

# PENSION RESERVE FUND

Quarterly Executive Report as of September 2018

# **EXECUTIVE SUMMARY**

**Third Quarter 2018** 

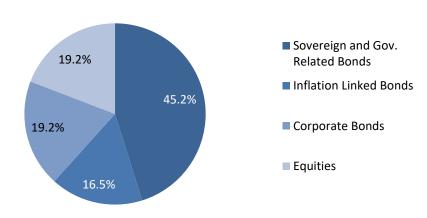
MarketContributionsWithdrawalsNetValueIncomeUS\$ 10.1US\$ 541.6US\$295.2US\$ -13.0billionmillionmillion

## Return in dollars<sup>1</sup>



Source: Ministry of Finance, based on information provided by JPMorgan.

## Portfolio Composition<sup>2</sup>



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

<sup>&</sup>lt;sup>2</sup> Appendix N°1 presents an update regarding "Portfolio Composition" presented in the second quarter report of 2018, due to an error.

## ı. Market Value of the Fund

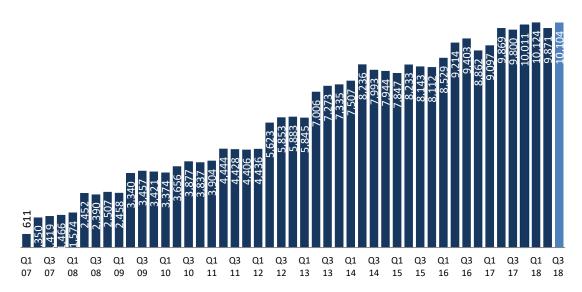
**Table 1**: **Quarterly change in market value** (millions of dollars)

Changes in Market Value	2017		2018		Since
(US\$ million)	Q4	Q1	Q2	Q3	Inception <sup>(a)</sup>
Starting Market Value	9,799.7	10,011.0	10,123.8	9,870.6	0.0
Contributions	0.0	0.0	0.0	541.6	8,913.2
Withdrawals	0.0	0.0	0.0	-295.2	-609.2
Accrued Interest	50.6	53.4	52.6	51.8	1,586.2
Capital Gains (Losses)	162.1	60.6	-304.4	-63.6	242.7
Admin., Custody and Other Costs (b)	-1.5	-1.1	-1.3	-1.2	-29.0
Final Market Value	10,011.0	10,123.8	9,870.6	10,103.9	10,103.9

<sup>(</sup>a) The PRF was stablished with an initial contribution of US\$ 604.5 million on December 28, 2006.

Source: Ministry of Finance, based on information provided by JPMorgan.

**Figure 1: PRF market value development** (millions of dollars)



<sup>(</sup>b) It includes costs associated with consultants and others.

#### II. Returns

Table 2: Performance by asset class<sup>3</sup> (percent)

Returns <sup>(a)</sup>	Last 3 months	YTD	Last 12 months	Last 3 years (annualized)	Since Inception (annualized) <sup>(b)</sup>
Sovereign and Government Related Bonds	-1.42%	-2.25%	-1.17%	1.96%	-0.02%
Inflation Indexed Sov. Bonds	-1.46%	-3.15%	-0.53%	2.23%	2.03%
Corporate Bonds	0.52%	-2.87%	-1.46%	3.07%	2.73%
Equities	4.34%	4.11%	10.10%	13.75%	10.88%
Total Portfolio	-0.12%	-1.52%	0.61%	4.05%	3.48%
Exchange rate (CLP)	2.09%	7.52%	3.87%	-2.09%	1.79%
Return in CLP <sup>(c)</sup>	1.97%	5.89%	4.51%	1.88%	5.33%

<sup>(</sup>a) Time Weighted Return (it is calculated as the growth rate of the funds that were invested throughout the period).

Source: Ministry of Finance, based on information provided by JPMorgan.

Table 3: Excess returns (basis points)

Asset Class	Last 3 months	YTD	Last 12 months	Last 3 years (annualized)	Since Inception (annualized) <sup>(a)</sup> ( <sup>b)</sup>
Sovereign portfolio	8	19	15	11	-14
Corporate Bonds	11	-9	-8	-6	-33
Equities	-7	-17	-27	-29	-44
Total Portfolio	12	10	8	4	-24

<sup>(</sup>a) Excess returns since inception are negatively affected by the fund's policy investment implementation period during the first quarter of 2012

Source: Ministry of Finance, based on information provided by JPMorgan.

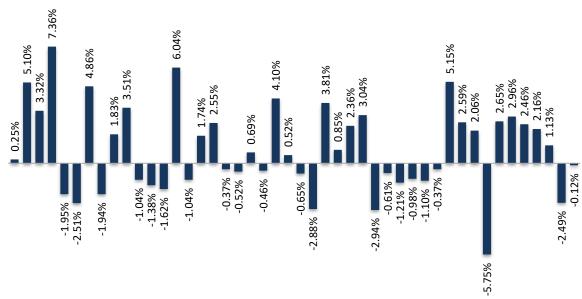
<sup>3</sup> Returns for periods of more than one year are compound annualized rates while those for less than a year correspond to the change as seen in the stated period. To meet high standards of transparency and provide a better assessment of the gains or losses on investments, the Ministry of Finance discloses the fund's return in different time horizons and currencies. With respect to the time horizon, it is important to note that, in keeping with the medium-and long term investment policy, the return assessment should focus on that period, disregarding fluctuations that may occur monthly or quarterly. With regard to returns expressed in different currencies, the return in US dollars allows for an assessment which is more in line with the investment policy given that the fund's resources are wholly invested abroad and in foreign currencies. The return in Chilean pesos is also disclosed. This return reflects changes in the peso-dollar exchange rate and, therefore, may experience greater fluctuations. Finally, as with any investment, returns obtained in the past do not guarantee future positive results.

<sup>(</sup>b) Since Inception return is calculated from December 31, 2011 for Sovereign and Gov. Related Bonds, Inflation Indexed Sov. Bonds, Corporate Bonds and Equities. Since inception exchange rate and return in CLP are calculated from March 31, 2007 for Total portfolio. Since March 31, 2007 the performance of Central Bank of Chile started to be measured.

<sup>(</sup>c) Returns in CLP corresponds to the sum of the percentage change of the exchange rate CLP/USD and the return in USD.

<sup>(</sup>b) Returns are calculated since March 31, 2007 for the sovereign portfolio, and since December, 2011 for corporate bonds and equities.

Figure 2: Quarterly returns in dollars (TWR) (percent)



Source: Ministry of Finance, based on information provided by JPMorgan

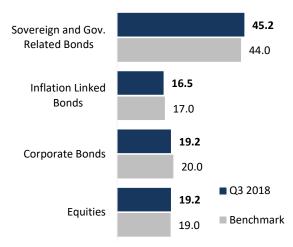
Figure 3: Internal rate of return in dollars (IRR) (percent)



#### III. Portfolio Allocation

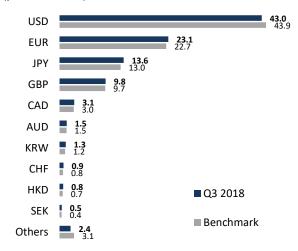
#### III.1. Total portfolio

Figure 4: Investment by asset class<sup>4</sup> (percent of total)



Source: Ministry of Finance, based on information provided by JPMorgan.

Figure 5: Investment by currency (percent of total)



Source: Ministry of Finance, based on information provided by JPMorgan.

Figure 6: Investments by country

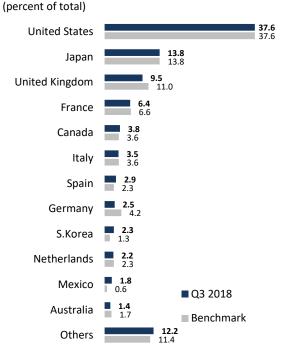
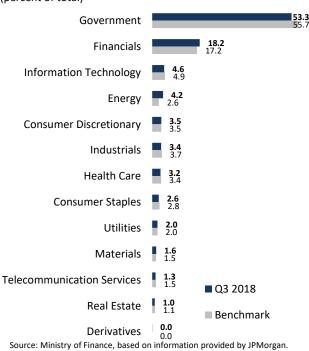


Figure 7: Investment by economic sector (percent of total)

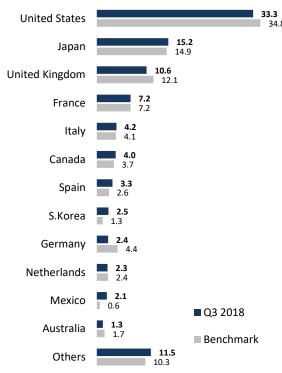


<sup>4</sup> Appendix N°2 presents an update regarding "Figure 4: Investment by asset class" presented in the second quarter report of 2018, due to an error.

#### III.2. Fixed-Income portfolio

Figure 8: Allocation by country

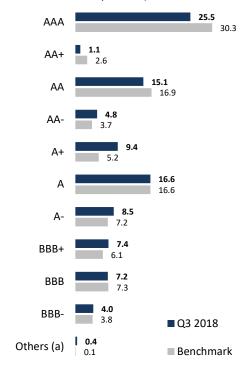
(percent of fixed-income portfolio)



Source: Ministry of Finance, based on information provided by JPMorgan.

Figure 9: Portfolio allocation by Credit Risk

(percent of fixed-income portfolio)



(a) Includes cash and cash equivalents.

 ${\bf Source: Ministry\ of\ Finance,\ based\ on\ information\ provided\ by\ JPMorgan.}$ 

Table 4: Portfolio by issuer credit rating

(percent of the fixed-income portfolio)

(percent of the fixe	a-income portrollo)			
Rating	Sovereign and Gov. Related Bonds	Inflation Indexed Sov. Bonds	Corporate Bonds	Total Fixed Income
AAA	15.3%	10.1%	0.1%	25.5%
AA+	0.6%	0.2%	0.4%	1.1%
AA	6.0%	8.7%	0.3%	15.1%
AA-	3.5%	0.0%	1.4%	4.8%
A+	6.8%	0.1%	2.5%	9.4%
Α	13.0%	0.0%	3.6%	16.6%
A-	3.6%	0.4%	4.4%	8.5%
BBB+	2.6%	0.0%	4.8%	7.4%
BBB	3.1%	0.9%	3.2%	7.2%
BBB-	1.3%	0.0%	2.7%	4.0%
Others <sup>(a)</sup>	0.0%	0.0%	0.4%	0.4%
Total	55.9%	20.4%	23.7%	100.0%

(a) Includes cash, cash equivalents and unliquidated transactions.

Figure 10: Largest exposures to sovereign bonds and Gov. **Related bonds** 

(millions of dollars)

Figure 11: Largest exposures to corporate bonds<sup>5</sup> (millions of dollars)

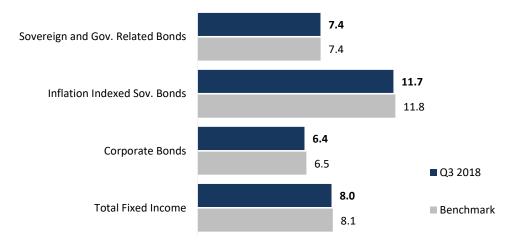


JP Morgan 28.2 **HSBC** 24.3 Wells Fargo 23.7 Bank of America 22.5 **Goldman Sachs** 21.9 Anheuser-Busch 21.2 Microsoft 20.9 Citigroup 19.7 Verizon Morgan Stanley 17.9

Source: Ministry of Finance, based on information provided by JPMorgan

Source: Ministry of Finance, based on information provided by JPMorgan.

Figure 12: Duration (years)

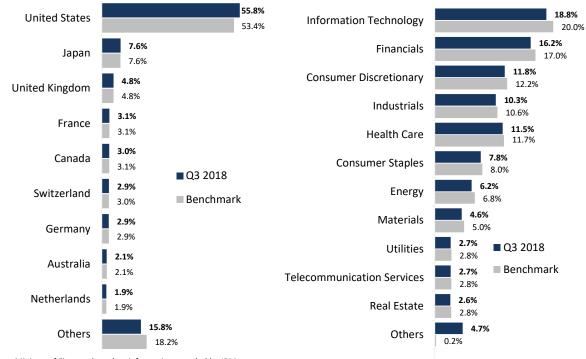


<sup>&</sup>lt;sup>5</sup> Appendix N°3 presents an update regarding "Figure 11: Largest exposures to corporate bonds" presented in the second quarter report of 2018, due to an error.

#### III.3. Equities

Figure 13: Allocation by country (percent of equity portfolio)

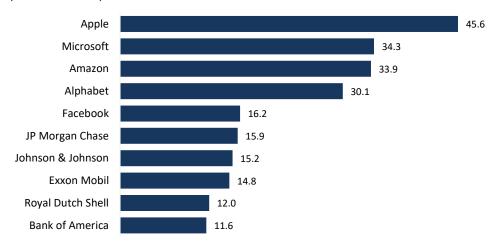
Figure 14: Allocation by economic sector (percent of equity portfolio)



Source: Ministry of Finance, based on information provded by JPMorgan.

Source: Ministry of Finance, based on information provided by JPMorgan.

Figure 15: Largest equity investments (millions of dollars)



#### iv. Other indicators

An indicator commonly used for monitoring the market risk of the portfolio is the return volatility. In the quarter, the standard deviation of returns of the PRF was 4.95%. The tracking error ex-post, an indicator used to measure the degree of how close the portfolio tracks the return of benchmark, was 13 basis points<sup>7</sup> at the quarter end.

Table 5: Standard deviation and tracking error ex-post

	Q3 2018
Standard Deviation	4.95%
Tracking error ex-post (basis points)	13

Source: Ministry of Finance, based on information provided by JPMorgan.

## v. Securities Lending Income and Administration Cost

The cost associated with the management of the fund by those responsible for the investment<sup>8</sup> was US\$781,115 during the quarter, while expenses associated with the custody service<sup>9</sup> were US\$426,744 and the cost associated to others, that includes the external advisory payment to Verus Advisory Inc. and PWC Management Consulting, was \$32,159. Meanwhile, the securities lending program generated revenues of US\$66,504 during the same period (see table 6).

Table 6: Other flows in the quarter (in dollars)

		Q3 2018
Outflow		
Administration		781,115
Custody		426,744
Others		32,159
	Total	1,240,019
Inflows		
Securities Lending		66,504
Others		0
	Total	66,504

Source: Ministry of Finance, based on information provided by JPMorgan and the Central Bank of Chile.

<sup>&</sup>lt;sup>6</sup> Standard deviation of annualized monthly returns of the past three years.

<sup>&</sup>lt;sup>7</sup> Standard deviation of annualized monthly excess returns of the portfolio against the benchmark in the past three years.

<sup>&</sup>lt;sup>8</sup> The Central Bank of Chile is responsible for the investment of the sovereign fixed-income portfolio (61% of the fund), while Mellon Capital Management Corporation and BlackRock Institutional Trust Company for the investment of the equity portfolios (19%), and Allianz Global Investors GmbH and BlackRock Institutional Trust Company for the corporate bond portfolios (20%). The entities responsible for investing portfolios of equities and corporate bond portfolios were selected in 2011.

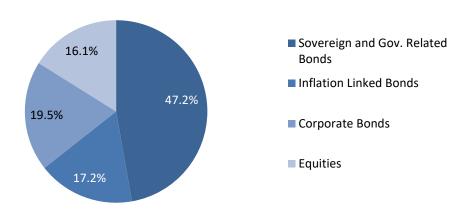
<sup>&</sup>lt;sup>9</sup> The custodian bank is J.P. Morgan.

## vı. Appendix

## Appendix N°1

## Portfolio Composition Second Quarter 2018

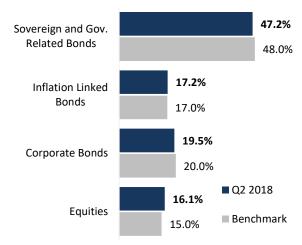
# **Portfolio Composition**



## Appendix N°2

Figure 4: Investment by asset class Second Quarter 2018

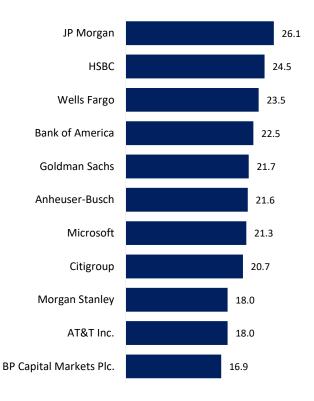
(percent of total)



## **Appendix N°3**

Figure 11: Largest exposures to corporate bonds Second Quarter 2018

(millions of dollars)



# Appendix N°4

#### **Benchmarks**

A benchmark is defined for each asset class of the strategic asset allocation, and corresponds to a representative index of the corresponding market:

Asset Class	Percent of total portfolio	Benchmarks
Sovereign and Government	44%	Bloomberg Barclays Capital Global Aggregate: Treasury Bond Index (USD unhedged)
Related Bonds <sup>(a)</sup>	4470	Bloomberg Barclays Capital Global Aggregate: Government-Related (USD unhedged)
Inflation Indexed Sov. Bonds	17%	Bloomberg Barclays Capital Global Inflation-Linked Index (unhedged)
Corporate Bonds	20%	Bloomberg Barclays Capital Global Aggregate: Corporates Index (USD unhedged)
Equities	19%	MSCI All Country World Index <sup>10</sup> (USD unhedged with reinvested dividends)

<sup>(</sup>a) For this asset class, the subindexes are weighted by relative capitalization.

Exclude	Chile
	Exclude