed the Central Bank of Chile (CBC) to the role of fiscal agent, with the following responsibilities: (i) manage portfolios comprising instruments that are eligible for investing the Bank's International Reserves; (ii) delegate the management of these portfolios to external managers; (iii) select external portfolio managers; and (iv) manage the custodian, among other duties. In carrying out these tasks, the CBC must follow the guidelines issued by the Finance Minister.

External Managers

The external managers are international companies that have been contracted to manage a share of the sovereign wealth fund investments. These firms are chosen based on a selection process carried out by the CBC, with the support of international consultants and Finance Ministry personnel.

In most cases, the Ministry is responsible for supervising the external managers, with support from the Treasury; however, the CBC supervises external managers that invest in instruments that are eligible for its International Reserves.

Table 1 lists the external portfolio managers that were under contract at year-end 2022.

TABLE 1

Sovereign wealth fund external managers, 31 December 2022

External Manager	Supervision	PRF
BlackRock Institutional Trust Company, N.A. (BlackRock)	Ministry/GTR	High-yield bonds
BNP Paribas Asset Management (BNP Paribas)	CBC	U.S. agency MBS
Mellon Investments Corporation (Mellon)	Ministry/GTR	Equities
Nomura Asset Management (Nomura)	Ministry/GTR	High-yield bonds
UBS Asset Management (Americas) Inc. (UBS)	Ministry/GTR	Equities
		Corporate bonds
Western Asset Management Company (Western Asset)	CBC	U.S. agency MBS

SOURCE: Ministry of Finance of Chile

It should be noted that based on the recommendations of the Finance Committee, in December 2022, the contract with Credit Suisse was terminated and the resources managed by that company were transferred to UBS on 13 December 2022.

Financial Committee

The Fiscal Responsibility Law stipulates that the Ministry of Finance must establish an Advisory Committee to give advice to the Finance Minister on the Sovereign Wealth Funds (henceforth, the Financial Committee). This Committee monitors the investment of the funds' resources and advises the Minister on the definition of the investment policies consistent with the funds' objectives. In compliance with these provisions, on 23 December 2006, the Finance Minister announced the establishment of both the Sovereign Wealth Funds and the Financial Committee. The Committee was then officially created through Decree N° 621, issued by the Ministry of Finance in 2007. In accordance with that decree, the Committee must be made up of six members who have experience in investment portfolio management, have held an executive position in a financial institution or have held or currently hold an academic post. The six Committee members are appointed for two years, with half the seats being renewed each year. The current and former members of the Financial Committee are presented in Appendix 1. The Committee's president receives a fee per session of 25.5 UTMs (Unidades Tributarias Mensuales, UTM), with an annual cap of 127.5 UTMs. The remaining members receive a fee of 17 UTMs per session, with an annual cap of 85 UTMs. The Committee must meet at least once every six months, but in practice it has met at least five times a year. A summary of the Committee's meetings during 2022 is presented in Appendix 2.

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

- To advise the Finance Minister, when requested, on key issues related to the funds' investment policy, such as the distribution of investments by asset class (asset allocation), the incorporation of new investment alternatives, the specification of portfolio benchmarks (see Box 2), the permissible range of deviation from the asset allocation and the limits on the funds' investment possibilities.
- To submit recommendations to the Finance Minister, when requested, on custody and investment instructions and on the tender and selection processes for the management of the funds' portfolios.
- To express an opinion at the request of the Finance Minister about the structure and content of the annual reports on the funds' portfolio management that are presented to the Ministry of Finance by the institution(s) responsible for their management or custody and, on the basis of these reports, to express an opinion about the funds' management and, particularly, its consistency with their investment policies.
- To express an opinion about the structure and content of the reports on the funds prepared quarterly by the Ministry of Finance.
- To advise the Finance Minister, when requested, on any matter related to the funds' investment.
- To express its views and recommendations regarding other matters related to the funds' investment policies, taking into account the principles, objectives, and rules that govern the funds.

To promote transparency, the Financial Committee decided that the decree regulating its activities, the minutes of its meetings, and the corresponding press releases should be publicly disclosed. The Ministry of Finance's website thus includes a special section containing all information on these issues.[11]

11 https://www.hacienda.cl/english/work-areas/international-finance/sovereign-wealth-funds.

BOX 2: Portfolio benchmarks

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

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

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

D. Investment policy

Economic and Social Stabilization Fund

The main elements of the ESSF investment policy are presented below.

Investment objectives: Consistent with the ESSF objectives, the investment policy aims to maximize the fund's accumulated value in order to partially cover cyclical reductions in fiscal revenues while maintaining a low level of risk. Its aversion to risk is reflected in the choice of an investment portfolio with a high level of liquidity and low credit risk and volatility, thereby ensuring the availability of the resources to cover fiscal deficits and avoiding significant losses in the fund's value.[12]

Strategic asset allocation: The ESSF investment policy stipulates a strategic asset allocation of 96.3% in sovereign bills and bonds and 3.7% in inflation-linked sovereign bonds. The fixed-income portfolio has a currency allocation of 43.1% in USD, 27.1% in EUR, 21.6% in JPY, and 8.2% in CHF, expressed as a percentage of the total portfolio.

Portfolio benchmarks: A benchmark has been defined for each component of the strategic asset allocation, using a representative market index (see Table 2).

12 This objective is consistent with the investment policy in force at the date of publication of this report. However, the Minister of Finance provided the Finance Committee with new guidelines on the purpose of the ESSF that could modify this investment objective. For more information on the objective of the ESSF, see Box 1 and Chapter 3, Section A.

TABLE 2

Benchmarks ESSF
(percent of portfolio)

Asset class		Percent of portfolio	Benchmark
1. Treasury bills and sovereign bonds	1.1. Treasury bills	11.9	ICE BofA US Treasury Bill Index
		14.2	ICE BofA Germany Treasury Bill Index
		10.8	ICE BofA Japan Treasury Bill Index
		36.9	**Subtotal Treasury bills**
	1.2. Sovereign bonds	28.6	Bloomberg Global Aggregate -Treasuries: U.S. 7-10 Yrs
		11.8	Bloomberg Global Aggregate - Treasuries: Germany 7-10 Yrs
		10.8	Bloomberg Global Aggregate -Treasuries: Japan 7-10 Yrs
		8.2	Bloomberg Global Aggregate -Treasuries: Switzerland 5-10 Yrs
		59.4	**Subtotal Sovereign bonds**
		96.3	**Subtotal Treasury bills and Sovereign bonds**
2. Inflation-linked sovereign bonds		2.6	Bloomberg Global Inflation-Linked: U.S. TIPS 1-10 Yrs
		1.1	Bloomberg Global Inflation-Linked: Germany 1-10 Yrs
		3.7	**Subtotal inflation-linked sovereign bonds**

SOURCE: Ministry of Finance of Chile

Management: The ESSF is managed in its entirely by the CBC.

Ex ante tracking error:[13] The ex-ante tracking error is capped at 50 basis points for the fixed-income portfolio.

Eligible currencies and issuers: Only currencies in the corresponding benchmark are eligible for investment. In the case of treasury bills, the eligible issuers are the United States, Germany, and Japan; for sovereign bonds, the United States, Germany, Japan, and Switzerland; and for inflation-linked bonds, the United States and Germany. Other eligible issuers include supranational institutions, agencies, and entities with an explicit government guarantee according to the eligibility criteria used by the CBC for investing its International Reserves and in conformance with the pre-established limits defined in the investment guidelines.

Leveraging and the use of derivatives: Leveraging is not allowed.[14] Regarding the use of derivatives, the use of forwards or swaps is allowed only for currency hedging, as well as futures for hedging purposes or that allow exposure to be obtained apart from the benchmark. The aggregate nominal amounts of futures, forwards and swaps may not exceed 10% of the portfolio.

Rebalancing policy: There is currently no defined rebalancing policy as the fund is managed entirely by the CBC and follows a passive mandate.

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

14 Leveraging is the purchase of assets through debt.

Investment guidelines: The investment guidelines, which are published in Spanish and English and available online at the Ministry of Finance website,[15] provide additional information on the ESSF investment policy, such as special restrictions on investment in specific countries and other relevant limits, as well as other aspects of portfolio management.

Pension Reserve Fund

The Minister of Finance, based on the recommendations of the Finance Committee, divided the PRF into two investment portfolios in 2020: the Short-Term Investment Portfolio (STIP) and the Long-Term Investment Portfolio (LTIP).[16] In the first, the STIP, created in October of that year, most of the resources that were disbursed from the fund until June 2021 were kept there. Since then, this portfolio has remained without resources. In the other, the LTIP, resources with a medium- to long-term investment horizon are invested.[17] The LTIP investment policy is described below:[18]

Long-term investment portfolio

Investment objective: The investment objective is to earn an expected annualized return in pesos of at least 2% over Chilean inflation in a ten-year period, with a probability of at least 60%. The risk tolerance establishes that the probability that the fund's real return will be less than –12%, expressed in pesos, must not be over 5% in any given year.[19]

Strategic asset allocation: The portfolio allocation is 31% equities, 34% sovereign and government-related bonds, 13% corporate bonds, 8% high-yield bonds, 6% U.S. agency MBSs, and 8% inflation-linked bonds.[20] In contrast to the ESSF, which has a fixed investment currency allocation, in the PRF the currency composition derives from the share of each currency in the benchmarks (see Box 3).

15 https://www.hacienda.cl/english/work-areas/international-finance/sovereign-wealth-funds/economic-and-social-stabilization-fund/investment-policy.

16 The Finance Committee recommended in 2020 to separate the PRF portfolio into two sub-portfolios. In the first, the STIP, the disbursements expected in 2020 and 2021 would be maintained, and in the other, the LTIP, the resources that would not be withdrawn in the short term would be maintained to invest them with a medium- to long-term investment horizon. For more information on this amendment, see Section B, Chapter 3, of the 2020 Financial Committee Report.

17 For more information on this amendment, see Section B, Chapter 3, of the 2020 Financial Committee Report.

18 For more information on the STIP's investment policy, see Section D, Chapter 1, of the 2021 Financial Committee Report.

19 This objective was defined in the investment policy approved by the Minister of Finance in late 2017 but it must be revised considering the Minister's decision in 2020 to stop convergence to the strategic asset allocation of said policy (for more information see Chapter 3, Section B of the Annual Report of the Financial Committee 2020).

20 The Finance Minister decided to maintain this strategic asset allocation that was in place for the fund in January 2020 when the decision was made to stop convergence to the investment policy defined in late 2017.

BOX 3: Currency composition of the ESSF and PRF

In the ESSF, the currency composition defined for the fixed-income portfolio has been stable since August 2013, when the investment policy was modified based on recommendations by the Financial Committee. As of October 2021, the fund is only invested in fixed-income securities.[1] As shown in table R3.1, the ESSF is mainly invested in what are considered reserve currencies, which tend to appreciate in the event of an international crisis that could trigger a withdrawal from this fund. Furthermore, the table also shows that the currency composition of the ESSF is in line with the benchmark, which is consistent with a passive management strategy.

TABLE R3.1

Currencies composition in the ESSF as of 31 December 2022
(percent of portfolio)

Currency	ESSF	Benchmark
USD	43.1	43.1
EUR	27.0	27.1
JPY	21.6	21.6
CHF	8.2	8.2
Total	**100.0**	**100.0**

SOURCE: Ministry of Finance of Chile

The PRF, in turn, has a currency allocation that tracks the relative share of each currency in the different benchmarks used for the fund. Table R3.2 presents the currency composition at year-end 2022. As the table shows, the number of currencies is much greater than in the ESSF due to the use of global indexes in almost all the asset classes.[2] Additionally, the PRF portfolio is fairly closed aligned with the benchmark currency allocation,[3] which is also consistent with the passive strategy implemented in almost all the asset classes.

1 From August 2013 to September 2021, a small share of the ESSF was invested in global stocks, and the currency composition of this equity portfolio largely depended on the relative share of each stock in the portfolio. Specifically, starting in mid-August 2013, 7.5% of the ESSF was invested in equities; this share was reduced to 5% in April 2020 and then to 0% in October 2021.

2 U.S. agency MBS is the only PRF asset class that is invested solely in dollars.

3 The difference between the PRF and the benchmark in terms of the USD share reflects the fact that in the equity portfolio, ETFs are used for some restricted markets where it was decided not to invest locally due to the associated operating costs or greater complexity (for example, Taiwan, India, etc.). Because these ETFs are traded in the United States, they are considered to be invested in USD, although from the perspective of the benchmark, those restricted markets are reported in the "Others" currency category.

TABLE R3.2

Currencies composition in the PRF as of December 31, 2022
(percent of portfolio)

Currency	PRF	Benchmark
USD	55.1	54.0
EUR	16.7	16.4
JPY	8.3	8.3
GBP	5.5	5.5
CNY	4.5	4.5
CAD	2.6	2.6
AUD	1.4	1.4
HKD	1.1	1.1
KRW	1.0	1.0
CHF	0.9	0.9
SEK	0.4	0.4
Others	2.6	3.8
Total	**100**	**100**

SOURCE: Ministry of Finance of Chile

Benchmarks: A benchmark has been established for each component of the strategic asset allocation, using a representative market index (See Table 3).

TABLE 3

Benchmarks – LTIP
(percent of LTIP)

Asset class	Percent of LTIP	Benchmarks
Sovereign and government-related bonds[(a)]	34	Bloomberg Global Aggregate: Treasury Bond Index (unhedged)
		Bloomberg Global Aggregate: Government-Related (unhedged)
Inflation-linked sovereign bonds	8	Bloomberg Global Inflation-Linked Index (unhedged)
Corporate bonds	13	Bloomberg Global Aggregate: Corporates Index (unhedged)
U.S. agency MBS	6	Bloomberg US Mortgage-Backed Securities (MBS) Index
High yield bonds	8	Barclays Global High Yield Index (unhedged)
Equities	31	MSCI All Country World Index ex Chile (unhedged, with reinvested dividends)

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

SOURCE: Ministry of Finance of Chile

Management: The sovereign and government-related bonds portfolio and the inflation-linked bond portfolio are managed directly by the CBC. The equity, corporate bond, high yield, and agency U.S. agency MBS portfolios are managed by external portfolio managers selected by the CBC with support from the Ministry of Finance and a consulting firm RVK, Inc. (RVK).

Ex ante tracking error*:* The ex-ante tracking error has been set at 50 basis points for the aggregate portfolio of sovereign and government-related bonds and inflation-linked sovereign bonds, 60 basis points for the equity portfolio, 50 basis points for the corporate bond portfolio, and 150 basis points for the high yield bond portfolio. For the U.S. agency MBS portfolio, the monthly average cannot exceed 20 basis points, and the maximum daily value cannot exceed 30 basis points.

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

- U.S. agency MBS: debt instruments issued or guaranteed by the U.S. government or by MBS issuing agencies, interest rate futures, and TBAs.[21]
- Corporate bonds: market-traded futures and reopened issues that are comparable to the instruments included in the benchmark.
- High yield bonds: futures, reopened issues that are comparable to the instruments included in the benchmark, sovereign instruments, and investment-grade bonds that leave the benchmark.
- Equities: ETFs, mutual funds, American Depositary Receipts (ADRs), Global Depositary Receipts (GDRs), and futures.

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

- Aggregate portfolio of sovereign and government-related bonds, and inflation-linked sovereign bonds: The use of forwards or swaps is allowed only for currency hedging, as well as futures for hedging purposes or that allow obtaining exposure to part of the benchmark. The nominal value of forwards or swaps contracted with a particular eligible counterparty may not exceed 1% of the market value of the portfolio if it has a risk rating of at least AA- and 0.5% if its risk rating is between A- and A+. The aggregate nominal amounts of futures, forwards and swaps may not exceed 10% of the portfolio.
- U.S. agency MBS: Exposure to TBAs cannot exceed 30% of the portfolio. The nominal amounts of U.S. interest rate futures valued at market price and expressed in absolute value cannot exceed 10% of the market value of the portfolio.

21 To be announced (TBA): MBS forwards. The term TBA is derived from the fact that the MBS to be delivered in the future to fulfill the transaction is not designated at the time the transaction is made. Otherwise, it is announced 48 hours before the established settlement date.

- Equities, corporate bond, and high yield bond portfolios: Each manager can only contract forwards or swaps for the purpose of currency hedging; and futures—equities or fixed-income, as indicated—for hedging purposes or to gain exposure to part of the benchmark. The nominal value of the forwards or swaps that are contracted by a given manager with a given eligible counterparty cannot exceed 3% of the market value of the portfolio under management. The aggregate nominal amount of futures, forwards, and swaps cannot exceed 10% of the portfolio of any given manager.

Investment guidelines: The investment guidelines for both, the STIP and LTIP, which are published on the Ministry of Finance's website,[22] provide additional information on the PRF investment policy, including details on the admissible instruments and other key limitations, as well as other issues related to fund management.

22 https://www.hacienda.cl/english/work-areas/international-finance/sovereign-wealth-funds/pension-reserve-fund/investment-policy.

CHAPTER 2

State of the Sovereign Wealth Funds

A. Analysis of the international economy

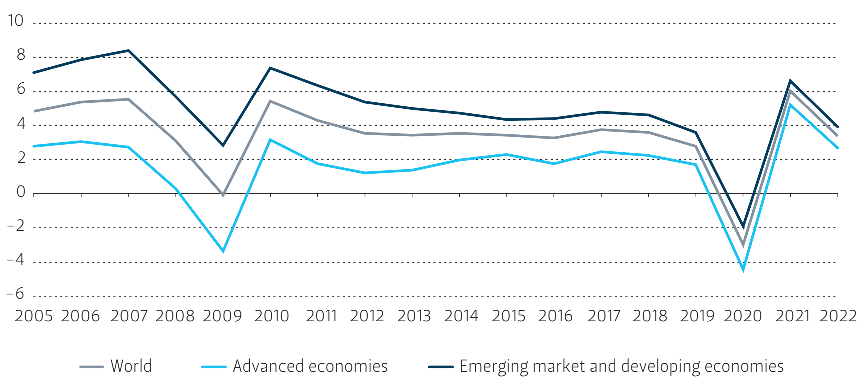
To better understand the recent performance of the sovereign wealth funds, this section reviews the main events and trends in the world economy in 2022.

The year was marked by the increase in inflation, the tightening of monetary conditions, the slowdown in China's economy as a result of its "Zero Covid" policy, the Russian invasion of Ukraine and its implications on fuel and food prices. In this scenario, the world economy grew 3.4% in 2022, compared to a growth of 6.0% in 2021, according to estimates by the International Monetary Fund (IMF).[23]

On aggregate and within this economic context, advanced economies experienced a growth of 2.7% in 2022 following an expansion of 5.2% in the previous year. Likewise, emerging and developing economies grew by 3.9% in 2022, following a 6.6% expansion in 2021 (see Figure 3). Among the advanced economies, the United Kingdom and the Euro Zone stand out, with estimated growth of 4.1% and 3.5%, respectively (see Figure 4). In the emerging and developing economies, India's 6.8% growth was particularly noteworthy (see Figure 5).

FIGURE 3

Real GDP growth, 2005 – 2022
(percent)

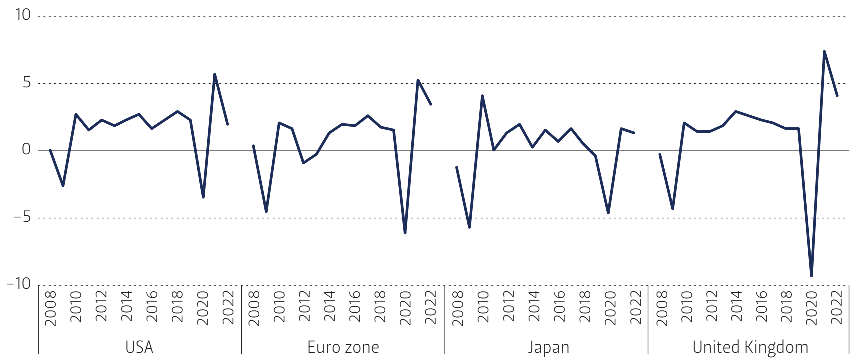


SOURCE: International Monetary Fund

23 The growth figures in this section are extracted from the IMF World Economic Outlook Database (October 2022 and the January 2023 update).

FIGURE 4

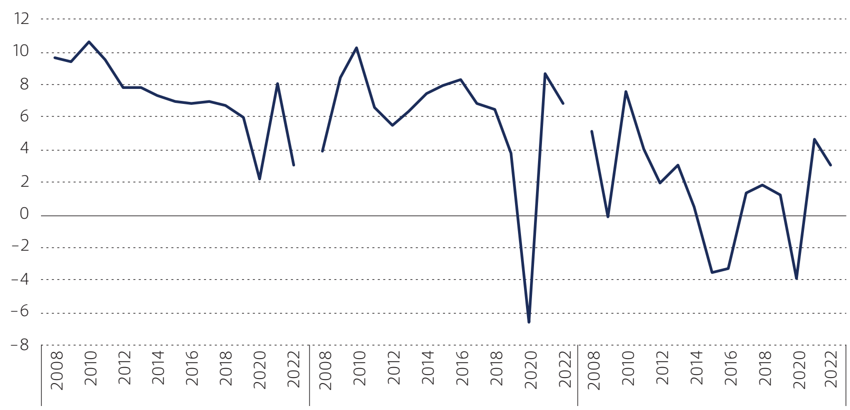
Real GDP growth in specific developed economies, 2008–2022
(year-on-year change, percent)



SOURCE: International Monetary Fund

FIGURE 5

Real GDP growth in specific emerging economies, 2008–2022
(year-on-year change, percent)



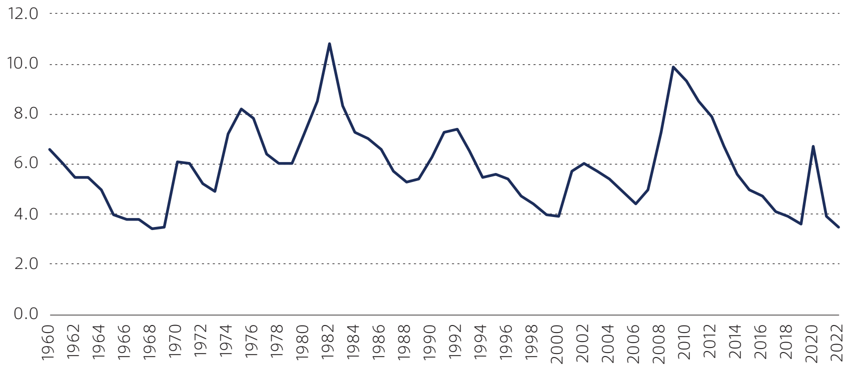
SOURCE: International Monetary Fund

Regarding the United States, the unemployment rate was 3.5% in December, down from 3.9% the previous year. With this, the unemployment level ended the year similar to the pre-pandemic level (see Figure 6). At year-end, the nominal wage per hour had increased 4.6% relative to the previous year (see Figure 7).[24] As for inflation, the general price index ended the year up 6.5%, above the 2.0% annual target of the U.S. Federal Reserve (Fed), while core inflation, which excludes food and energy prices, was 5.7% in the year (see Figure 8). In the year 2022, following a year of accommodative monetary and fiscal policies aimed at recovering from the recession induced by the Covid-19 pandemic, the Fed initiated a shift towards a more restrictive monetary stance. Throughout the year, it increased the monetary policy rate (Federal Funds Rate) by 425 basis points, bringing it within the range of 4.25% to 4.5%. On the other hand, in March, it ceased net asset purchases and in June it started downsizing its balance sheet.

24 The low annual growth rate of wages in the month of April 2021 was mainly due to the high wage level recorded in April of the previous year. The increase in wages in April 2020, in turn, was due to a sharp drop in the employment of low-wage workers due to the pandemic.

FIGURE 6

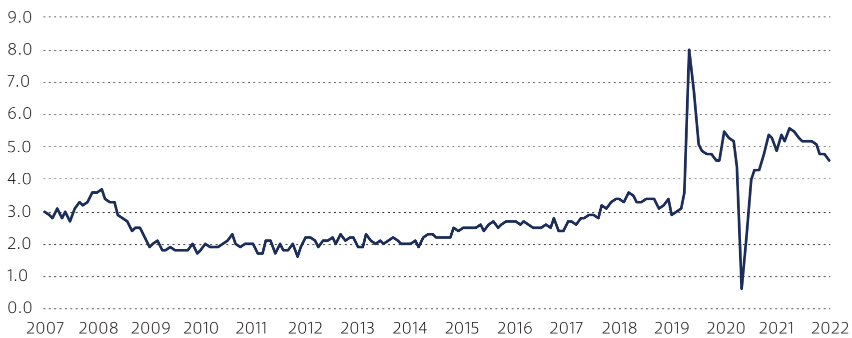
U.S. unemployment rate, 1960 - 2022
(percent)



SOURCE: Bureau of Labor Statistics

FIGURE 7

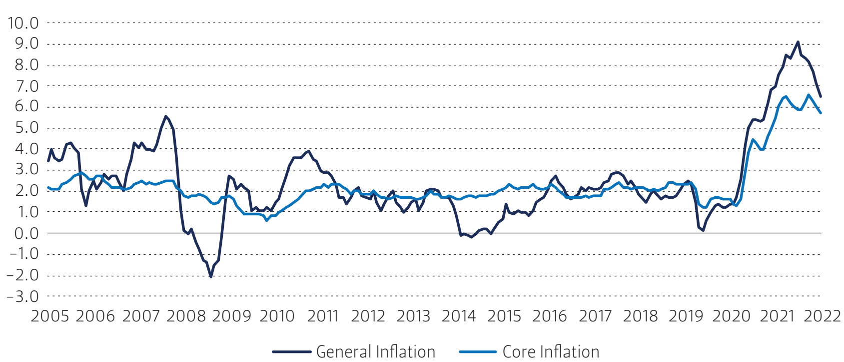
U.S. wage growth, 2007 - 2022
(year-on-year change, percent)



SOURCE: Bloomberg

FIGURE 8

U.S. consumer price index, 2005 - 2022
(year-on-year change, percent)

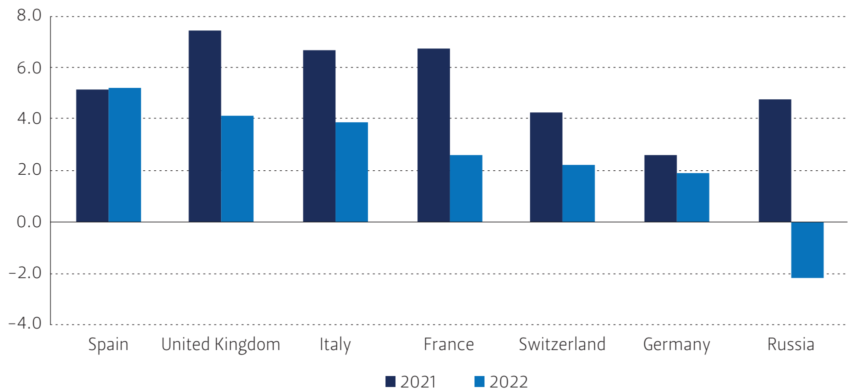


SOURCE: Bloomberg

The Eurozone went from an annual expansion of 5.2% in 2021 to an estimated growth of 3.5% in 2022, reflecting a slowdown in economic growth in the countries that make up the bloc. Among them, Spain and Italy stand out, with GDP growth of 5.2% and 3.9%, respectively (see Figure 9). The year concluded with inflation reaching 9.2% in the Eurozone (see Figure 10). Regarding unemployment level, it declined over the course of the year, ending at 6.6% in December (see Figure 11). In this scenario, to address the sustained rise in inflation, the European Central Bank (ECB) increased the interest rate on its main refinancing operations by 250 basis points during the year, reaching 2.5%. On the other hand, the ECB concluded in March the Pandemic Emergency Purchase Program (PEPP)[25] initiated in March 2020. Also, the ECB announced in December a reduction of €15 billion per month in its asset purchase program (APP).[26]

FIGURE 9

Real GDP growth in selected European countries in 2022
(year-on-year change, percent)



SOURCE: International Monetary Fund. Estimates

FIGURE 10

Eurozone annual inflation, 2005 – 2022[27]
(percent)

SOURCE: Bloomberg

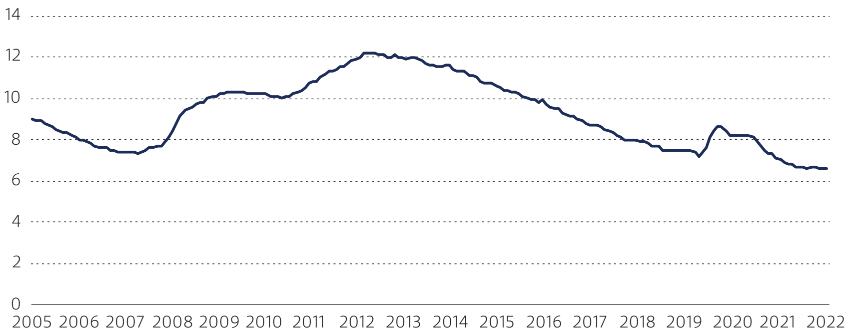
25 The Pandemic Emergency Purchase Programme (PEPP) is a temporary asset purchase programme of public and private sector securities.

26 Asset Purchase Programme (APP) is a monetary policy instrument used by the ECB.

27 The data corresponds to the Harmonized Index of Consumer Prices (HICP).

FIGURE 11

Eurozone unemployment rate, 2005 - 2022
(percent)



SOURCE: Bloomberg

Japan experienced a slight recovery in growth, reaching 1.4% in 2022. The Bank of Japan held its short-term target rate at –0.1% and continued its ten-year bond purchase program, aiming to keep ten-year rates around 0%. However, in December, it widened the trading range for yields on these bonds to 50 basis points.

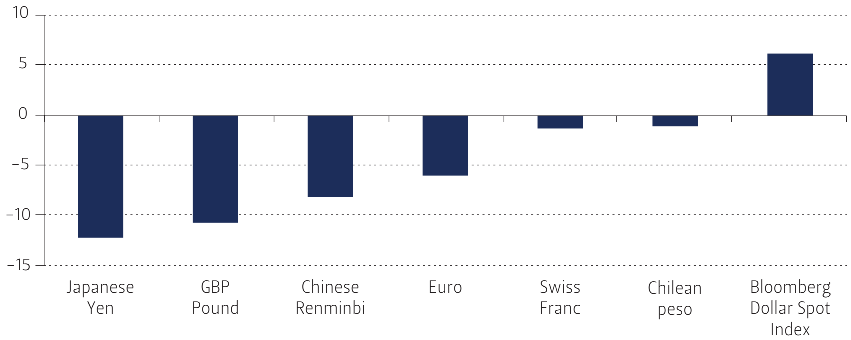
China grew 3.0% in 2022, which was lower than the 8.1% growth achieved in 2021. During the year, the Chinese economy was affected by frequent confinements due to its zero-tolerance Covid policy and problems in the real estate sector. In this scenario, the People's Bank of China (PBOC) lowered the prime lending rate for one-year loans to 3.65% and the prime lending rate for five-year loans, used to define mortgages, to 4.3%. In addition, the PBOC reduced the reserve requirement ratio for banks, injecting liquidity into the financial system.

In this global context, the U.S. dollar strengthened against the main world currencies by 6.2% (see Figure 12).[28] Among the investment currencies of the sovereign wealth funds, the Japanese yen and the pound depreciated the most (12.2% and 10.7%, respectively). The Chilean peso ended the year with a slight depreciation of -1.1%.

28 The Bloomberg Dollar Spot Index is a tradable index that shows the value of the dollar relative to the world's top ten currencies. Index returns above zero are indicative of the dollar appreciating relative to the value of the basket of currencies, while negative returns reflect that the dollar depreciated relative to the value of the basket of currencies.

FIGURE 12

Selected currencies against the U.S. dollar in 2022[29]
(year-on-year change, percent)

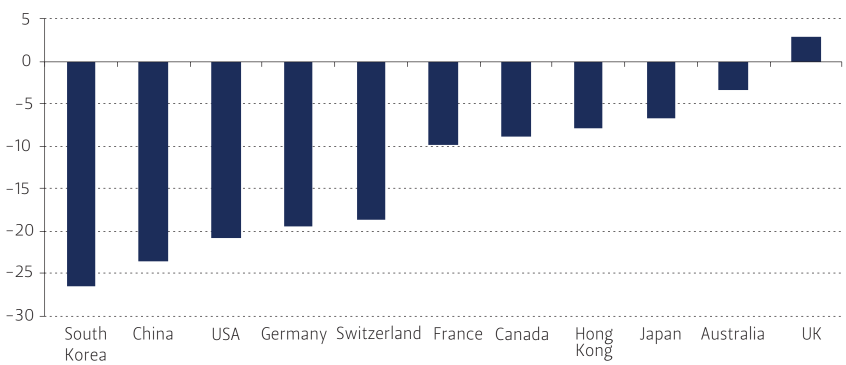


SOURCE: Bloomberg

Significant declines in stock prices were observed during 2022. For the selected sample (see Figure 13), the indexes that experienced the most pronounced declines in terms of relative performance in their local currencies were those of South Korea, China, and the US, with returns of -26.4%, -23.5%, and -20.8%, respectively. On a brighter note, the United Kingdom's stock market outperformed, achieving a return of 3.0% when measured in local currency.

FIGURE 13

MSCI equity indices return in 2022
(percent, measured in local currency)



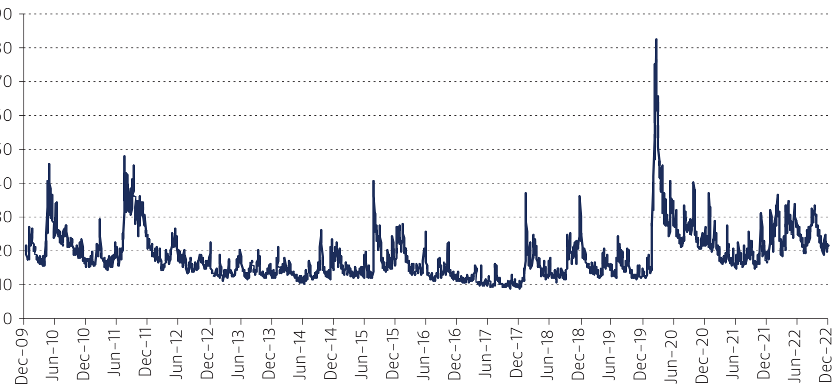
SOURCE: Bloomberg

Equity market volatility (S&P 500), measured by the Chicago Board Options Exchange (CBOE) Volatility Index (VIX), exhibited a higher average level in 2022 compared to the previous year, peaking in March with a value of 36.2. The average value of the VIX in 2022 was above the average of the last ten years (see Figure 14).

29 Negative performances indicate depreciation of the currency, while positive performance indicates appreciation.

FIGURE 14

Equity market volatility (VIX): S&P 500, 2009–2022
(in levels)

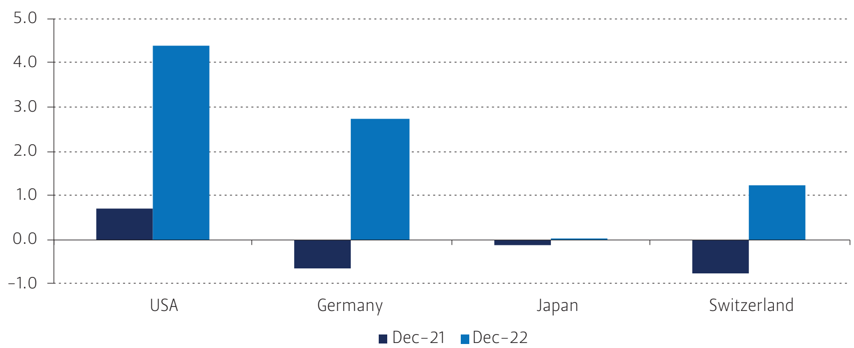


SOURCE: Bloomberg

At year-end, two-year and ten-year nominal sovereign interest rates had risen relative to the levels observed at the end of the previous year in the U.S., Germany, Switzerland and Japan (see Figure 15 and 16).

FIGURE 15

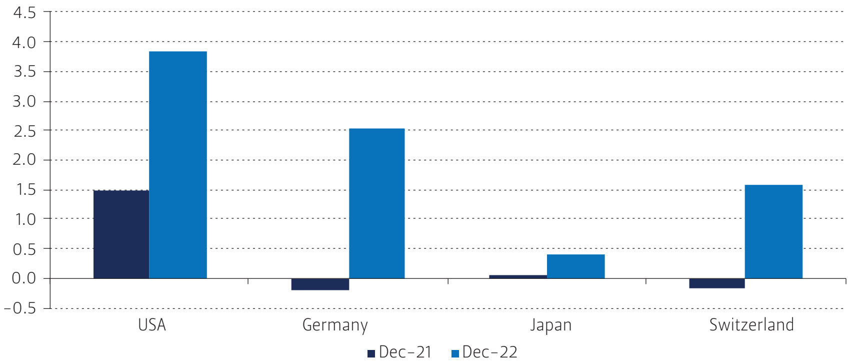
Internal rate of return (IRR) on two-year bonds in selected countries, 2021–2022
(percent)



SOURCE: Bloomberg

FIGURE 16

Internal rate of return (IRR) on ten-year bonds in selected countries, 2021-2022
(percent)

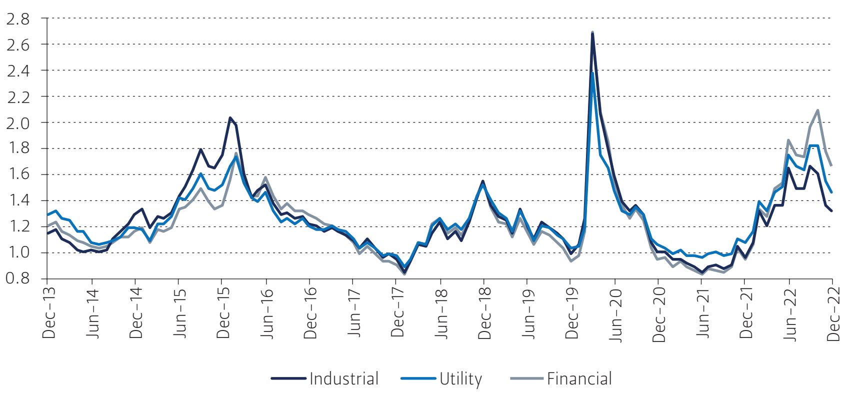


SOURCE: Bloomberg

Regarding the corporate market, the spreads of the industrial, utilities and financial sectors in the Bloomberg Global Aggregate Corporate Index increased during 2022, reaching annual highs in October of 1.7%, 1.8% and 2.1%, respectively (see Figure 17). High-yield bonds also saw an increase in their spreads with respect to 2021. This can be seen in the spreads of the Bloomberg Global High Yield Index, which reached a maximum of 6.7% in June and ended the year at 5.4%, higher than the 3.8% registered at the end of 2021 (see Figure 18).

FIGURE 17

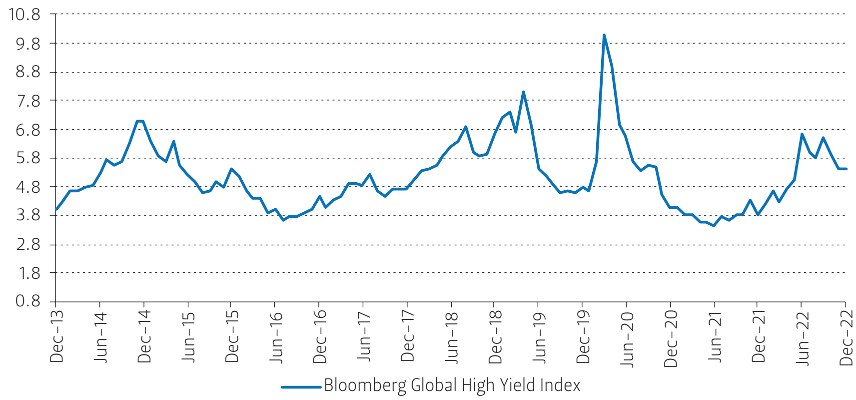
Investment grade corporate spreads by industry, 2013 – 2022
(percent)



SOURCE: Bloomberg

FIGURE 18

High yield bonds spreads, 2013 – 2022
(percent)

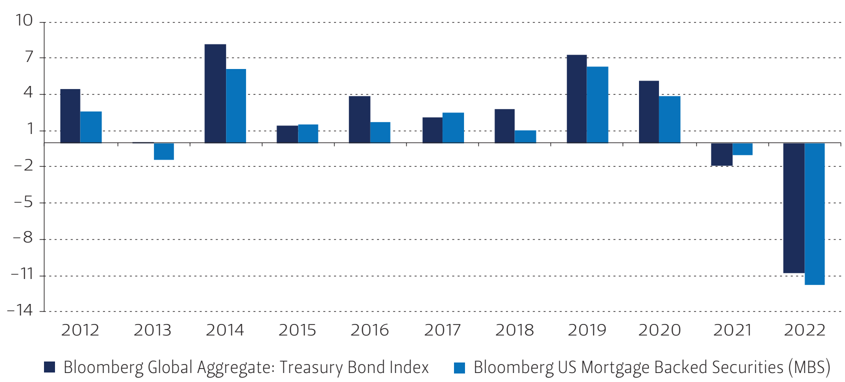


SOURCE: Bloomberg

In 2022, investment-grade sovereign bonds and U.S. agency MBS recorded negative returns in local currency. Thus, the Bloomberg Global Aggregate: Treasury Bond Index (hedged) and the Bloomberg U.S. Mortgage-Bac-ked Securities (MBS) Index closed the year with returns of -10.8% and -11.8%, respectively (see Figure 19). Investment-grade corporate bonds, represented by the Bloomberg Global Aggregate: Corporates Index (hedged), and high-yield bonds (sovereign and corporate), represented by the Bloomberg Global High-Yield Index (hedged), closed the year with returns of -14.1% and -11.0%, respectively (see Figure 20).

FIGURE 19

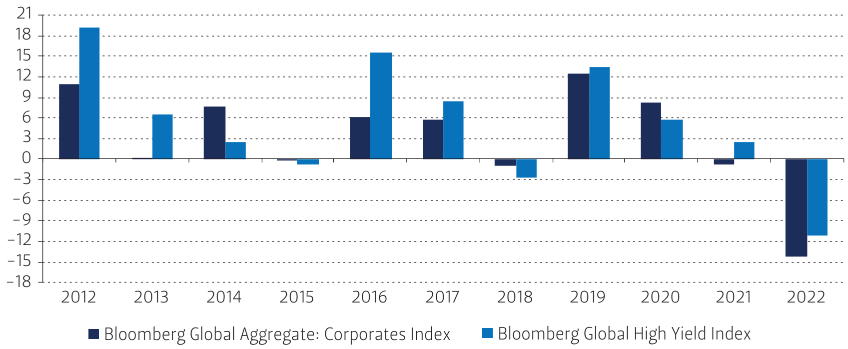
Bloomberg: Global Aggregate Treasury bonds (hedged) and US MBS (hedged), 2012 - 2022
(percent, measured in local currency)



SOURCE: Bloomberg

FIGURE 20

Bloomberg Global: Aggregate Corporates (hedged) and High Yield (hedged), 2012 – 2022
(percent, measured in local currency)

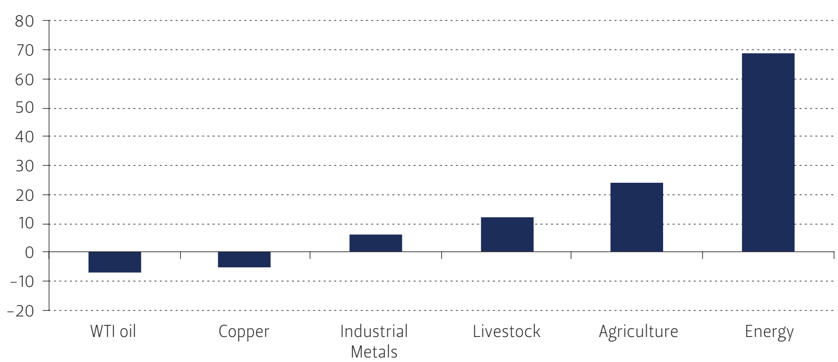


SOURCE: Bloomberg

A comparison of average commodity prices in 2022 versus 2021 reveals price hikes in livestock, agriculture, industrial metals, and energy. Meanwhile, the average prices of oil and copper decreased by 7.5% and 5.7%, respectively (see Figure 21).

FIGURE 21

Standard & Poor's commodity index in 2022
(year-on-year change, percent)



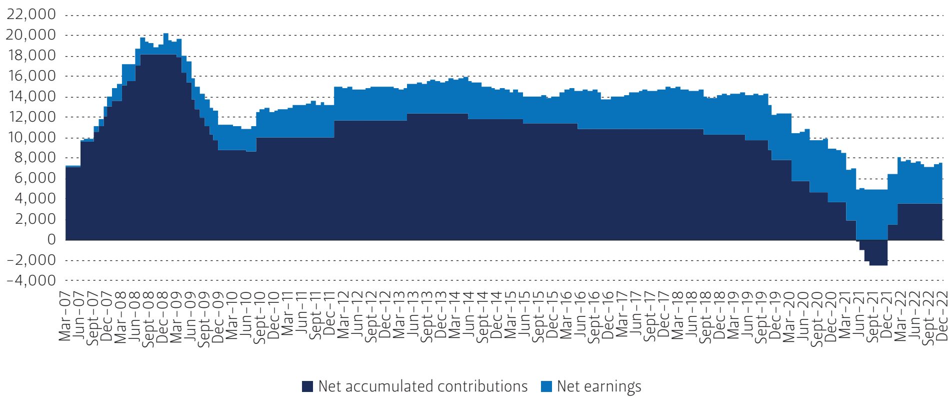
SOURCE: Bloomberg

B. Market value

At year-end 2022, the market value of the ESSF and the PRF was US$ 7,514 million and US$ 6,475 million, respectively, versus US$ 2,457 million and US$ 7,473 million, respectively, at year-end 2021. The increase in the value of the ESSF was mainly due to contributions of US$ 5,998 million, partially offset by net investment losses of US$ 941 million (see Figure 22).[30] The decrease in the PRF, in turn, was mainly due to net investment losses of US$ 1,260 million, withdrawals of US$ 269 million, which was partially offset by a contribution of US$ 532 million (see Figure 23).[31]

FIGURE 22

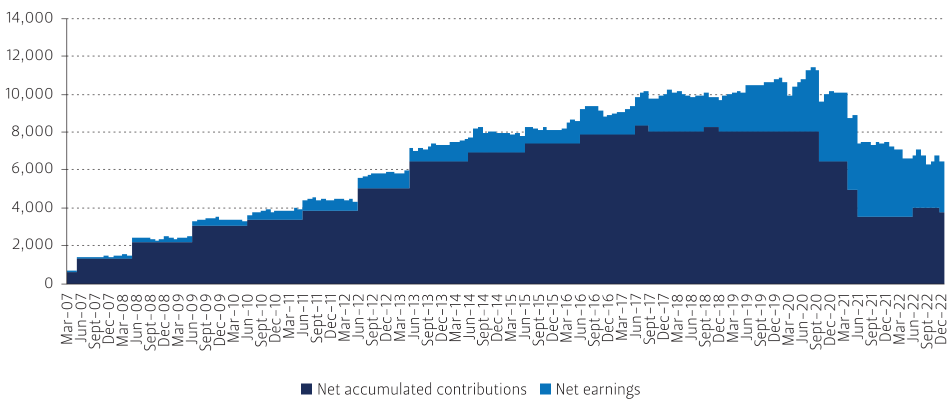
ESSF: Market value, March 2007 to December 2022
(millions of dollars)



SOURCE: Ministry of Finance of Chile

FIGURE 23

PRF: Market value, March 2007 to December 2022
(millions of dollars)



SOURCE: Ministry of Finance of Chile

30 It should be noted that during 2022, a withdrawal of US$ 0.1 million was made, corresponding to a balance of the portfolio of shares held by the ESSF until the end of September 2021. This balance was transferred to the PRF during the month of June 2022.

31 See Chapter 1, Section B.

C. Returns

In 2022, the net return in dollars was -12.37% in the ESSF and -16.88% in the PRF (see Table 4).

The ESSF return is mainly due to the yield obtained in the money market and sovereign bonds portfolio of -12.36%.[32] This, in turn, is broken down into the return on instruments in their local currencies of -8.20% and the yield on the currencies in relation to the dollar in which these instruments are denominated of -4.54% (see Box 4).

The PRF experienced a return of -16.88 % in the year. This return is broken down into yields of -16.41% for sovereign and government-related bonds, -22.48% for inflation-linked bonds, -11.75% for US agency MBS, -16.63% for corporate bonds, -12.45% for high yield bonds, and -18.13% for equities.

The funds' return expressed in Chilean pesos depends on the peso-dollar exchange rate. Thus, the value of the portfolio expressed in pesos increases (decreases) when the peso depreciates (appreciates) against the dollar. In 2022, the Chilean peso depreciated against the dollar in 1.09%, which explains the higher annual returns in national currency of -11.41% in the ESSF and -15.97% in the PRF. The real return of the funds, which is calculated by taking the nominal return in pesos and discounting the variation in the Unidad de Fomento (UF) for the respective period, was -21.81% for the ESSF and -25.83% for the PRF.

TABLE 4[33]

ESSF and PRF: Determinants of returns in dollars, 2022
(percent)

Fund	Component	Quarter				2022
		I	II	III	IV	
ESSF	Fixed Income[(a)]	-4.95	-6.59	-5.71	4.68	-12.36
	Local currency	-3.24	-2.45	-2.53	-0.34	-8.20
	Exchange rate fluctuations	-1.78	-4.25	-3.26	5.04	-4.54
	Total return (USD)	**-4.96**	**-6.59**	**-5.71**	**4.68**	**-12.37**
	Total return (CLP)	-12.01	9.17	-0.99	-6.86	-11.41
	Total return (Real in UF)	-14.05	4.69	-4.38	-9.12	-21.81

32 The return of the money market and sovereign bond portfolio (-12.36%) is slightly different from that of the ESSF (-12.37%) due to a small remainder of the equity portfolio that remained in the fund until June 2022.

33 Returns for periods of over one year are compound annualized rates. For periods of less than one year, the return corresponds to the change in the given period.

PRF	Sovereign and government-related bonds	-5.60	-8.71	-7.16	4.49	-16.41
	Inflation-linked sovereign bonds	-4.32	-13.70	-9.52	3.77	-22.48
	U.S. agency MBS	-5.03	-3.90	-5.31	2.12	-11.75
	Corporate bonds	-7.23	-8.83	-6.49	5.41	-16.63
	High Yield bonds	-5.27	-12.08	-2.50	7.82	-12.45
	Equities	-5.22	-15.51	-6.82	9.72	-18.13
	Return LTIP (USD)	**-5.52**	**-11.35**	**-6.67**	**6.34**	**-16.88**
	Total return (USD)	**-5.52**	**-11.35**	**-6.67**	**6.34**	**-16.88**
	Total return (CLP)	-12.53	3.60	-2.00	-5.38	-15.97
	Total return (Real in UF)	-14.56	-0.65	-5.35	-7.68	-25.83

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

SOURCE: Ministry of Finance of Chile

BOX 4: Factors affecting returns in the Sovereign Wealth Funds

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

For the fixed-income portfolios, the main factors are interest rates, the credit quality of issuers, prepayment, and exchange rate fluctuations. Market interest rates directly influence time deposit rates offered by financial institutions and sovereign bond rates at the time of issue. Moreover, changes in the interest rate level affect the price of fixed-income instruments that are traded in the market, especially in the case of medium- and long-term securities, where a rise has a negative effect, and a fall has a positive one. The credit quality of a fixed-income issuer also affects the price at which the security is traded in the market: a deterioration in quality causes the price to fall, while an improvement leads to an increase.[1] Additionally, all fixed-income instruments have some level of probability of default, that is, the probability that the issuer will not pay either the interest or the principal (or both). In investment-grade instruments, this probability is very low, but it increases with high-yield bonds.[2] Prepayment risk, in turn, mainly affects U.S. agency MBS, since the underlying assets are mortgage loans that can be refinanced if interest rates fall. If a mortgage is paid off early, the individual who refinances their mortgage loan returns the value of what is owed to the MBS investor.[3] Finally, since the funds' performance is measured in dollars and a large share of their portfolios are invested in instruments denominated in other currencies, exchange rate fluctuations against the dollar will have an effect on yields.

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

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

2 To mitigate this risk in high-yield bonds, the contracted external managers carry out an exhaustive analysis of each issuer in order to avoid these defaults to the extent possible.

3 If the par value is greater (less) than the present value of future payments, the investor experiences a gain (loss) on the prepayment. Also, prepayment risk also affects some corporate bonds that give the issuer the option of prepaying the debt it has issued.

Since the inception of the funds, the annual return in dollars as of year-end 2022 was 1.41% for the ESSF and 2.71% for the PRF. Expressed in Chilean pesos, the annual return for this full period was de 4.46% for the ESSF and 5.80% for the PRF. Finally, the real annual return since inception was 0.25% for the ESSF and 1.54% for the PRF.

It should be noted that in 2022 the performance of sovereign wealth funds was strongly affected by interest rate hikes associated with higher inflation caused by the pandemic, which was exacerbated by the Russia-Ukraine war that led to an increase in gas, oil and food prices. In this way, the returns experienced by sovereign wealth funds during the year are quite far from the historical behavior of their investment policies (see Figure 24 and 25).[34] It should be noted that, at the international level, both fixed income and equities showed returns close to -18% during 2022. In addition, equities experienced their worst return since the 2008 global financial crisis and U.S. sovereign bonds had their worst annual performance since 1928.

FIGURE 24

Historical returns of the current investment policy of the Economic and Social Stabilization Fund
(in percentages, measured in dollars)

				2020	
				2017	
				2011	
		2015	2019	2010	
		2014	2018	2007	
		2013	2016	2004	
		2009	2012	2003	
2022	2021	2005	2006	2002	2008
]-15,-10]	]-10,-5]	]-5,0]	]0-5]	]5,10]	]10,15]

Returns

SOURCE: Ministry of Finance of Chile

34 Figures 24 and 25 were prepared using the historical returns of the benchmark of each fund's current investment policies and do not necessarily reflect the returns experienced by the ESSF and PRF in the past, as their investment policies have been modified on several occasions since they were created.

FIGURE 25

Historical returns of the current investment policy of the Pension Reserve Fund
(in percentages, measured in dollars)

				2021	2016	2020		
				2014	2013	2019		
				2011	2012	2017		
			2018	2005	2010	2006		2009
2022	2008		2015	2002	2007	2004		2003
]-20,-15]	]-15,-10]	]-10,-5]	]-5,0]	]0-5]	]5,10]	]10,15]	]15,20]	]20,25]

SOURCE: Ministry of Finance of Chile

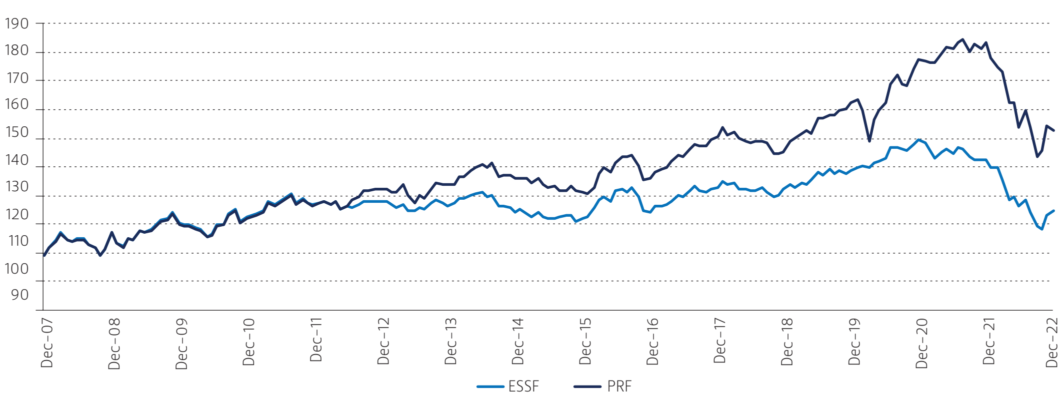
In 2022, the ESSF's and PRF's returns were 17 and 12 basis points lower than their benchmarks, respectively. Since 31 March 2007, the difference between the average annual return of the ESSF and PRF and their benchmarks was -4 basis points and -24 basis points, respectively.[35]

Figure 26 shows the index of accumulated returns for each fund. For the ESSF, the index increased 24.7% between 31 March 2007 and year-end 2022; for the PRF, the increase was 52.5% in the same period. The Figure illustrates how the two funds' returns began to differentiate in 2012, when the PRF investment policy was changed.[36]

The internal rate of return in 2022 was -12.06% and -16.26% for the ESSF and PRF, respectively.

FIGURE 26

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



SOURCE: Ministry of Finance of Chile

35 This means that the manager's portfolio generated lower returns, on average, than the implicit benchmark portfolio in the full period (2007–2022).

36 The investment policies of both funds were identical before 2012.

CHAPTER 3

Activities and Recommendations of the Financial Committee

A. Analyses carried out to define the investment policy of the ESSF

The work of the Financial Committee in 2022 was mainly focused on reviewing different background information related to the investment policy of the ESSF, which needed to be analyzed before making a recommendation to the Minister of Finance regarding a possible modification of said policy. Among the aspects analyzed is a review of the liquidity of the different fixed income instruments in periods of stress, a review of the fund's objective and size, and the instruments that could be considered in its investment portfolio. The main elements studied, and the main conclusions reached are described below.

Fixed Income Liquidity Analysis in Times of Stress

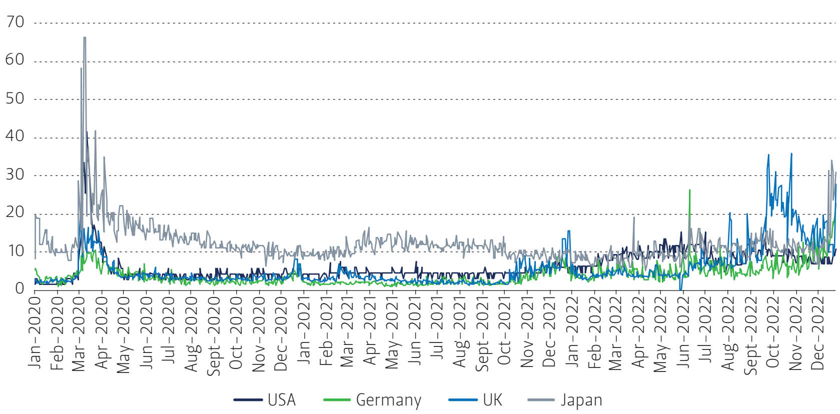
The Finance Committee analyzed the liquidity of various asset classes in times of stress in order to assess whether their transaction costs increase in such circumstances. To this end, it examined the performance of its Bid/Ask Spreads, an indicator widely used to assess the liquidity of financial instruments (see Box 5). It should be noted that to the extent that this indicator is smaller, it is understood that the instrument is more liquid.

Figure 27 shows the Bid/Ask Spreads of sovereign bonds issued by some countries from the beginning of 2020 to the end of 2022. It is observed that liquidity is different for each country and worsens at times when risk aversion increases, such as in March 2020, when the pandemic affected financial markets. On the other hand, this indicator is usually higher for corporate and high-yield bonds, reflecting that they are less liquid than sovereign bonds and their increase, in times of stress, can be much greater. Figure 28 illustrates as an example the behavior of both asset classes during the 2008/2009 financial crisis and the pandemic.

The Financial Committee will take these considerations into account in recommending the type of instruments that will be considered in the definition of the ESSF investment policy.

FIGURE 27

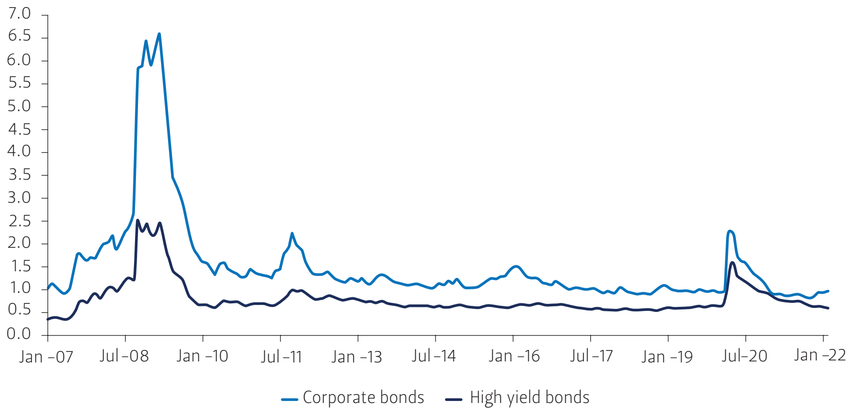
Bid-Ask spread nominal sovereign bonds
(in basis points)



SOURCE: Bloomberg

FIGURE 28

Bid-Ask Spread on U.S. High-Yield and Investment Grade Corporate Bonds.[37]
(in basis points)



SOURCE: Barclays

BOX 5: Bid/Ask Spread and Transaction Cost

The Bid/Ask Spread represents the spread that exists between the buy (Ask) and sell (Bid) price of a financial instrument.

The Bid/Ask Spread is calculated as follows and is usually expressed in basis points:

$$\text{Bid/Ask Spread}_t = \frac{\text{Ask}_t - \text{Bid}_t}{\text{mid - point}_t} \times 10.000, \text{ where mid-point}_t = \frac{\text{Ask}_t + \text{Bid}_t}{2}$$

To the extent that this spread is smaller, it is understood that the instrument is more liquid.

Also, there are no explicit transaction costs for fixed income instruments (e.g. fees). The market convention is that the transaction cost is calculated from the Bid/Ask Spread. It is assumed that the fair price of the instrument is between the Ask and Bid price. Thus, an investor who buys the instrument at the Ask price is paying a little more than the fair price, and the one who sells it at the Bid price is receiving a little less. From this point of view, the transaction cost is usually calculated in relation to the average of the Bid/Ask Spread (mid-point).

Objective of the Economic and Social Stabilization Fund

The starting point of defining the investment policy is to have clarity about the fund's objective, since fundamental elements such as the return objective, risk tolerance, investment horizon, even the restrictions, depend directly on its definition.

37 "Market Liquidity Snapshot February 2022", Quantitative Portfolio Strategy, Barclays. The chart corresponds to the time series of the Liquidity Cost Score (LCS) which represents the cost of buying and selling an instrument immediately and is calculated as % of the bond price.

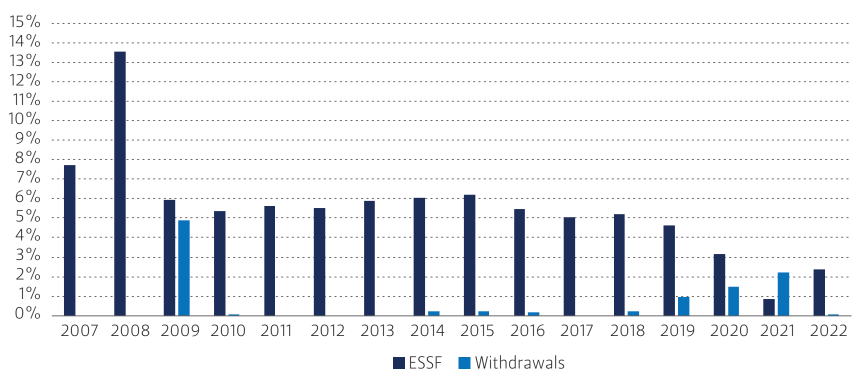
During 2022, the Finance Committee analyzed two alternative objectives for the ESSF that are consistent with the legal framework applicable to it. In the first, extraordinary cyclical tax revenues generated by applying the structural balance rule are accumulated in the fund, and its resources are used by the Fisco when there are cyclical fiscal deficits.[38] In the second, the fund's objective is to support the needs of the Fisco when the Chilean economy faces infrequent macroeconomic or financial events that can produce significant and unexpected deficits.

In this context, the Minister of Finance, Mario Marcel, met with the Finance Committee in October 2022 and delivered his guidelines regarding the ESSF's objective. The Minister stated that the fund should be used primarily when "macro" tail risks occur that produce significant and infrequent fiscal deficits compared to the regular cycle. This is consistent with the second alternative indicated in the previous paragraph and with the historical behavior of withdrawals.

Figure 29 shows the evolution of the size of the fund at the end of each year along with the withdrawals incurred in the respective period, both expressed as a percentage of GDP. The most significant withdrawals from the fund occurred in crises that have had a significant impact on public finances and in which it has been necessary to implement countercyclical measures to deal with them. The global financial crisis of 2008/2009 in which US$ 9,278 million were withdrawn,[39] the pandemic of 2020 and 2021 in which US$ 10,287 million were withdrawn between the two years, and to a lesser extent the social crisis in which US$ 2,564 million were withdrawn in 2019 stand out.[40, 41]

FIGURE 29

Size of the Economic and Social Stabilization Fund at the end of each year and withdrawals
(percent of GDP)



SOURCE: Ministry of Finance of Chile

38 Cyclical fiscal deficits can be financed with borrowing If it is decided not to use ESSF's resources, keeping the net government debt constant.

39 US$ 837 million was used to finance the entire contribution to the PRF and US$ 441 million to repay debt.

40 US$ 564 million was used to finance the contribution to the PRF.

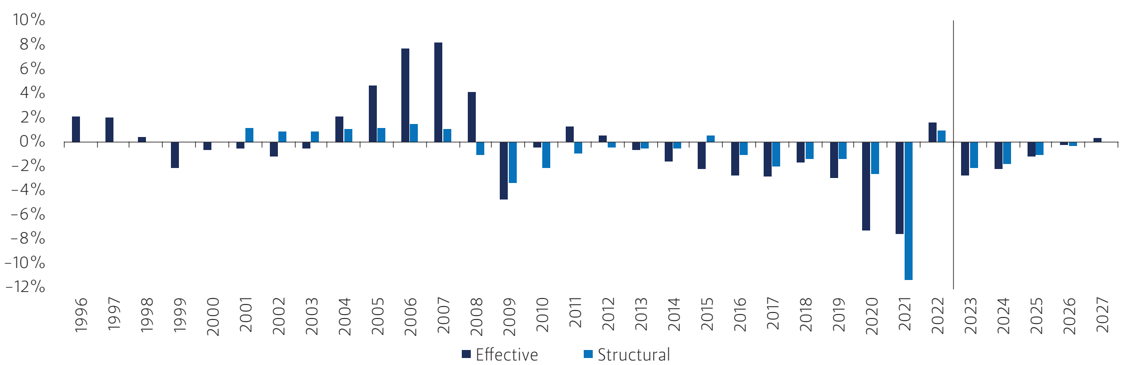
41 Figure 29 also shows other minor withdrawals that are associated with the financing of annual contributions to the PRF.

Size of the Economic and Social Stabilization Fund

The figure above shows that before 2009, the ESSF reached a size close to 14% of GDP, which is consistent with the structural surplus target of 1% of GDP that was in place in the first years of the use of the structural balance rule (see Figure 30) and with the high copper price experienced in that period. However, since the global financial crisis of 2008/2009, governments have set structural deficit targets without being able to converge to a structural balance, and Chile has mainly experienced effective fiscal deficits. In this scenario, between 2010 and 2018, debt issuance was preferred to finance the Fisco's needs and the fund was used only to finance contributions to the PRF. Consequently, the fund remained relatively stable in a range between 5%-6% of GDP between those years. Since the social crisis, but especially due to the Covid pandemic, significant resources were withdrawn from the ESSF, which resulted in its size at the end of 2021 being equivalent to 0.9% of GDP, the lowest since its creation. It should be noted that at the beginning of 2022, nearly US$ 6,000 million was contributed to the fund, resources from debt issuances, to partially reestablish its size to easily have financing available in case another crisis could affect public finances. At the end of 2022, the ESSF had an equivalent size of close to 2.4% of GDP.

FIGURE 30

Effective and structural balance
(percent of GDP)



SOURCE: Ministry of Finance of Chile

In this scenario, the Finance Committee debated whether the size of the fund is appropriate to separate it into two sub-portfolios. The first would be a defensive portfolio, which would be primarily geared towards covering significant and infrequent deficits, and which should maximize or at least protect the value of its assets at times when the fund's resources are most likely to be used. The second would be a portfolio with a medium-term investment horizon, whose main objective would be to improve the expected return of the ESSF.

By the end of December, the Financial Committee had not reached a conclusion on the above, however, the Ministry of Finance informed it that it would commission an advisory report from the International Monetary Fund in order to estimate the minimum size required to maintain a defensive portfolio.

For its part, the Finance Committee recommended focusing on the definition of the investment policy of this portfolio, taking into account that the size of the current fund and the size of historical withdrawals in times of crisis, make it less feasible today that part of the fund can be invested more aggressively.

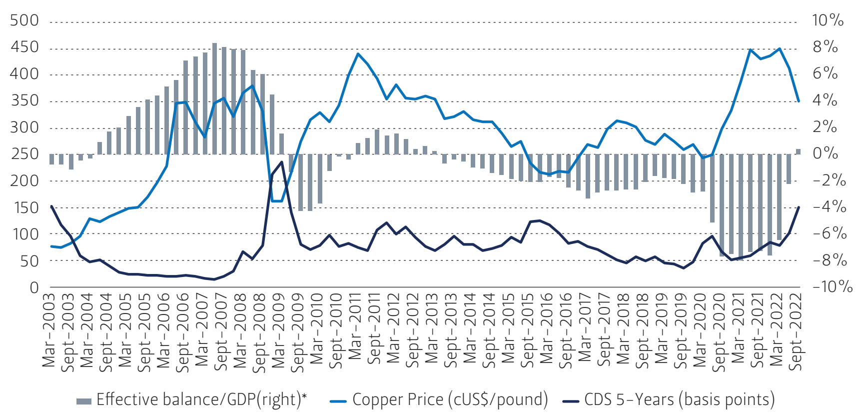
Defensive Portfolio

As described above, the defensive portfolio should aim to maximize or at least protect the value of its assets at times when the fund's resources are most likely to be utilized. This must be accompanied by the requirement that their assets must be sufficiently liquid to be quickly disposed of when needed, without incurring high transaction costs.

The Finance Committee recommended using the 5-year Credit Default Swaps (CDS)[42] of Chile's sovereign bonds as a market indicator that could be associated with the time when resources from the ESSF would be most likely to be used (see Figure 31). This is due to the fact that the increase in CDS is related to the increase in risk aversion towards Chile, which means that it is more expensive for the country to borrow when this happens and, in this scenario, the use of the ESSF becomes more likely. In the extreme case, if the CDS were to increase in an exacerbated manner, it could be experienced the unlikely event that the financial markets are closed for Chile, which would force the fund to be used.[43] On the other hand, the CDS of Chilean bonds have had a negative correlation of 0.43 with the price of copper. That is, significant and sudden falls in the price of copper (e.g. in 2008), which affect tax revenues associated with mining, could lead to fiscal deficits, which could also trigger the use of the ESSF, which tends to coincide with the increase in CDS on domestic bonds.

FIGURE 31

Copper Price, Chile CDS - 5 Years, and Effective Balance
(cUS$/pound; basis points, % of GDP)



** Moving average of the last 4 quarters.*
SOURCE: Ministry of Finance of Chile

The Finance Committee has analyzed the correlation of the returns of different currencies and instruments in pesos in relation to the CDS of Chilean sovereign bonds in order to select those that could be incorporated into the defensive portfolio. The objective of the analysis is to choose those currencies and instruments whose market values are favored when the perception of Chile's sovereign risk, expressed in the increase in CDS, deteriorates (see Figures 32 and 33). In relation to currencies, it is observed that the USD, JPY, and CNY are the ones that have had the highest correlations followed to a lesser extent by the CHF, GBP, and EUR. Other currencies such as CAD and KRW have experienced lower correlations, even negative for the AUD. The behavior of the instruments is like that described above

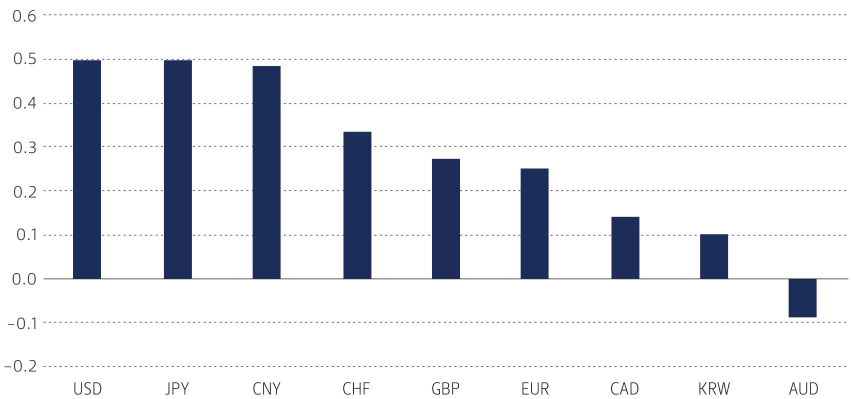
42 A CDS is a contract between two parties in which one buys protection in the event that a fixed income issuer experiences a default, and the other party offers protection. The price of the CDS is usually expressed in a spread (in basis points) and represents the payout received by the party offering the protection. That is, if it increases, it means that it is more expensive to protect yourself from a default.

43 It should be noted that this has not happened in the crises experienced in recent decades, which are among the worst of the last century.

for currencies, since their performance measured in pesos depends mainly on the behavior of exchange rates. For example, fixed income instruments denominated in USD, JPY, and CNY experience the highest correlations, and the worst are those in South Korea and Australia. It's worth noting that global stocks have a negative correlation, as their declines coincide with increases in risk aversion and Chile's CDS.

FIGURE 32

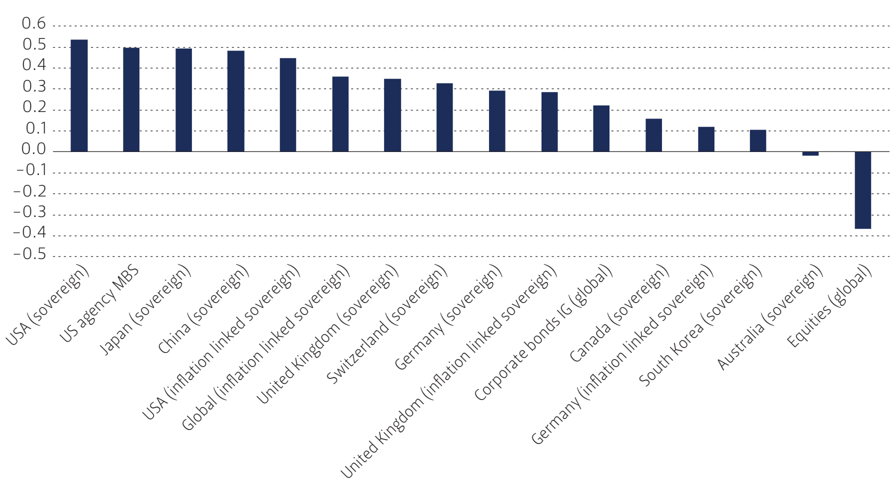
Return correlations of selected currencies in relation to the Chile CDS – 5 yrs[44]
(between -1 and 1)



SOURCE: Ministry of Finance of Chile

FIGURE 33

Return correlations of selected instruments in relation to the Chile CDS – 5 yrs
(between -1 and 1)



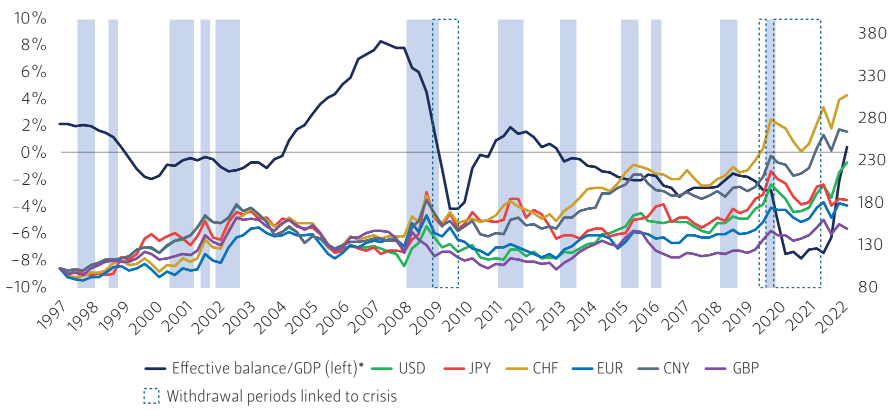
SOURCE: Ministry of Finance of Chile

44 It corresponds to the correlations between the monthly change in parities in relation to the CLP and the change in the monthly CDS (February 2003 and December 2022). A positive correlation means that the dollar appreciated relative to the peso when CDS increased.

An analysis of the historical behavior of currencies that have a higher correlation with CDS (see Figure 34) shows that they tend to appreciate in periods of crisis (areas presented with a gray background).[45] It can also be noted that in general the fiscal balance tends to worsen after them, with very sudden and pronounced fiscal deficits at the time when it was necessary to use the ESSF (2009 and between 2019 and 2021).

FIGURE 34

Quarterly effective balance and safe-haven currencies return indices[46]
(percent of GDP - left axis and 100 = 31 December 1996 - right axis)



** Moving average of the last 4 quarters.*
Fuente: Ministry of Finance of Chile

The Finance Committee expects to make a recommendation to the Minister of Finance with modifications to the current investment policy of the ESSF during the first half of 2023. Its recommendation will focus on a portfolio that will be composed of the instruments that offer the greatest protection at the times when it is most likely to use the ESSF and will be optimized taking into account their expected returns, volatilities, covariances, liquidity, and their relative importance in global fixed income indices.

B. Analysis of inflation-linked bonds

At its June session, the Finance Committee took an in-depth look at the inflation-linked sovereign bond (ILB) asset class.[47] The members of the Finance Committee reviewed the main characteristics of the market for this asset class (size, main issuers, amounts traded, etc.). They also studied the theoretical framework applicable to ILBs, in particular the Canadian model, which is the most widely used in different countries (see Box 6). In addition, the concept of breakeven was analyzed, which represents the market's inflation expectations, and how it is influenced by the inflation risk premium and liquidity premium associated with this type of instrument. In addition, the Committee examined the extent to which ILBs effectively protect against inflation, focusing on the U.S. Treasury Inflation Protected Securities (TIPS) market, and how they compare to other asset classes that also hold this property, examining their performance under different scenarios.

45 For this chart, crises are mainly associated with stock market crashes.

46 The areas of the graph in gray correspond to periods of crisis.

47 Inflation-linked bonds.

The following are some of the conclusions reached by the Finance Committee:

- At the aggregate level, ILBs account for about 10% of the size of conventional sovereign bonds in developed countries, although in a few countries, such as the United Kingdom, they are more significant. However, their daily traded amounts are well below conventional ones, which affects their liquidity.
- One should be indifferent between investing in an ILB and a conventional bond if the markets are efficient and the breakeven actually reflects inflation expectations.
- Investors should use ILB if they have a different view of market inflation expectations or if they want to hedge against long-term inflation surprises.
- For a buy-and-hold investor,[48] the ILB guarantees real returns. However, its market price before maturity will incorporate movements in real interest rates, new inflation information, and the liquidity premium. In addition, there are other elements that make the coverage of ILBs less than perfect, such as the gap associated with the inflation benchmark and whether the latter reflects in a good way the inflation to be protected.
- Short ILBs are a good alternative if the objective is to protect inflation and if you want to invest in more liquid instruments that are less exposed to interest rate risk; however, they can offer lower returns over the long term than longer-duration instruments.
- Based on information gathered from third-party administrators, it is unusual to have a portion in ILB in strategic asset allocations. In addition, you can hedge inflation over the long term by investing in a riskier portfolio that includes stocks and alternative investments.

C. Monitoring of external fund managers

The Finance Committee received delegations from CBC, BlackRock, BNP Paribas, Credit Suisse, Mellon, Nomura, UBS, and Western Asset, who must report annually to the members of the Finance Committee and the Ministry of Finance on the management of their portfolios. In these presentations, each manager details the results of their management, explaining the reasons that explain their performance, their investment approaches, and main positions, as well as about organizational or team changes that could affect their management. The situation of the markets that were heavily affected by the increase in inflation globally was also analyzed. All these visits are part of the activities that these administrators must carry out to account for their management.

48 A "buy and hold" investor refers to those who buy an instrument and hold it until maturity.

BOX 6: Canadian Model in Inflation-linked Bonds

In most countries, the standard model for inflation-linked bonds is the Canadian model,[1] in which the coupon is fixed in percentage terms (it represents the real coupon, for example, 3%) and is applied to a capital that is adjusted according to the variation of a price index that has been previously defined for the bond. On the other hand, at maturity, the investor will receive the principal adjusted for the variation of the price index since its issuance.

The Index Ratio is used to adjust the principal at the time of paying a coupon or to the maturity of the bond. This is calculated by dividing the reference price index at the time of payment by the level of the index at the time the bond was issued (equation i). Equations ii and iii show how the coupon and principal are adjusted, respectively, according to the change in the price index associated with the inflation-linked bond. It is important to note that the amount received by the investor associated with the payment of the coupon is variable as it depends on the variation of the price index that is used to adjust the principal of the bond.

$$\text{i) Index Ratio}_t = \frac{I_t}{I_0}$$

$$\text{i) Coupon Payment}_t = 100 * \text{Coupon ILB} * \text{Index Ratio}_t$$

$$\text{iii) Principal Payment}_m = 100 * \text{Index Ratio}_m$$

Where I_t corresponds to the value of the price index used in the ILB at t, I_0 corresponds to the value of the price index at the time of issuance, Coupon ILB corresponds to the actual coupon associated with the ILB, and m corresponds to maturity.

1 Except for Australia, Brazil, Mexico, Argentina and Israel.

APPENDIX 1 CURRENT AND FORMER FINANCIAL COMMITTEE'S MEMBERS

Members	Position	Incorporation Date	Departure Date
Juan Andrés Fontaine Talavera	President	August 2021	-
Macarena Pérez Ojeda	Vice-president	August 2021	-
Pablo Castañeda Navarrete	Counselor	August 2022	-
Nicolás Eyzaguirre Guzmán	Counselor	August 2021	-
Jennifer Soto Urra	Counselor	August 2022	-
Marcela Valenzuela Bravo	Counselor	August 2022	-
Mauricio Villena Chamorro	Counselor	August 2021	August 2022
Ricardo Budinich Diez	Counselor	August 2016	August 2022
Martín Costabal Llona	Counselor	August 2007	August 2022
José De Gregorio Rebeco	President	September 2014	August 2021
Cristián Eyzaguirre Johnston	Counselor Vice-president	March 2010 September 2011	August 2021
Jaime Casassus Vargas	Counselor	September 2014	August 2021
Paulina Yazigi Salamanca	Counselor	September 2018	August 2021
Igal Magendzo Weinberger	Counselor	September 2014	September 2018
Eduardo Walker Hitschfeld	Counselor	August 2007	August 2016
Arturo Cifuentes Ovalle	President Counselor	January 2014 August 2011	August 2014
Rodrigo Valdés Pulido	Counselor	February 2014	April 2014
Eric Parrado Herrera	Counselor	August 2011	March 2014
Klaus Schmidt-Hebbel Dunker	President Counselor	August 2011 September 2009	January 2014
Andrés Bianchi Larre	President	August 2007	August 2011
Ana María Jul Lagomarsino	Vice-president	August 2007	August 2011
Andrés Sanfuentes Vergara	Counselor	August 2007	March 2010
Oscar Landerretche Moreno	Counselor	August 2007	June 2009

APPENDIX 2 SUMMARY OF MEETINGS IN 2022[49]

MEETING 1 | 28 JANUARY 2022

In the first session of the year, the Finance Committee met with the Minister of Finance, Rodrigo Cerda. On the occasion, the minister informed on the contribution to the ESSF for US$ 4,000 million on 31 January 2022, thanks to the higher collection tax received as a result of the higher growth of the economy in 2021, and pointed out that he did not rule out new contributions in the year. The Committee also met with a delegation from BNP Paribas, the external administrator responsible for managing the U.S. mortgage-backed bond portfolio. On this occasion, the firm presented the results obtained during the 2021 and reported on its investment strategy, organization, and market vision. Finally, the Technical Secretariat was requested to analyze the transaction and liquidity costs of the different asset classes in times of crisis.

MEETING 2 | 21 MARCH 2022

At its second session, the Finance Committee met with the new International Finance and International Affairs Coordinator Carola Moreno Valenzuela, who took office on 11 March 2022. In addition, it met with a delegation from the CBC, led by the Manager of the Financial Markets Division, who spoke about the results of its management in both funds during 2021, along with other issues related to legal issues concerning the contracts that said entity signed on behalf of the Fisco, and its procedures and standards. The Committee also discussed the funds objectives and recommended that the President of the Committee meet with the Minister of Finance to clarify them, to have more information about their expected evolution and his expectations for incorporating responsible investment in the funds. In addition, the next steps associated with the preparation of the 2021 annual report of the Financial Committee were agreed. Finally, the Committee met with RVK, an external consultant to the Ministry of Finance, to discuss best practices in the use of special permissions granted to administrators, especially at the beginning of new mandates, and on the use of equity indices that incorporate responsible investing.

MEETING 3 | 25 APRIL 2022

The third meeting was attended by UBS, which presented on its management of equities and corporate bonds in the PRF. The company presented about its organization, investment processes and the main results obtained during the year 2021 and up to March 2022, as well as the situation of the markets. On this occasion, the President of the Committee spoke about the meeting held with the Minister of Finance, Mario Marcel, in which he gave some general guidelines relating to the objectives of the funds. Specifically, noted that the ESSF must be administered within the framework of the structural balance rule and its resources used to finance cyclical deficits, although considering the use of escape clauses. He also conveyed that the PRF should have a long-term investment horizon and be used to support fiscal pension obligations. Finally, he said that the minister requested that the Committee evaluate the incorporation of responsible investments in the funds. On another topic, the Technical Secretariat was requested to prepare a minute on the inflation-linked bonds to gain a deeper understanding of the asset class. Finally, the Technical Secretariat presented its analysis of the liquidity of assets in periods of crisis.

49 Due to the pandemic, all the Financial Committee's meetings were held remotely starting in April 2020.

MEETING 4 | 6 JUNE 2022

The Committee, in its fourth session, met with the Mellon team, responsible for investing part of the PRF's equity portfolio. On this occasion, the firm spoke about its company, team and investment strategy, and then referred to its management during 2022. In addition, the company presented on the situation of international markets. Later, the International Finance and International Affairs Coordinator, informed the Committee about the situation that affected the CBC related to a payment impersonation related of RVK. Subsequently, the Technical Secretariat made a presentation on inflation-linked bonds, describing their main markets, the conceptual framework applied to them, an analysis of their hedging against inflation, and how they are compared to other asset classes. The Committee requested that the Technical Secretariat inform RVK, the consulting firm that carried out an investment policy review in 2021, its desire to update the assumptions of its study and to report whether the findings were different. In addition, it required updated projections of contributions and withdrawals in the ESSF and PRF and that the CBC be consulted about the process it follows to define the investment policy of its International Reserves.

MEETING 5 | 18 JULY 2022

At its fifth session of the year, the Committee met with a delegation from BlackRock who presented about their management high-yield bonds portfolio in the PRF and provided an analysis of the current situation of international markets. In addition, a delegation from the CBC, led by the Manager of the Financial Markets Division, presented on the process that they use to define and review the investment policy of their International Reserves. The Finance Committee thanked the delegation of the CBC for the presentation made and then discussed how such an experience could be applied to the funds. Subsequently, the members of the Committee were informed that RVK pointed out that there was an associated cost to update the study's assumptions; however, the firm did not recommend doing so because the recommendations would be too similar. Subsequently, the Committee recommended that the CBC be asked to conduct a study to define the investment policy and, if it is unable to do so, for the Technical Secretariat to make a proposal. Finally, the Finance Committee discussed and established the steps to be followed in relation to possible modifications to the investment policy of the Strategic Contingency Fund (FCE) established in Law N° 21,174.

MEETING 6 | 3 OCTOBER 2022

At its sixth session of the year, the Finance Committee resumed its meetings after the renewal of several of its members. The President, Juan Andrés Fontaine, welcomed the new counsels: Pablo Castañeda, Jennifer Soto and Marcela Valenzuela. At this meeting, the Technical Secretariat of the Financial Committee made a presentation on its study carried out to amend the investment policy of the ESSF, which led to an exchange of views among the counsels on the methodology, the objectives of the fund and the next steps required to recommend possible modifications to the Minister of Finance. Next, the General Manager of the CBC spoke about the situation that occurred with the consulting company RVK. Finally, the Committee received the Minister of Finance, Mario Marcel, who, in addition to welcoming the new members, provided new general guidelines based on the objectives of the ESSF and PRF.

MEETING 7 | 18 NOVEMBER 2022

At its seventh session, the Technical Secretariat presented to the Financial Committee its analysis of the investment policy review of the ESSF, which incorporated the comments provided by the Committee at the previous session. In particular, different investment portfolio alternatives were analyzed taking into account the currencies that have performed better at times of crisis. After an exchange of views, it was requested that the restrictions imposed on the optimization should be based on the composition of global fixed income indices. The Committee then met with a team from Nomura that presented about the company, team and investment strategy, and later about the high-yield bonds managed in the PRF. Finally, a representative of the Ministry of Finance briefed the Committee on the decision to terminate contracts with the external manager, Credit Suisse, and with the advisory firm RVK, indicating the reasons and arguments to make that decision.

MEETING 8 | 16 DECEMBER 2022

At the last meeting of the year, the members of the Finance Committee exchanged views on the objective of the ESSF and how this would impact the investment decisions. On this basis, the Technical Secretariat was asked to estimate the resources that should be held in a defensive portfolio to fund unexpected and significant fiscal situations. In addition, it was suggested to deepen the analysis that would allow the selection of the currencies in which it could be invested taking into account their behavior at times when it is more likely to use the fund. The Committee then met with Western, who presented initially about their company, team and investment strategy, and later about the MBS managed in the PRF.

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Glossary

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

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

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

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

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

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

Cash — cash in hand and bank demand deposits.

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

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

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

Duration — a measure of the sensitivity of a bond's price to changes in interest rates: the longer the duration, the farther the bond's price will fall in response to an increase in interest rates.

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

Sovereign bond — a bond issued by a government.

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

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

Swift — Society for Worldwide Interbank Financial Telecommunication.

TED Spread — the difference between the interbank borrowing rate (LIBOR) and the risk-free rate (U.S. Treasury bills). A higher TED spread typically indicates a lower level of market liquidity.

To Be Announced (TBA) — denotes the forward mortgage-backed securities (MBS) trade, and pass-through securities issued by Freddie Mac, Fannie Mae and Ginnie Mae.

Time-weighted rate of return (TWR) — a measure of return obtained by compounding or multiplying daily returns, excluding contributions and withdrawals; unlike the IRR, it excludes the effect of net cash flows.

Variable-income — equities.

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

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

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