TIMOR-LESTE PETROLEUM FUND

Annual Report 2022



Petroleum Fund Policy and Management Office
MINISTRY OF FINANCE
DEMOCRATIC REPUBLIC OF TIMOR-LESTE





REPÚBLICA DEMOCRÁTICA DE TIMOR-LESTE MINISTÉRIO DAS FINANÇAS



TIMOR-LESTE PETROLEUM FUND

ANNUAL REPORT 2022

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LIST OF ACRONYMS

ANPM National Authority for Petroleum and Minerals (Autoridade Nacional do Petróleo e Minerais)

APT Additional Profits Tax

AU Australia

BCTL Central Bank of Timor-Leste (Banco Central de Timor-Leste)

BIS Bank for International Settlements

Bn/b Billions

BOE Barrels of Oil Equivalent

Bp/bps Basis points BU Bayu-Undan

BUIW Bayu-Undan Infill Well program

CMATS Certain Maritime Arrangement in the Timor Sea

COVID Coronavirus disease
CPI Consumer price index
DM Developed Market
DXY US Dollar Index
ECB European Central Bank

EITI Extractive Industry Transparency Initiative

ESI Estimated Sustainable Income EY Ernst & Young - External Auditor

EZ Euro-zone

FMI Financial Market Investments
FOMC The Federal Open Market Committee

FTP First Tranche Petroleum

FV Future Value

GAPP Generally Accepted Principles and Practices

GDP Gross Domestic Product

GIPS Global Investment Performance Standards

IAB Investment Advisory Board

IFRS International Financial Reporting Standards
IFSWF International Forum of Sovereign Wealth Funds

ISS Institutional Shareholder Services JKM Platts Japan-Korea-Marker

JPDA Joint Petroleum Development Area

LNG Liquefied Natural Gas
LPG Liquefied Petroleum Gas

Mn/m Millions

MOF Ministry of Finance

MSCI Morgan Stanley Capital International
OMA Operational Management Agreement
PF/TLPF The Petroleum Fund of Timor-Leste
PFCC Petroleum Fund Consultative Council

PFPMO Petroleum Fund Policy and Management Office - Ministry of Finance

PSC Production Sharing Contract SAA Strategic Asset Allocations

SPDI Special Private Debt Instrument for petroleum operations - Timor Gap Loan

SSGA State Street Global Advisors SWF Sovereign Wealth Fund

TIPS Treasury Inflation-Protected Securities

TL Timor-Leste

TLEA Timor-Leste Exclusive Area

UK United Kingdom

US/USA United States of America

USD US Dollar

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MESSAGE FROM THE MINISTER OF FINANCE



The recent transition to the IX Constitutional Government has given the country a fresh economic perspective. This change has allowed for a new layer of energy and possibility, as we look to new methods to improve the country's economic management. As this new administration takes office, there will be the potential for policy adjustments that are needed in order to revitalise a variety of industries, including banking and investment.

As explained in this report, both equities and government bonds faced substantial declines in value in 2022, exacerbated by the necessity for central banks to implement abrupt interest rate hikes in a bid to combat rising inflation. The Petroleum Fund was certainly not alone in incurring sizable mark-to-market losses.

Despite these adversities, there are noteworthy silver linings. The mark-to-market losses incurred throughout 2022 followed a three-year period where net investment income totalled over \$5 billion, which was well above long-term expectations. Investing in equities is not always smooth sailing, and enduring market volatility is part of a long-term investment strategy.

An additional point of resilience stems from the Fund's sizeable allocation to low-risk investments, a strategic recalibration that was implemented in July 2021 to better account for decumulation of the Fund. This foresight paid off, as the liquidity portfolio – commencing the year with \$3 billion – remained notably insulated from the tempestuous price volatility in 2022, while equities and longer-maturity bonds fell in value.

Through strategic employment, the liquidity portfolio supported the government's withdrawal of \$1.4 billion in 2022, allowing time for equities in the growth portfolio to recover. In fact, the growth portfolio posted gains in the fourth quarter of 2022 when there were signs that inflation had peaked. The liquidity portfolio ended the year at a healthy \$2.6 billion, boosted by \$1.1 billion of petroleum inflows received from Bayu-Undan field. The Fund's balance ended 2022 at \$17.3 billion, and, I am pleased to say, it has increased further with the recovery of markets in 2023.

The Petroleum Fund's structure provides checks and balances, and also requires cooperation and collaboration to work well. Against this backdrop, the Ministry of Finance, supported by the Fund's Investment Advisory Board (IAB), has initiated an independent review of the Petroleum Fund, a process that is now underway. Considerable value can be added from good governance, and we look forward to the guidance from the consulting firm's report.



PETROLEUM FUND AT A GLANCE

Market Value of the Petroleum Fund

\$17,273,001,722

As at 31 December 2022

\$19,621,023,723

As at 31 December 2021

Receipts from Oil and Gas

\$1.106 billion

\$24.938 billion

In 2022

Since inception, including initial transfer of \$205m

Transfers to the State Budget

\$1.404 billion

\$15.023 billion

In 2022

Since inception

Total Return on Investment

-\$2.050 billion

\$7.357 billion

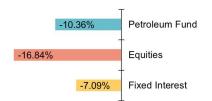
In 2022

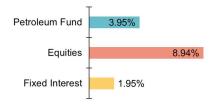
Since inception

INVESTMENT HIGHLIGHTS OF THE PETROLEUM FUND

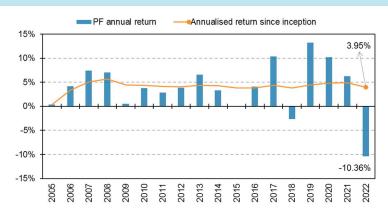
Investment return in 2022

Investment return since inception (annualised)

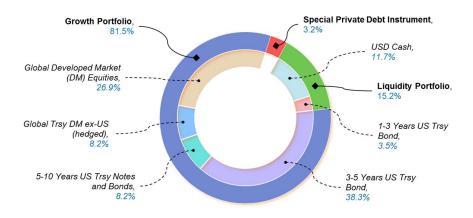




The Fund's annual investment returns since 2005



The Total Fund's actual asset allocations as at 31 December 2022



Note: the inner-ring shows the mandates

PETROLEUM FUND ASSET ALLOCATIONS

Financial Market Investments by asset classes

Liquidity and growth portfolios



Note: The private debt instrument is separate from the Financial Market Investments and limited to 5% of the total value of the Fund under the Petroleum Fund Law.

Financial Market Investments by managers

Liquidity and growth portfolios



Note: The private debt instrument is separate from the Financial Market Investments and managed by the BCTL. It is limited to 5% of the total value of the Fund under the Petroleum Fund Law.

A. ABOUT THE PETROLEUM FUND

The Petroleum Fund Framework

Under Timor-Leste's Constitution, the country's natural resources are owned by the State and are to be used in a fair and equitable way in accordance with national interests. The Constitution mandates the establishment of a fund from the income derived from its natural resources. ¹ The Petroleum Fund was created in 2005 to receive Timor-Leste's petroleum income from the Timor Sea.²

The Fund's objective is to contribute to the wise management of petroleum revenues for the benefit of both current and future generations. All of Timor-Leste's petroleum revenue flows into the Fund, while outflows from the Fund are to the State Budget, which is approved by Parliament.

The Fund contributes to sound fiscal policy, where consideration is given to the long-term interests of Timor-Leste's citizens.³ The Petroleum Fund Law specifies a sustainable level of withdrawals. The Law sets the Estimated Sustainable Income (ESI) as 3% of total Petroleum Wealth, which is equal to the value of the Petroleum Fund's investments plus the net present value of expected petroleum revenue from proven reserves and approved development fields (see Figure 1).

The Petroleum Fund Law also distinguishes between the Fund's investments and government expenditure and domestic investments. The Fund only invests in international financial assets, which are to be assessed on the financial criteria specified in the Law. The Government's national investments are included in the State Budget and passed by Parliament. The spending rule and the requirement for international investments reflects the model developed for Norway's sovereign wealth fund. The framework permanent income Government's withdrawals to the expected real return from the SWF's investments in order to preserve the real value of the fund in perpetuity. This can be said to equally benefit current and future generations by providing for the same real value of withdrawals each year. In the case of the Petroleum Fund, a significant allocation to higher returning risk assets are required to offset withdrawals of 3%. The Petroleum Fund Law was amended in 2011 to allow an equity allocation of up to 50% of the total fund, and in 2012 a 40% equity allocation was decided upon, which, at that time, was expected to earn a 3% real return over the long-term.

There have been challenges to the framework in Timor-Leste. The ESI guideline has not been followed since 2009. Withdrawals have exceeded the 3% ESI on the grounds that government expenditure and investment contribute to economic development that is in Timor-Leste's long-term interests. The Fund's investment strategy was amended in 2021 to better reflect fiscal policy, as Section C describes. In addition, the government decided in 2019 for the Petroleum Fund to invest in petroleum operations, which was implemented by amendments to the Petroleum Activities Law. This is described in a subsequent section.

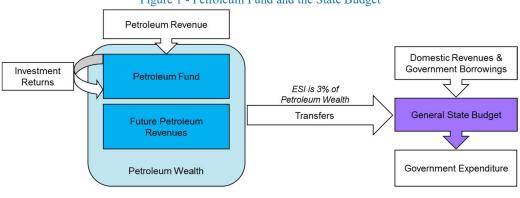


Figure 1 - Petroleum Fund and the State Budget

¹ Article 139 of the Constitution of the Democratic Republic of Timor-Leste.

² Petroleum Fund Law No.9/2005 as of 3 August 2005, which was amended by the Law No.12/2011 as of 28 September 2011. The fiscal regime that governs Timor-Leste's petroleum revenue is described in a section below.

³ Preamble to the Petroleum Fund Law No.9/2005.

The Petroleum Fund's Institutions and Governance Framework

The Petroleum Fund is structured as an account held by the appointed operational manager, the Central Bank of Timor-Leste (BCTL).

Figure 2 shows the BCTL and the other institutions involved in the Petroleum Fund. The National Parliament enacts the key parameters for the Fund in the Petroleum Fund Law. These include the objectives of the Fund, the roles of its institutions, its eligible investments, the guidelines for asset allocation, and the risk limits. Parliament supplemented the legal framework for the Petroleum Fund in 2019 by passing an amendment to the Petroleum Activities Law that allowed the Fund to invest in petroleum operations. The Government's investment decision accounted for national economic development objectives and the expected economic and social benefits.

The Minister of Finance is the executive of the Petroleum Fund and is responsible for the overall management of the Fund as the Government's representative. The Minister of Finance's

responsibilities include determining the investment policy, setting guidelines for new investments and overseeing the Fund's governance. The Minister of Finance is supported by the Petroleum Fund Policy and Management Office (PFPMO), a section at the Ministry of Finance. The Minister of Finance seeks advice on the Fund's investment and management from the Investment Advisory Board, as described below.

The BCTL is the Operational Manager of the Petroleum Fund. The BCTL implements the Fund's investments, and its responsibilities are set out in an Operational Management Agreement (OMA) with the Minister of Finance. Annex 1 of the OMA contains the details of the investment policy and individual mandates. Some of the portfolio is directly managed by the BCTL. For the externally managed portion of the portfolio, the BCTL undertakes manager searches and monitors the appointed external managers. The Ministry of Finance oversees the operational manager.

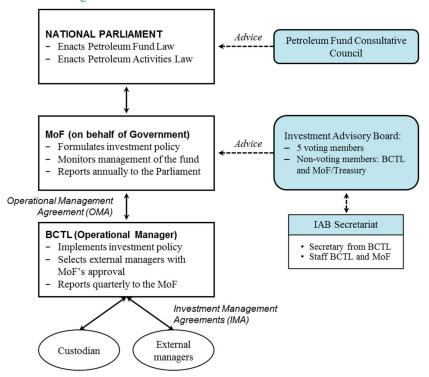


Figure 2 - Governance structure of the Petroleum Fund

The Minister of Finance is required by the Petroleum Fund Law to seek advice from the Investment Advisory Board (IAB) before making decisions on the Fund's investments and management. The IAB is an advisory board that provides non-binding independent and impartial advice upon the Minister's request or on the Board's initiative. The Petroleum

Fund Law requires the IAB to include members who have significant experience in investment management. The Ministry of Finance, via the Director of Treasury or his/her delegate, and the BCTL, as the Operational Manager, have non-voting representatives on the Board and actively contribute to the discussions preceding the IAB's advice. The

IAB is supported by a Secretary from the BCTL and secretariat members from both the BCTL and PFPMO. The IAB has its own budget and is able to procure external support when required. Its advice is published each year as part of the Annual Report (Annex XII), or earlier when requested by Parliament.

The IAB plays a crucial role in the Petroleum Fund, and the Board's independent, impartial and expert advice represents an important safeguard in the Fund's structure. The current members of the IAB are listed in Table 1 and short biographies are included in Annex IX.

Table 1 - Members of the Investment Advisory Board

	Position and tenure
Mr. Olgario de Castro	Chairman. Voting member since 2008
Dr. Torres Trovik	Voting member since 2006
Mr. Gualdino da Silva	Voting member since 2012
Professor Michael Drew	Voting member since 2017
Mr. Venancio Alves Maria	BCTL's representative since 2012
Mr. Filipe Nery Bernardo	MoF's representative since 2022

Lastly, the Petroleum Fund Consultative Council (PFCC) advises Parliament on the performance and operation of the Petroleum Fund, and on withdrawals from the Fund, including whether the transfers are

being used effectively for the benefit of current and future generations. The current members of the PFCC are listed in Table 2.

Table 2 - Members of the Petroleum Fund Consultative Council

	Position and tenure
Mr. Juvinal Dias	President. Appointed in 2018 as civil society's representative.
Mr. Nuno Eugénio Goulart	Appointed in 2019 as Parliament's representative.
Mrs. Izilda Imanuela da Luz Pereira Soares	Appointed in 2018 as Parliament's representative.
Pe. Mouzinho Pereira Lopes*	Appointed in September 2022 as religious organisations' representative.
Mr. Hernani Agostinho Soares	Appointed in 2019 as private business sector's representative.
Mrs. Martinha da Silva de Jesus Pinto	Appointed in 2019 as civil society's representative.

^{*} Pe. Julio Crispim Ximenes Belo served on the PFCC prior to Pe. Mouzinho Pereira Lopes.

Transparency is a fundamental principle governing the Fund, and the Petroleum Fund Law sets out the reporting requirements for each institution. The Petroleum Fund's reports are outlined in Table 3.

The Ministry of Finance is responsible for the publication of the Petroleum Fund's Annual Report. This includes the financial statements, which are compiled by the BCTL as Operational Manager, externally audited, and approved by the Director of Treasury at the Ministry of Finance. ⁴ An internationally accredited auditor issues an audit report on the annual financial statements. The Ministry of Finance also undertakes the ESI calculations, which are certified by an independent auditor and included in the General State Budget presented to National Parliament.

The BCTL compiles quarterly performance reports to the Minister of Finance. The BCTL also reports to the Ministry of Finance on its internally managed mandates. The annual report and quarterly performance reports are provided to key stakeholders and are publicly available on the Ministry of Finance and the Central Bank's websites.⁵

The Petroleum Fund has been a member of the International Forum of Sovereign Wealth Funds (IFSWF) since 2009. The Ministry of Finance undertakes an annual self-assessment of compliance with the IFSWF's Santiago Principles, which set out the best practice for sovereign wealth funds. The latest assessment is contained in Annex XIII.

There is considerable public interest in the Petroleum Fund's management and performance. The Ministry of Finance and the BCTL are committed to

⁴ The Director of Treasury's responsibility to maintain the Petroleum Fund's accounts in Article 21 of the Petroleum Fund Law is delegated by the Minister of Finance to the BCTL under the Operational Management Agreement.

⁵ The Ministry of Finance website: https://www.mof.gov.tl/. The Central Bank of Timor-Leste's website: https://www.bancocentral.tl/en

developing the public's understanding of the Fund's management and investment strategy. The BCTL and the Ministry of Finance present throughout Timor-Leste at public workshops coordinated by the Petroleum Fund's Consultative Council. However,

COVID-19 restrictions contributed to a limited number of workshops in 2022, and the BCTL did not hold its joint press release of the quarterly performance report.

Table 3 - Petroleum Fund reports

Report	Responsible institution	
Annual Report	Published by the Ministry of Finance along with the audited financial statements	Inputs from the BCTL on investment performance and holdings
Audited Annual Financial Statements	The BCTL compiles the accounts	Fund's custodian provides accounting services to the BCTL
	External auditor appointed by the Ministry of Finance	Currently Ernst & Young (EY)
	Approved as true and fair by Director General of Treasury	Treasury assisted by PFPMO
Quarterly performance reports – investment performance and financials	Compiled and published by the BCTL	
Monthly reports – investment performance and financials	Compiled and published by the BCTL	

Timor-Leste's Petroleum Fiscal Regime

Timor-Leste's petroleum receipts are required to flow into the Petroleum Fund. The Fund's revenues have been from fields in Timor-Leste's jurisdiction in the Timor Sea. Bayu-Undan was the only operating field in 2022 and production is declining and coming to an end. The development plan for the Greater Sunrise field is yet to be agreed, and is discussed below. While there has been petroleum exploration onshore, there are yet to be proven fields.

Timor-Leste's share of petroleum revenues depends on the relevant treaties, which define the countries' ownership interests, and the production sharing contracts, which specify how petroleum revenue is to be shared between the national owners and the oil company contractors. The Maritime Boundary Treaty between Timor-Leste and Australia became effective on 30 August 2019. The treaty significantly improved Timor-Leste's ownership interests. The previous Timor Sea Treaty provided that Timor-Leste would receive 90% of the revenue from the former Joint Petroleum Development Area (JPDA), which includes Bayu-Undan, while Australia received 10%. Under the Maritime Boundaries Treaty nearly all of the former JPDA is within Timor-Leste's exclusive jurisdiction (Figure 3), meaning that Timor-Leste receives 100% of the petroleum revenues.

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AND

Figure 3 - Map of Timor-Leste Maritime Boundary Agreement

Source: Timor-Leste Maritime Boundary Office, https://www.gfm.tl/library/maps/

The Maritime Boundaries Treaty also improves Timor-Leste's terms for Greater Sunrise. Rather than the 50% share under the Certain Maritime Arrangements in the Timor Sea (CMATS) 2006, Timor-Leste will receive 70% of upstream revenue if the pipeline is to an LNG processing plant in Timor-Leste, or 80% of upstream revenue if the pipeline is to a plant in Australia. Timor-Leste, Australia and the

participants in the joint venture continue to negotiate the development plan for Greater Sunrise.

The shares of the participants in the Greater Sunrise joint venture are shown in Table 4. Timor Gap E.P. acquired a 56.56% ownership interest in April 2019, following the Petroleum Fund's investment in petroleum operations, which is described below.

Table 4 - Ownership of Greater Sunrise field

Company	Participating interest
Timor Gap E.P.	56.56%
Woodside Energy Group	33.44%
Osaka Gas	10.00%

The Production Sharing Contracts (PSCs) are agreements between the national owners and the oil company contractors. Bayu-Undan and Greater Sunrise were governed by Annex F of the Timor Sea Treaty, which preserves the fiscal regime that was in place prior to Timor-Leste's independence. The PSCs and other contracts under the former JPDA fiscal regime and those partially under the Australian fiscal regime were transferred entirely to Timor-Leste's fiscal regime following the ratification of the Maritime Boundaries Treaty. This required the oil contractors to receive equivalent conditions to the prior regime.

The States' petroleum revenues are comprised of:

- **Royalties**, which represent the Governments' share of production before the oil companies' cost recovery. The Governments' share is 5% of production for Annex F (Bayu-Undan and Greater Sunrise), Non-Annex F PSCs (a new regime) and the Timor-Leste Exclusive Area (TLEA).⁶
- Profit oil of 40% (or 50% for condensate under Annex F), which is calculated as gross revenue less royalties and the oil companies' exploration and development costs.

Taxes paid by the oil companies. This includes corporate income tax of 30%; an additional profit tax or supplemental petroleum tax for profitable projects that exceed a hurdle rate of return; and wage income tax for wages received for employment in Timor-Leste.

Figure 4 illustrates the components of Timor-Leste's petroleum revenues that have flowed from the three productive fields, Kakatua (which ceased in 2007), Kitan (which ceased in 2015), and the Bayu-Undan field, all located in the former JPDA. Bayu-Undan's gas condensate field is now operated by Santos Ltd, which acquired ConocoPhillips' interest in the field and the Darwin LNG Plant in May 2020. The operator's royalties and profit shares are collected by Timor-Leste's National Petroleum and Minerals Authority, ANPM, as the Designated Authority. The Petroleum-related taxes are paid directly by the contractor into the Petroleum Fund. As noted, following the Maritime Boundaries Treaty, Timor-Leste has received all of the petroleum revenue from Bayu-Undan since September 2019.

⁶ For projects based on Annex F, "First Tranche Petroleum" is 10% of production, which is equally shared between the Government and contractors.

Segundaries Treaty: 100% TL

Royalties/FTP

Petroleum-related Taxes
e.g. Income tax, Additional profit tax,
Wages

Other payments

PDDA: 90/10 division TL/Australia
Maritime Boundaries Treaty: 100% TL

ANPM

\$14.0b

Petroleum Fund

\$10.6b

Figure 4 - Components of petroleum revenues from former-JPDA since 2005

Note: Under the Timor Sea Treaty 2002, JPDA revenues were shared 90%/10% between Timor-Leste and Australia. Under the new Maritime Treaty, Bayu-Undan is exclusively in Timor-Leste's jurisdiction. The categories shown do not include the initial transfer to the Fund of \$205 million of revenues that were collected before the Fund was created.

The Investment in Petroleum Operations

The Petroleum Fund's investment in petroleum operations in April 2019 is an exception to the framework and rules in the Petroleum Fund Law 2011. An overview of the investment is presented below. Further details are available in the Petroleum Fund's Annual Report for 2019.

The Government agreed to purchase ConocoPhillips' and Shell's participating interests in the Greater Sunrise joint venture in September and November 2018. The objective was to facilitate onshore processing in Timor-Leste to fully participate in the upside of development.

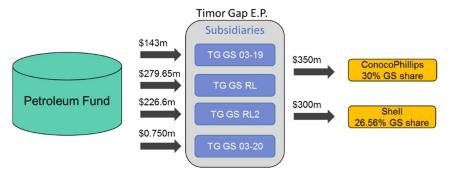
The aggregate 56.56% ownership interest cost Timor-Leste \$650 million, which needed to be financed. The Ministry of Finance's guidance was to follow the framework in the Petroleum Fund Law and include the government's domestic-orientated investments in the State Budget. However, the resulting \$2.1 billion Budget for 2019 was not promulgated by the President on sustainability concerns. The Government then chose to remove the acquisition from the Budget and instead finance it through their recent amendment to the Petroleum Activities Law. The amendment allowed the 5 per cent allocation for alternative assets in Article 15.4 of

the Petroleum Fund Law to be applied to investments in petroleum operations in national territory or abroad.

The Petroleum Fund's \$650 million investment was structured as a loan to the national oil company, Timor Gap E.P., which would then use the proceeds to acquire the interests in the Greater Sunrise joint venture. Loans were made to four subsidiaries of Timor Gap E.P. that held the related Production Sharing Contracts and Retention Leases (see Figure 5). The interest rate was 4.5% per annum, with a grace period on repayments for the first eight years to allow time for development and production to commence. Interest would accrue during the grace period and the loan would then be repaid over the following 10 years, when petroleum inflows were expected.

In addition, once the Greater Sunrise field commenced production, the Petroleum Fund will receive the State's usual share of petroleum revenue - namely, royalties, profit oil and petroleum-related taxes. The Petroleum Fund will also receive the dividends paid by the owner, Timor Gap E.P., from its participation in the joint venture.

Figure 5 - Petroleum Fund's investment in Timor Gap E.P



The Petroleum Fund's investment in Timor Gap E.P. is exceptional in two respects:

- It was an investment decision by the Government, approved by the Council of Ministers. The Petroleum Fund's Investment Advisory Board's advice was limited to how to implement the government's investment decision, rather than due diligence because the Board did not have the supporting analysis.
- It was an investment in Timor-Leste motivated by national development objectives rather than purely financial criteria.

The investment in petroleum operations has presented some challenges since it was made. Firstly, while the government's legal advice confirmed the investment was in accordance with the applicable laws at the time, the exposure limits in the Petroleum Fund Law may be breached in future. The Petroleum Fund Law limits the investment to 5% of the Fund's balance, and this limit will be breached if the Fund depletes as projected, subject to the valuation of the loans. In addition, Article 15.5 of the Petroleum Fund Law imposes a 3% investment limit to any one company or issuer. The Maritime Boundaries Treaty requires consolidating the existing PSCs into one contract, and Timor-Leste's ownership interests will also be consolidated into one entity. If the loans are also transferred to that entity, then the 3% exposure limit is likely to be exceeded.

The Ministry of Finance in 2019 advocated incorporating the investment in petroleum operations into the Petroleum Fund Law rather than have the Fund's investments governed by two different laws. The Ministry proposed introducing a new article to incorporate the provisions in the Petroleum Activities Law and clearly set out the exceptional criteria that applied to the Fund's investment in petroleum operations. The remainder of the Fund's investments would continue to be governed by the original criteria. This change was supported by advice from the Investment Advisory Board. However, the

amendments were not adopted following a ruling by the Court of Appeals. As noted, the exposure limits in the law will pose problems in the future.

The second problem is that the accounting and valuation of the loan to Timor Gap E.P. resulted in significant delays to the Petroleum Fund's audited financial statements and annual report for 2020 and 2021. Initially, the Fund's investment was valued at amortized cost, and therefore mechanically increased in value with accrued interest during the 8-year grace period. However, EY, who was appointed as the Fund's external auditor in 2021, explained during the audit of the 2020 financial statements that the conditions for amortized cost were not met, and instead fair value needed to be applied. The BCTL, as operational manager, then needed to procure an independent valuation firm and establish the valuation process. The late release of Timor Gap's audited financial statements for 2020 in September 2021 contributed to the delay.

The Ministry of Finance, in consultation with the BCTL and EY, developed a process that allowed the 2022 financial statements to be provided with the Government's financial statements to National Parliament on 22 June 2023. The 2022 annual report was delayed somewhat by the Fund's custodian recalculating investment returns to account for the valuation of the loan.

The latest challenge to accounting for the loan is the expected timing of inflows from Greater Sunrise. When the loan was entered into in 2019, the 8-year grace period on repayments was expected to allow sufficient time for Greater Sunrise to commence production. However, the development plan is yet to be agreed and the first interest payment is due in April 2028. Therefore, there may be a gap between Timor Gap E.P.'s contracted loan repayments and the revenue it will receive from Greater Sunrise. The relevant parties will meet to discuss the terms of the loan.

B. BALANCE AND FLOWS

The Fund's balance decreased by \$2,348.0 million in 2022 to end the year at \$17,273.0 million (Figure 6). The balance of the Fund is determined by inflows from petroleum revenues, investment returns and outflows from Government withdrawals. As Figure 6 illustrates, petroleum revenues contributed \$1,106.4 million to the Fund, while the annual investment return was negative \$2,050.4 million. A total of \$1,404.0 million was withdrawn to finance the Government's expenditure. The following sections provide more details on each component.

21,500 -21,000 -\$1,106.4 20,500 -20,000 -\$19,621.0 19,500 -19,000 -18,500 -18,000 -

\$17 273 0

-\$1,404.0

Budget

Figure 6 - Movement in net-assets during 2022

22.000

17.500

17,000 16,500 16,000

Beginning

Balance

Petroleum revenue

The Fund's petroleum revenue is a function of production and prices. Bayu-Undan is the only field in operation. Its production peaked in 2012 and productivity has declined over time. Infill drilling in 2018 and Phase 3C in 2021 allowed production to be extended, but there was a marked reduction in output in 2022. Monthly production fell from the typical level of around 3 million BOE to under 1 million BOE at the end of 2022. Annual production significantly decreased from 37.2 million barrels of oil equivalent (BOE) in 2021 to 17.3 million BOE in 2022. There were 6 condensate cargoes, 3 LPG cargoes, and 19 LNG cargoes sold in 2022, which is lower than in 2021.

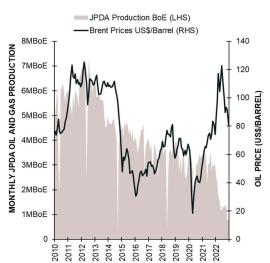
At the same time, petroleum prices were much higher in 2022, following Russia's invasion of the Ukraine. Prices received from Timor's petroleum products sold under short or long-term contracts were linked to global oil benchmark prices. Brent crude averaged \$100.80/b in 2022, \$30/b higher than the previous year's average (Figure 7). Most of Bayu Undan's LNG was sold spot in 2022. Prices were linked to either oil benchmark prices or LNG benchmark prices, namely the Platts Japan-Korea-Marker ("JKM"). The JKM's historical future prices averaged \$34.1/MMBtu in 2022, significantly higher than recent years.

Figure 7 - JPDA production and oil prices

Petroleum Investment

Return

Revenues



Higher prices allowed the Petroleum Fund to receive \$1,106.4 million of petroleum revenues during 2022. The receipts proved to be much higher than the conservative estimates incorporated in the ESI process. The revenues were comprised of \$491.8 million in petroleum taxes, \$611.7 million in royalties and profit from oil and gas, and \$2.9 million of other payments (Figure 8).8 These collections were in accordance with Articles 6.1 (a), (b), and (e) of the Petroleum Fund Law respectively.

Santos is the operator of the Bayu-Undan Joint Venture. Production is expected to cease in 2023, although the exact timing is uncertain. It is clear that most of Timor-Leste's Petroleum Wealth from Bayu-Undan has already been received by the Fund. Including, the other smaller fields, Kakatua and Kitan, total production since 2004 was 947 million BOE, and petroleum receipts totalled \$24.938 billion.

Figure 8 - Annual petroleum revenues (\$m)

Annual Petroleum Revenues, \$m

Tax receipts Other receipts ■ Royalties and oil profit ▲ Total revenues 4,000 \$3,559.1 3 500 Petroleum revenues in 2022 Tax receipts = \$491.8m 3 000 Royalties and oil profit = \$611.7m Other receipts = \$2.9m Total petroleum revenues received 2.500 2022 = \$1,106.4m 2,000 1 500 1.000 500 2010 2012 2013 2015 2016 2011 2014 2017

Withdrawals

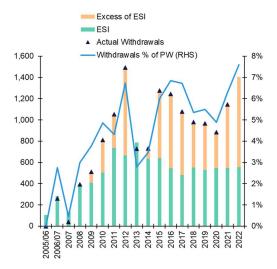
The Government's General State Budget is largely financed by withdrawals from the Petroleum Fund. The State Budget for 2022 was passed by Parliament in December 2021 and promulgated by the President in January 2022. The Parliament approved withdrawals of \$1,346.1 million from the Petroleum Fund. In May 2022, the Parliament approved the Government's proposed rectification Budget 2022, which increased the total withdrawals to \$2,552.6 million. The rectification budget included a \$1 billion transfer to create a new fund for Timor-Leste's war veterans (the National Liberation Combatants Fund or "Veterans Fund").

However, on 13 December 2022, the Veterans Fund was ruled to be unconstitutional by the Timorese Court of Appeal on the grounds of proportionality and the fair, equitable, inclusive and sustainable use of Timor-Leste's natural resource wealth. As a result, the \$1 billion was not transferred from the Petroleum Fund. Withdrawals from the Fund totalled \$1,404.0 million during 2022. This was less than the \$1,552.6 million allowed for under the rectification Budget 2022, after adjusting for the Veterans Fund's allocation.

Actual withdrawals in 2022 were \$849.9 million higher than the \$554.1 million ESI published in the 2022 Budget Book. The ESI is set at 3% of the Petroleum Wealth, which was estimated as \$18,469.3 million in the 2022 Budget Book. Petroleum Wealth consists of the projected Petroleum Fund balance at the beginning of the budget year (\$18,323.8 million)

and the forecasted net present value of the future petroleum revenues (\$145.5 million). Future petroleum revenues only include estimates from fields with approved development plans and therefore exclude Greater Sunrise and other potential sources of revenues.

Figure 9 - Transfers to the State Budget (\$m)



Since 2009, annual withdrawals have averaged about 5 per cent of estimated Petroleum Wealth, compared to the 3 per cent ESI (see Figure 9). The excess reflects the Government's policy to front-load expenditure to enable economic development.

Investment income and expenses

The Petroleum Fund's annual investment income was negative \$2,050 million after deducting expenses. This followed high returns for the previous three years; investment income after expenses was \$1,144 million in 2021, \$1,773 million in 2020, and \$2,101 million in 2019.

Total investment revenue (i.e. before expenses) was negative \$2,031 million in 2022. Interest, dividends and trust income totalled \$307 million. The loss on market valuations was \$2,338 million, which resulted from the declines in value of both fixed interest and equity holdings, as described in Section D.

Table 5 shows that the expenses incurred in managing the Petroleum Fund totalled \$13.3 million in 2022, which was lower to the previous year's expenses of \$17.0 million. The BCTL recovered operating expenses of \$6.211 million, which was below the maximum allowed by the Operational Management Agreement, namely 4 basis points of the Fund's value. The other expenses comprised custody and external manager fees of \$6.820 million, and Investment Advisory Board (IAB) expenses of \$287 thousand. Total expenses in 2022 were about 7 basis points of the average size of the Fund in 2022.

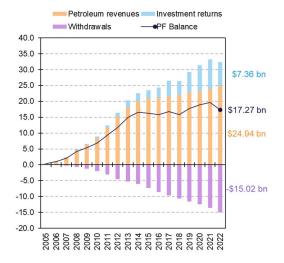
Table 5 - Management expenses in 2022 (\$m)

Category	2020	2021	2022
External managers and Custodian fees	8.815	8.139	6.820
BCTL Operational Management expenses	5.973	7.712	6.211
IAB expenses	0.242	0.140	0.287
Other expenses	1.989	0.967	0.008
Total expenses:	17.019	16.957	13.326
Total expenses relative to average Fund size:	0.093%	0.088%	0.072%

Flows since inception

Figure 10 shows the contributions to the Fund's value since its inception. Petroleum revenue receipts total \$24,938 million, which includes the initial transfer of revenues collected before the Fund was created. Investment returns have added \$7,357 million to the Fund's balance. Government withdrawals have totalled \$15,023 million since the Fund commenced in 2005, which exceeds the cumulative ESI over that period by \$6,264 million.

Figure 10 - Cumulative flows for the Fund (\$m)



C. INVESTMENT STRATEGY

Financial market investments and the investment in petroleum operations

Since 2019, the Fund has in effect been divided into investments in financial markets and the investment in petroleum operations, which was executed in April 2019 by means of loans to Timor Gap E.P.'s subsidiaries.

The investment in petroleum operations is an exception to the framework and rules in the Petroleum Fund Law that was enabled by amending the Petroleum Activities Law. The amendment allowed the Petroleum Fund to invest in petroleum

operations in Timor-Leste or abroad by applying the 5% allocation to alternatives in Article 15.4 of the Petroleum Fund Law. The Government's investment decision accounted for national economic development objectives and the expected economic and social benefits from onshore processing.

Under the framework in the Petroleum Fund Law, the Fund can only invest in offshore financial assets. National investment decisions by the government are required to be made through the State Budget, which is assessed and approved by Parliament, rather than made directly by the Fund. The Petroleum Fund's investments are subject to rigorous due diligence by the Fund's institutions, including independent advice from the IAB, and assessed purely on financial grounds, rather than accounting for development objectives. This follows the Santiago principles that seek to separate a sovereign wealth fund's investments from political influence.

The Petroleum Fund Law sets out the following rules for investments:

- The Fund only invests in offshore financial assets (Article 15.1).

- A minimum of 50% of the Petroleum Fund is invested in fixed interest securities, that is, cash and investment grade bonds (Article 15.2).
- A maximum of 50% of the Petroleum Fund is invested in listed equities (Article 15.3).
- A maximum of 5% of the Petroleum Fund is able to be invested in other eligible investments (Article 15.4).
- A maximum exposure of 3% of the Petroleum Fund in any one issuer or company, other than sovereign issuers (Article 15.5).

The Petroleum Fund Law also provides guidelines for the investment strategy. The investments shall be diversified with the objective of maximizing risk-adjusted financial returns, after taking into account the Fund's purposes, its operational constraints, and ability to bear risk (Article 14.1). There must also be sufficient liquidity to fund Government withdrawals (Article 14.2). The investments are assessed purely on these financial grounds and need to comply with sound portfolio management practices.

Box I: The evolution of the Petroleum Fund's investments

The Fund's asset allocation has evolved over time. Under the original Petroleum Fund Law in 2005, the Fund's investments were limited mainly to low-risk assets. The Fund was fully invested in US Treasuries before a global bond allocation was introduced in 2009. Equities were first introduced in 2010, when the upper limit in the 2005 Law was effectively 10%.

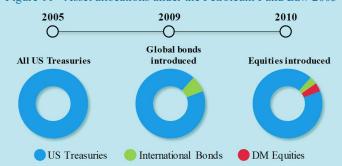
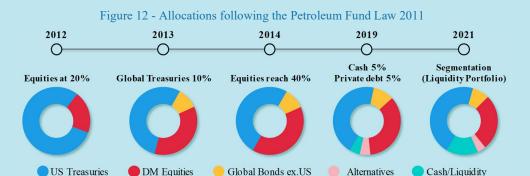


Figure 11 - Asset allocations under the Petroleum Fund Law 2005

The amendments to the Petroleum Fund Law in 2011 increased the maximum equity allocation to 50% of the Fund. This was designed to meet the 3% real return objective implied by the ESI withdrawal rule. A 40% equity allocation was decided upon in 2012, which, at that time, was expected to meet the 3% real return objective with a reasonable probability. The long-term investment horizon that results if the permanent fund framework is followed would allow the Fund to withstand the short-term volatility inherent in equities. The equity allocation was initially increased to 20% in 2012, and was then increased incrementally each month to reach 40% by June 2014. During this time, a 10% allocation to unhedged Global Treasuries excluding the US was introduced in 2013.



The implications of a declining Fund balance for the investment strategy have been considered for some time. In June 2016, a cash portfolio of \$800m was introduced to match expected net withdrawals for the remainder of that year. In 2017, the cash mandate was set to equal the 12-month expected net cash shortfall on a rolling quarterly basis. That cash allocation was treated as outside the SAA and is not shown. To simplify operational management, a 5% cash allocation was added to the SAA in 2019, as shown in Figure 12.

The Fund invested in petroleum operations in April 2019. The allocation was funded by reducing the equity allocation from 40% to 35%. Timor Gap E.P.'s interest repayments are to be financed from revenues derived from the Greater Sunrise petroleum development project, meaning that the risk of the Fund's investment is more comparable to the equity allocation than bonds.

Lastly, in July 2021, the Petroleum Fund was segmented into the liquidity portfolio and the growth portfolio. Figure 12 shows that for the total fund this involved a significant increase in the defensive allocation to cash and short-maturity US Treasuries, while the equity allocation decreased.

Segmentation into a Liquidity and Growth portfolio

The permanent fund framework described in Section A, where sustainable withdrawals are offset by the expected real investment return, was not applied in practice. Rather than follow the ESI fiscal guideline, governments have front-loaded expenditure with the aim of economic development. Withdrawals averaged about 5% of Petroleum Wealth from 2009 to 2020, significantly higher than the 3% ESI, and the projections were for excess withdrawals to continue in 2021 and beyond (Figure 10).

In prior years, petroleum inflows allowed the Fund to grow or at least partially offset the excess withdrawals. However, by 2020 low petroleum revenue was expected from the depleting Bayu-Undan field, meaning that the government's withdrawals will need to be financed by selling down the Petroleum Fund's investments. The Fund will continue to be depleted at least until inflows are received from the Greater Sunrise project or other significant prospective fields, or unless fiscal policy changes.

Equity investments are volatile and require a longer holding period for investors to be confident of earning a higher return. The projected depletion of the Fund challenged this. Following advice from the Investment Advisory Board and independent analysis, it was decided that near-term withdrawals should be matched by low-risk investments in a liquidity portfolio. The remainder of the Fund, the growth portfolio, is invested according to the previous fixed interest and equity allocation of 65%/35%. The aim of the growth portfolio is to benefit from equity's higher expected return, which comes with higher risk and volatility. Segmentation is shown in Figure 13. Holding three years of withdrawals in the liquidity portfolio was seen as providing an appropriate balance between reducing risk and being able to participate in the upside via the growth portfolio.

Segmenting the Fund by creating the liquidity portfolio:

- Reduces risk to account for withdrawals and the shorter investment horizon. The risk in the total fund is lower because the liquidity portfolio does not invest in equities.
- Provides clear objectives for each portfolio, which helps in setting the investment strategy and communicating investment performance. The objective for the liquidity portfolio is to finance

withdrawals via low-risk, lower-return investments, while the growth portfolio seeks a higher return.

- Provides confidence to stakeholders that nearterm withdrawals are covered by relatively safe assets, leading to less concern about the fluctuations in value that are characteristic of the growth portfolio.
- Reconnects the Fund's investment strategy with fiscal policy, a connection that was broken when the ESI guideline was not followed. Holding the next three years of withdrawals in safe, lowerreturn assets should encourage medium-term planning and efficient execution of public sector budgets, as required by the Preamble of the Petroleum Fund Law. It also encourages policymakers to consider fiscal sustainability now rather than later.

The liquidity portfolio funds withdrawals during the year, and therefore will deplete, subject to petroleum inflows. As a result, at the beginning of the next year, there will be a shortfall between the remaining balance in the liquidity portfolio and the projected

withdrawals for the next three years. To address this, investments in the growth portfolio are sold at the beginning of each year to finance the shortfall and "top up" the liquidity portfolio. A counter-cyclical rule applies, whereby 50% of the shortfall is transferred when the growth portfolio records a loss, 100% of the shortfall is transferred when the Fund posts a "normal" return (0-6%), and 150% of the shortfall is transferred when the growth portfolio records a strong return (greater than 6%). This counter-cyclical rule is designed to limit the sale of equities after a fall. At the same time the transfer is made to the liquidity portfolio, the growth portfolio is rebalanced to its strategic weights.

The liquidity portfolio in 2022, was set at \$3,311.39 million, which consists of the withdrawal for 2022 approved in the original State Budget and estimates of \$1 billion for both 2023 and 2024. In February 2022 the balance in the liquidity portfolio was already \$3,296.30 million, having been topped-up by petroleum inflows, meaning that only a small transfer was required from the growth portfolio to match three years of expected withdrawals.

Financial Market Investments

Liquidity Portfolio

Growth Portfolio

Covers 3 years of withdrawals, reduces risk

Low risk assets: cash and short maturity bonds

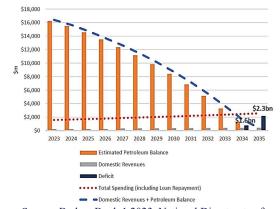
Allocation: 35% equity, 65% fixed interest

Figure 13 - Segmenting the Petroleum Fund into two portfolios

The structure adapts the Fund's investments to new information about withdrawals. For example, lower withdrawals allow for a higher allocation in the growth portfolio, while higher withdrawals requires a lower allocation to risk assets.

The fiscal sustainability analysis in the 2023 Budget Book projects that the Fund will be exhausted by 2034 under the current spending trajectory (Figure 14). Moderate spending cuts and new taxes could see the Fund's life extended to 2044 and 2049, respectively. The fiscal sustainability analysis does not account for potential inflows from Greater Sunrise. The Ministry of Finance reviews the framework regularly and it will be revisited when the amount and timing of the inflows from the Greater Sunrise project become clearer.

Figure 14 - Petroleum Fund forecasts from 2023 Budget Book – current spending trajectory



Source: Budget Book 1 2023. National Directorate of Economic Policy, Ministry of Finance, 2022.

Portfolio and Holdings

The Petroleum Fund's asset allocation has evolved over time, as shown in Box I.

The current structure of the Fund's investments is illustrated in Figure 15. As noted earlier, the

Investment in Petroleum Operations is separated from the Fund's Financial Market Investments. In turn, the Financial Market Investments are segmented into the Liquidity and Growth Portfolios.

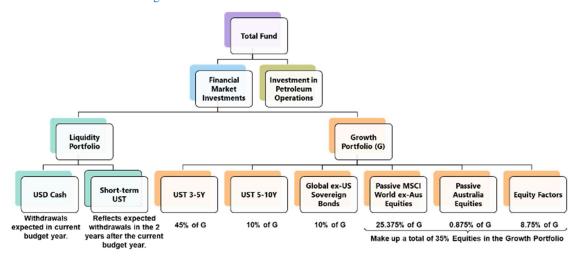


Figure 15 - Overview of the Petroleum Fund's investments

The Fund's investment strategy reflects the IAB's "Statement of Investment Beliefs and Principles", which is published on the Ministry of Finance's website and summarised in Box II. The portfolio avoids unnecessary complexity and targets systematic return premia by investing in cash, government bonds and listed equities. Diversification is used to remove unrewarded risk; the equity portfolio is diversified across companies, countries, and industries, while the sovereign bond portfolio helps to mitigate equity risk.

Passive management is the main investment style. A passive manager invests so that the weights of the individual securities in the portfolio reflect those in the benchmark index. As a result, the mandate's investment performance will correspond with the benchmark's performance. Passive management is usually preferred by the Petroleum Fund because financial markets are seen to be generally efficient and the bulk of returns come from systematic risk factors. It provides cost effective and diversified exposure.

The liquidity portfolio finances the expected withdrawals from the Fund over the next three years. It is comprised of two mandates, Cash and 1-3 year US Treasury bonds, which are internally managed by

the BCTL and are expected to perform broadly in line with their respective benchmarks.

The growth portfolio follows the 65% fixed interest and 35% equity allocation that was adopted prior to segmentation. Fixed interest investments are limited to investment-grade government bonds. The internal, passively managed US Treasury mandates constitute the bulk of the fixed interest holdings. The 3-5 year US Treasury portfolio has a 45% weight in the growth portfolio, while the 5-10 year US Treasury portfolio has a 10% weight. The Global Treasury ex-US mandate is externally managed by the Bank for International Settlements (BIS) on an "enhanced passive" basis, which seeks to earn a moderate excess return relative to its benchmark. The currency exposure in the Global Treasury ex-US mandate has been hedged since BIS was appointed in April 2020.

Three quarters of the equity allocation is also passively managed. SSgA and BlackRock's passive mandates are benchmarked to the MSCI World excluding Australia, a market-capitalisation index. The BCTL internally manages the allocation to Australian equities on a passive basis.

The Fund's allocation to equity factors departs from the market capitalization index by targeting companies that have higher exposures to value, quality, low-volatility and, to a lesser extent, size. The characteristics of these factors are summarised in Table 6. The equity factor mandate was introduced in August 2019 and amounts to one quarter of the total equity allocation. It consists of two managers; Schroders, which was held as an enhanced passive

mandate prior to the factor allocation but then reclassified, and a new factor mandate to SSgA. Over the long-term, the equity factor mandate is expected to improve the risk-adjusted return relative to a portfolio invested in a market capitalization index.

Table 6 - Characteristics of equity factors

Equity Factor	Company characteristics
Value	Low valuation ratios e.g., Book to Market value
Quality	Higher profit
Low volatility	Less variable returns
Size	Smaller market capitalisation

Table 7 - Financial Market Investments' mandates of the Petroleum Fund as at 31 December 2022

Portfolio/Mandate	Manager	Style		Allocations a	it year-end	
			US\$ m	SAA weight	% of Growth	% of FMI
Financial Market Investments			16,716			100.0%
Liquidity Portfolio			2,632			15.7%
Growth Portfolio			14,084			84.3%
Liquidity Portfolio			2,632			15.7%
Cash/US 3 Month Treasury bills	BCTL		2,029			12.1%
US 1-3 Year Treasury bonds	BCTL		603			3.6%
Growth Portfolio			14,084	100.0%	100.0%	84.3%
Total Fixed Interest			9,442	65.0%	67.0%	56.5%
US 3-5 Year Treasury bonds	BCTL	Passive	6,609	45.0%	46.9%	39.5%
US 5-10 Year Treasury bonds	BCTL	Passive	1,414	10.0%	10.0%	8.5%
Global DM ex-US Treasury	BIS	Enhanced Passive	1,419	10.0%	10.1%	8.5%
Total Equities			4,642	35.0%	33.0%	27.8%
Passive MSCI DM Equities ex-AU	SSgA, BlackRock	Passive	3,340	25.4%	23.7%	20.0%
Passive MSCI Australian equities	BCTL	Passive	120	0.9%	0.9%	0.7%
Equity Factors	SSgA, Schroders		1,181	8.8%	8.4%	7.1%

Note: SAA = Strategic Asset Allocation; DM = Developed Market. Ex-AU = Excluding Australian equities.

The liquidity portfolio ended 2022 at \$2,632 million. The \$1,106 million of petroleum inflows, partially offset the \$1,404 million of withdrawals by the government. The liquidity portfolio represented close to 16% of total financial market investments at yearend, with the majority of the holdings in the 0-12 month Cash mandate.

The growth portfolio was rebalanced to its SAA weights in the first quarter of 2022. Under annual

rebalancing, the weights of fixed interest and equities will subsequently drift according to their relative performance during the year. The negative returns from equities exceeded those of fixed interest, which resulted in equities finishing the year 2.0% under the 35% SAA weight, with fixed interest being correspondingly overweight its 65% allocation (Table 7).

Table 8 - Petroleum Fund's allocation by countries

Country	Cash	Bonds	Equities	FMI
Australia	0.1%	1.2%	2.6%	1.5%
Canada	0.1%	1.1%	3.6%	1.7%
Denmark	0.1%	0.7%	0.9%	0.7%
Eurozone	0.2%	3.7%	9.1%	4.8%
Hong Kong	0.1%	0.1%	0.8%	0.3%
Israel	0.0%	0.0%	0.1%	0.0%
Japan	0.2%	1.3%	6.3%	2.6%
New Zealand	0.1%	0.6%	0.1%	0.4%
Norway	0.1%	0.4%	0.3%	0.4%
Singapore	0.1%	0.9%	0.4%	0.7%
Sweden	0.1%	0.5%	1.0%	0.6%
Switzerland	0.1%	0.7%	3.0%	1.3%
United Kingdom	0.1%	1.1%	4.6%	2.0%
United States of America	98.7%	87.8%	67.2%	83.1%
Total	100.0%	100.0%	100.0%	100.0%

Note: Financial Market Investments only. Cash includes cash at bank, repurchase agreements and Treasury Bills. Bonds includes the 1-3 Year US Treasury mandate in the liquidity portfolio and the fixed interest mandates in the growth portfolios.

Table 8 shows the Fund's allocations by country. Cash is comprised primarily of the USD Cash mandate, as well as the 10% collateral required for the hedged global treasury mandate, and also small cash balances held by managers in their bond and equity mandates for operations, which includes non-USD.

The composition of the Petroleum Fund's equity holdings largely corresponds with the benchmark index. The MSCI World Index is comprised of large and mid-size capitalisation companies that are listed in developed markets. The Petroleum Fund held 1,580 companies at the end of 2022. The holdings are reported in Note 24 of Annex II. Table 8 shows that 67% of the equity portfolio is invested in companies listed in the US. Eurozone countries represent the next largest allocation at 9.1% of the equity portfolio, followed by Japan (6.3%) and the UK (4.6%). The allocation to Australian equities is internally managed by the BCTL and is 2.6% of total equities.

The US allocation represents 88% of the Fund's bond holdings and consists of the US Treasury 1-3 year mandate in the liquidity portfolio, and the 3-5 year and 5-10 year Treasury mandates in the growth portfolio. The Non-US government bond allocation is benchmarked to a customised index of developed

markets, which is designed to facilitate diversification by capping the Eurozone allocation at 30% of the index and individual country weights at 10%. The allocations in Table 8 are in line with the benchmark weights, with the Eurozone representing 3.7% of the total fixed interest holdings, while the weights for Australia, Canada, Japan and the UK are consistent with the maximum country weight.

In terms of the foreign currency exposure, the fixed interest holdings are effectively entirely in US dollars because the global developed market sovereign bond mandate is now hedged to the US dollar, while Cash and the US Treasury mandates are denominated in US dollars. The equity holdings are unhedged so that the currency exposures correspond with the country weights in Table 8.

For the aggregate of financial market investments, 83% of the Fund is invested in US securities, with the Eurozone the next largest allocation at about 5%. The USD dominates the currency exposure at about 91%, with small exposures to the other major currencies – namely, the Euro, the Japanese Yen, the British Pound, the Canadian dollar and the Australian dollar – by means of the unhedged equity allocation.

Box II: IAB Investment Beliefs and Principles

The Investment Advisory Board has set out the investment beliefs and principles that provide the framework for its investment advice to the Minister of Finance. The beliefs and principles are backed by academic and market support, and specifically account for the circumstances of Timor-Leste's Petroleum Fund. The main points in the Statement of Investment Beliefs and Principles are outlined below, while the full document is published on the Ministry of Finance's website. https://www.mof.gov.tl/budget-spending/petroleum-fund/

Investment beliefs

- Obtaining financial returns involves taking risk. In general, higher risks are rewarded with higher expected returns, but returns may take time to emerge from the underlying risks.
- Financial markets are generally efficient, with prices trending towards fundamental value over the long term
- Risk factors provide systematic returns, which can be captured over time through a structured investment approach.
- Diversification is the primary means of capturing systematic returns. Systematic investment in multiple
 asset classes with less than perfectly correlated returns is rewarded over time, whereas concentrated risk
 taking is not rewarded.
- A long-term investment horizon allows systematic returns to be captured because the volatility of returns decreases over time and the probability of receiving positive returns increases.
- Non-systematic returns can from time to time give rise to investment opportunities. Such opportunities are less reliable than factor returns and are of secondary importance.
- Disciplined skills, systems and procedures can be applied to optimise returns after costs. Risks cannot be avoided but can be identified and managed. Discipline during adverse investment cycles is rewarded, whereas opportunistic strategies generally are not. Costs are important and compound over time.
- Transparency builds confidence and enables a long-term disciplined approach to be implemented.
 Investment decisions with public acceptance can be maintained through difficult times, and a high level of public trust enables discipline to prevail over expediency.

Investment Principles

- Determining the strategic asset allocation is the first order decision, because it is the most important contributor to portfolio performance. It involves articulating the expected return for a specific level of risk
- Risks must be managed with an appropriate risk profile, avoiding concentrations, and based on careful selecting and monitoring of managers and risks.
- Unnecessary complexity should be avoided to achieve efficient returns from the risk taken. This implies a general approach of passively managing a limited number of asset classes.
- The investment objective should be achieved through investments in listed bonds and equities in the immediate future.
- Passive management should be the main investment style because the evidence points to this being a prudent and effective means of managing this type of portfolio.
- External managers should be hired to achieve the optimal risk/return exposure in order to avoid internal capacity constraints, to gain access to selected markets, and as a source of knowledge.
- There should be a structured review process for the strategic asset allocation, without giving up discipline, and a systematic rebalancing of the portfolio to manage risks.
- Capacity across all key stakeholders is paramount to developing the investment strategy. This involves understanding international markets, the features of asset classes, and the nature of risks all of which are a necessary precursor to further diversification.
- Evaluation of Fund returns and appropriate benchmarks is important to foster institutional learning. Databases should be maintained to recover the history of the Fund.

Beliefs and principles for fixed interest

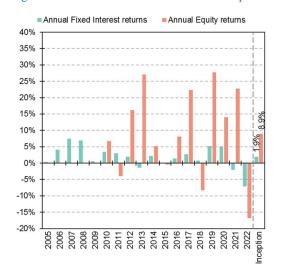
- The first order priority for fixed interest investments in the Fund is to mitigate portfolio risk. Other roles
 for fixed interest investments include seeking returns, providing stable income, and providing liquidity.
- Term, credit, and potentially other risk premia are available to fixed interest investors over the long-run.
 Realized returns from term and credit exposures vary over time depending on prevailing economic and market conditions.
- Simplicity and the avoidance of complex structured products reduce risk in a fixed interest portfolio.

D. INVESTMENT PERFORMANCE IN 2022

The Petroleum Fund's total return in 2022 was -10.36%. The liquidity portfolio's total return was -0.65%, consistent with its low risk, while the growth portfolio's total return was -11.81%. Both equities and fixed interest fell in value as central banks had to sharply raise interest rates to fight persistent inflation. The Petroleum Fund's loan to Timor Gap E.P. returned -20.05% following the latest independent valuation. The negative return for the Fund followed a period of strong performance in the prior three years.

The negative return in 2022 caused the Petroleum Fund's annual return since inception to fall to 3.95%. The fixed interest portfolio's return since 2005 is

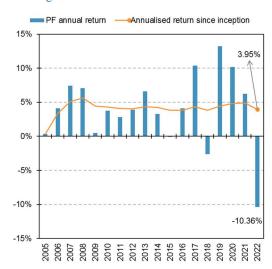
Figure 16 - Annual returns from bonds and equities



1.95% per annum, while the equity allocation's annualized return is 8.94% per annum since the first investment in 2010. The corresponding return from fixed interest since equities were introduced in October 2010 is 0.85% per annum.

The Fund's annualized real return since inception is 1.51% per annum after deducting US inflation. This is below the implied target of 3% annual return if the permanent fund model was being followed.

Figure 17 - PF annual investment returns



Developments in financial markets in 2022

It was a very difficult year for financial market investors, both in terms of returns and volatility. Inflationary pressure persisted from 2021 and worsened with the sharp increase in commodity prices that followed Russia's invasion of the Ukraine.

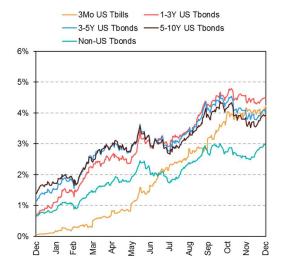
COVID-related lockdowns in China also contributed to supply constraints and price pressures. Strong labour markets fuelled consumer demand.

Inflation reached multi-decade highs in many Western countries. To re-establish price stability, central banks

needed to raise their policy rates much higher than was expected at the beginning of the year. For example, the Federal Reserve's Federal Open Market Committee's projections in December 2021 was for inflation to ease in 2022 and for the policy rate to end 2022 at 0.9%. The Fed first increased rates in March by 25bps, but a series of 50 and 75bp increases saw the Fed rate finish the year at 4.25-4.5%, an annual increase of 4.25%. The Fed also started to reduce the size of its balance sheet in the second half of 2022. At the beginning of the year, the European Central Bank (ECB) was expected to maintain accommodative policy in 2022. However, the energy crisis contributed to inflation reaching record highs and the ECB raised its policy rate by 50bps in July. This was the first rate rise in a decade and ended the era of negative rates. The ECB also ended its asset purchases in quarter 3. Subsequent rate rises saw the ECB deposit rate reach 2% in December, up from -0.5% at the start of the year.

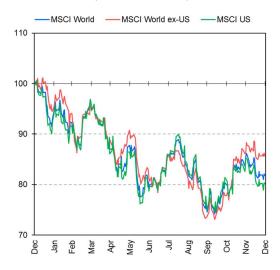
Government bond yields reflect the central bank's current policy rate and the market's expected future policy rates. The increases in policy rates and expectation for further increases caused government bond yields to rise sharply in 2022, especially during the first three quarters. US 2 year and 10 year yields rose to levels not seen since the financial crisis in 2007-2008. The value of a bond moves inversely to its yield and, consequently, the market value of the Fund's bond holdings declined substantially in 2022 as a result of the large increase in yields. The capital loss was not offset by the coupons received from bonds, meaning that the fixed interest mandates recorded negative annual returns.

Figure 18 - Index bond yields in 2022



Interest rates rose across the yield curve and the longermaturity mandates – the US Treasury 3-5 year, 5-10 year and non-US Government hedged mandate - fell the most in value. The short-maturity, low-risk, liquidity portfolio was less affected and returned -0.65%. In terms of its component mandates, the Cash mandate of 0-12 month securities posted a positive return of 0.52%, while the 1-3 year US Treasury mandate returned -3.1%, again losing value because of rising yields.

Figure 19 - Equities total returns in US dollar (31/12/2021 = 100)



Russia's invasion of the Ukraine in February increased geopolitical uncertainty, added to inflationary pressure, and detracted from growth. The economic impact was most pronounced in Europe, which was heavily dependent on Russia's exports. Central banks' tighter policy rates slowed economic growth over the course of year. The magnitude of the interest rate increases, and an inversion of government bond vield curves. caused markets to fear a recession. Stagflation inflation combined with slow or negative growth - was also a concern. The value of equities fell sharply in the first three quarters, weighed down by persistent inflation, increasing rates, and pronounced uncertainty, both in terms of geopolitics and the economic outlook. There were some positives in quarter four, when equities posted gains in October and November on signs that inflation may have peaked and hopes that central banks would slow the pace of tightening. However, in their December meetings, both the Fed and ECB raised rates by 50 basis points and reiterated their commitment to fighting inflation, projecting further increases in 2023.

The MSCI World Index, which is comprised of companies in developed markets weighted by their market size, returned -18.1% in USD terms in 2022. US equities underperformed the aggregate, returning -19.85% in 2022.

The US dollar strengthened in the first three quarters, mainly as a result of wider interest rate differentials, although weakened in quarter four when policy expectations were revised. The US Dollar Index, a measure of the US dollar relative to the currencies of the United States' major trading partners, finished the year 8.2% higher (Figure 20, DXY series). All of the major currencies depreciated against the US dollar in 2022. The British Pound and the Japanese Yen were the weaker currencies, depreciating by more than 10% against the dollar. The weakness in the Yen reflected the Bank of Japan's commitment to very accommodative monetary policy settings, keeping short and longer-term rates near zero, in contrast to central banks in other countries, which were increasing policy rates.

Figure 20 - US dollar relative to other currencies (31/12/2021 = 100)



Box III: The causes of high inflation in 2022 and the effect on financial markets

Record high inflation and central banks increasing policy rates dominated the financial market news in 2022. This resulted in both government bonds and equities falling in value.

We need to return to 2020 to understand the build-up in global price pressures. To counter the COVID-19 restrictions, government's provided substantial fiscal stimulus to preserve employment and support business. At the same time, monetary policy rates were set at close to zero or below, and central banks engaged in quantitative easing, that is, buying government bonds and other securities to bring down longer-term interest rates and increase the money supply. The accommodative policy settings helped to mitigate the depth of the global recession in 2020.

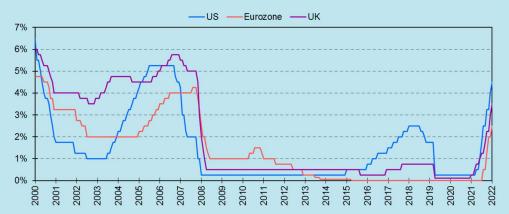
Inflationary pressure started to build in 2021 as COVID restrictions were relaxed and policy settings remained very accommodative. Price pressures were initially believed to be transitory, attributed to the supply constraints associated with the pandemic, which resulted in shortages of raw materials and finished products. Policy makers were also intent on avoiding deflation. Reflecting this, the Federal Reserve in 2020 and the ECB in 2022 adjusted their policy frameworks to allow for a period of above average inflation.

However, price pressures continued to build, and by quarter 4 2021 the Federal Reserve stopped describing inflation as transitory. Around this time, the Fed and other central banks announced tapering of asset purchases given the high rate of inflation and strong economy. By the end of 2021, the FOMC's projections were for modest increases in its policy rate during 2022, while the ECB was expected to remain on hold.



Figure 21 - US Inflation: Headline and Core CPI

Figure 22 - Global Central Bank Policy Rates



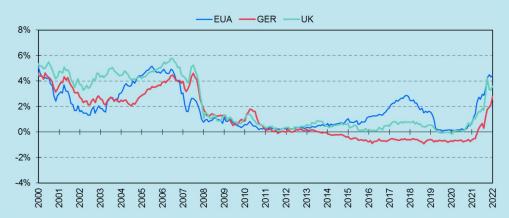
Russia's invasion of the Ukraine in February 2022 added to inflationary pressure by disrupting supply chains and increasing commodity prices. Russia is a large exporter of oil and gas, particularly to Europe, and both Russia and Ukraine are significant exporters of agricultural commodities.

The persistently high inflation forced central banks to raise policy rates significantly over the course of the year. The Federal Reserve had learnt from the past episodes of high inflation that decisive action was needed to restore price stability.

Government bond yields are a function of expected policy rates, and the repeated upward revisions of expectations caused bond yields to rise during 2022 (Figure 23). The price of a bond falls when its yield rises. The sizable increases in yields during 2022 resulted in large capital losses on government bonds.

Inflation and the increase in rates also negatively affected equity markets in 2022. The stock price of a company corresponds with the discounted value of its expected cash flows (Figure 24). The discount rate includes a risk-free rate that can be approximated by a government bond yield. When the discount rate increases, the stock price falls. In addition, increasing policy rates reduces inflation by slowing economic growth, which flows through into lower company profits, and therefore a lower stock price. Fears of a central bank induced recession – a hard-landing – was also being priced into equity markets to varying degrees during 2022

Figure 23 - Global Government Bond Yields



The relationship between stock prices, discount rates and growth:

$$P = \frac{D_1}{r - g}$$

Where:

 $P = stock\ price;\ D_{I} = next\ year's\ dividend;$ $r = discount\ rate\ (cost\ of\ equity\ capital);\ g = growth\ rate$ The past year was a situation where equities and government bonds fell in value at the same time. Since 2000, it has been common for equities and government bonds to be negatively correlated. Negative correlation means that when equities fall in value, government bond yields also fall, and bonds, therefore, increase in value. This helped mitigate the Petroleum Fund's losses in quarter 1 2020. During the initial stages of COVID-19, central banks drastically cut policy rates, which flowed through into lower bond yields, leading to positive returns from the bond portfolio.

If central banks are able to regain control of inflation, the negative correlation between equities and government bonds may resume. The increase in policy rates and bond yields to more normal levels also provides greater scope for accommodative policy when it is needed, and related upside from bond returns. Regardless of the future correlation, the bond allocation reduces the total portfolio's risk because government bonds are less risky than equities. The liquidity portfolio's allocation to cash and short-maturity Treasury bonds further reduces the risk in the portfolio.

Lastly, Treasury Inflation Protected Securities (TIPS) help to provide protection against higher than expected inflation. The Fund's allocation to TIPS in 2023 will be described in the next annual report.



Figure 24 - Correlations of equities and bonds

Developments in the private debt instrument

The process to account for and value the loan to Timor Gap took some time to establish, which resulted in significant delays to the 2020 and 2021 annual financial statements and annual reports. Our process for 2022 has been timelier.

As noted in our past two reports, the Petroleum Fund's investment in Timor Gap E.P. is required to be reported at fair value, as is the case for the Fund's investments in listed equities and government bonds. However, unlike equities and bonds, a publicly available market price is not available for the loans. Instead, fair value is determined by an annual independent valuation. The BCTL, as operational manager, hires an independent expert to assess the

loans' value each year. The valuation firm determines a discount rate that incorporates the end of year yield on a US Treasury bond with a maturity that corresponds to that of the loans, and also accounts for the risk of the Fund's investment. The discount rate is then applied to the promised cash flows on the loan to calculate the fair value. Note that a similar discounted cash flow approach is used to determine the value of a government bond.

The discount rate increased in 2022 because government bond yields rose significantly, and also because the valuer increased the risk premium on the loan by 1%. The changes to the discount rate, valuations and returns are shown below.

Table 9 - Fair value of the loans to Timor Gap E.P. compared to Timor Gap's liability

	2019	2020	2021	2022
Discount rate for the loan	4.50%	5.62%	4.87%	7.95%
Fair value of Petroleum Fund's asset (\$m)	671.314*	615.700	701.353	560.758
Investment return	3.3%**	-8.3%	13.9%	-20.0%
Value of Timor Gap's liability (\$m)	671.613	701.350	732.974	765.958

Notes: * The asset was reported at amortized cost in 2019. When the valuation policy changed to fair value in the 2020 report, the external auditor assessed that the 2019 value was not materially different from fair value.

Although the promised cash flows are one year closer to being received, their present value fell because of the increase in the discount rate. The loan was valued at \$560.758 million in 2022, compared to \$701.353 million in 2021, which represents a return of -20.05 per cent. This followed a positive return of 13.91% in 2021, when interest rates were lower than the previous year.

Note 13 in the accompanying financial statements in Annex II shows that interest continues to accrue on the loan. This is based on the cumulative value of the loan at the start of the year, rather than the fair value. The difference between the end of year independent valuation and the book value – the beginning value and accrued interest - is accounted for as a fair value gain/loss.

Table 10 - Accounting for the loans to Timor Gap (US\$ millions)

	2022
Balance at beginning of year	701.353
Interest income*	32.985
FV gain/loss	-173.581
Fair value at end of year	560.758

^{*} Interest income is calculated as 4.5% of \$733.007m, the cumulative value of the loan.

The value of the Petroleum Fund's asset needs to be distinguished from the value of Timor Gap E.P.'s liability. Although the fair value of the Petroleum Fund's asset is lower, Timor Gap E.P.'s promised cash flows remain the same. Timor Gap E.P. is required to report the value of its liability to the Petroleum Fund at amortized cost. During the grace period on interest repayments, the value of the liability continues to increase with accumulated interest, as shown in Table 9, last row.

It is also worth distinguishing between two valuation reports that relate to Timor Gap E.P. and Greater Sunrise. As noted, the BCTL hires an independent firm to assess the value of the loans that the Petroleum Fund made to Timor Gap in 2019. Separately, Timor Gap hires an independent firm to assess the value of its investment in the Greater Sunrise project, an acquisition that was financed by the loans. In its 2020 and 2021 annual financial statements, Timor Gap's participating interest in Greater Sunrise was valued at zero. The independent valuation undertaken for Timor Gap E.P. reported a negative value of the owner's participating interests in Sunrise, after taking into account the uncertainty about the fiscal regime and agreement on development.

Investment performance relative to benchmark

The Total Fund underperformed the aggregate benchmark's annual return of -9.90% by 46 bps in 2022 (Table 11). Financial Market Investments, which is comprised of the liquidity and growth portfolios, outperformed the benchmark index by 62 bps over the year. The liquidity portfolio underperformed its benchmark by 15 bps, while the growth portfolio outperformed its benchmark by 13 basis points.

The majority of the Fund's investment mandates are passively managed, so their performance will generally follow that of the benchmark indices. In the liquidity portfolio, the BCTL's cash mandate underperformed the 3-month Treasury bill benchmark by 92 bps. The BCTL's US Treasury 1-3

year mandate outperformed the benchmark by 77 basis points.

In the growth portfolio, the aggregate fixed interest outperformed its benchmark by 9 bps in 2022. The two internally managed US Treasury mandates outperformed, as did the externally managed non-US hedged benchmark.

The equity portfolio outperformed its benchmark by 130 bps in 2022. The equity factor allocation outperformed the market-capitalisation weighted benchmark by 361 bps, which was similar to the outperformance in 2021. As noted, the equity factor mandates tilt towards companies with higher exposures to Value, Quality and Low Volatility

^{**} The investment was made in April 2019. On an annualised basis, the return for 2019 is 4.5%, consistent with the agreed interest rate.

factors, with the objective of improving the long-term risk-adjusted return relative to a portfolio invested according to market-capitalization weights. SSGA and BlackRock's passive equity mandates also outperformed the benchmark. This is largely because

the benchmark index assumes that the maximum withholding tax is paid, while, in practice, the Fund has exemptions in some countries. The BCTL's internally managed Australian equity mandate posted a small excess return relative to the benchmark.

Table 11 - Petroleum Fund's investment performance in 2022, (%)

Asset Class	Q1	Q2	Q3	Q4	2022	2021	5y	Since Inc
A. Total Fund (1)	-3.96	-5.33	-3.48	2.30	-10.36	6.25	2.96	3.95
Benchmark	-4.03	-5.61	-3.71	3.33	-9.90	5.56	2.84	3.89
Excess	0.07	0.28	0.23	-1.03	-0.46	0.68	0.12	0.06
B. Total Financial Market Investments (2)	-4.15	-5.59	-3.68	3.27	-9.98	5.98	3.16	4.01
Benchmark	-4.23	-5.88	-3.92	3.21	-10.61	5.55	2.72	3.85
Excess	0.08	0.29	0.24	0.05	0.62	0.43	0.44	0.16
B.1 Liquidity (3)	-0.87	-0.26	-0.37	0.86	-0.65	n.a	n.a	-0.61
Benchmark	-0.76	-0.12	-0.39	0.78	-0.50	n.a	n.a	-0.55
Excess	-0.11	-0.14	0.02	0.08	-0.15	n.a	n.a	-0.06
B.2 Growth (3)	-4.79	-6.69	-4.32	3.74	-11.81	n.a	n.a	-6.64
Benchmark	-4.76	-7.13	-4.42	4.16	-11.94	n.a	n.a	-6.79
Excess	-0.03	0.44	0.10	-0.42	0.13	n.a	n.a	0.14
B.2.1 International Fixed Interest	-4.79	-2.05	-2.72	1.08	-9.05	-2.25	-0.21	1.81
Benchmark	-4.75	-2.11	-3.59	1.08	-9.14	-2.16	-0.14	1.82
Excess	-0.04	0.07	0.87	0.00	0.09	-0.10	-0.06	-0.01
B.2.2 International Equities	-4.74	-15.30	-6.25	9.95	-16.84	22.72	6.37	8.94
Benchmark	-5.15	-16.19	-6.19	9.77	-18.14	21.82	6.14	8.49
Excess	0.41	0.88	-0.06	0.18	1.30	0.90	0.24	0.45
C. Private debt instrument (5)	0.00	0.00	0.00	-20.05	-20.05	13.91	n.a	-3.86
Benchmark	1.10	1.10	1.11	1.11	4.50	4.50	n.a	4.50
Excess	-1.10	-1.10	-1.11	-21.16	-24.55	9.41	n.a	-8.36

Notes:

Table 12 - Liquidity portfolio's fixed interest mandates investment performance in 2022, (%)

Liquidity Portfolio Mandate	Q1	Q2	Q3	Q4	2022	2021	5y	Since inception
Cash (1)	-0.24	-0.17	-0.08	1.01	0.52	0.02	0.98	1.01
Benchmark	0.04	0.10	0.44	0.84	1.44	0.05	1.34	1.16
1-3 Years US Treasury Bonds (2)	-2.15	-0.51	-1.16	0.72	-3.08	n.a	n.a	-2.34
Benchmark	-2.34	-0.50	-1.77	0.74	-3.85	n.a	n.a	-2.93

Notes

⁽¹⁾ The benchmark for the Total Fund after segmentation was introduced in July 2021 uses floating monthly weights for FMI and the private debt investment.

⁽²⁾ The Financial Market Investment portfolio was introduced in November 2020 and separated from the private debt.

⁽³⁾ The Financial Market Investment portfolio was segmented into the Liquidity and Growth portfolios in July 2021.

⁽⁴⁾ The Private Debt Instruments - the loans to Timor Gap E.P. - were issued on April 2019. Since 2020, an independent valuer has been engaged by the BCTL to determine the fair value of the instruments as at the end of year. The benchmark return shown is the agreed interest rate.

⁽¹⁾ The Cash mandate commenced in August 2018 as part of fixed interest. In July 2021, the Cash mandate was classified as part of the Liquidity portfolio.

⁽²⁾ The 1-3 Years Treasury Bonds mandate commenced in July 2021.

Table 13 - Growth portfolio's fixed interest mandates investment performance in 2022, (%)

Growth Portfolio Mandate	Q1	Q2	Q3	Q4	2022	2021	5y	Since inception
International Fixed Interest Aggregate (1)	-4.79	-2.05	-2.72	1.08	-9.05	-2.25	-0.21	1.81
Benchmark	-4.75	-2.11	-3.59	1.08	-9.14	-2.16	-0.14	1.82
3-5 Years US Treasury Bonds (2)	-4.57	-1.23	-3.34	1.26	-7.74	-2.09	0.41	0.79
Benchmark	-4.50	-1.33	-3.45	1.29	-7.85	-1.96	0.45	0.80
5-10 Years US Treasury Bonds (3)	-5.83	-3.39	-5.35	1.40	-12.69	-3.25	0.02	0.95
Benchmark	-5.87	-3.28	-5.88	1.18	-13.30	-2.97	-0.05	0.92
Global Treasury ex-US, Hedged (4)	-4.70	-4.39	-2.83	-0.06	-11.52	-2.91	n.a	-5.03
Benchmark	-4.77	-4.47	-3.54	0.01	-12.23	-2.75	n.a	-5.30

Notes: (1) International Fixed Interest Aggregate is part of the Growth portfolio from July 2021.

Table 14 - Growth portfolio's equity mandates investment performance in 2022, (%)

Growth Portfolio Mandates	Q1	Q2	Q3	Q4	2022	2021	5y	Since inception
International Equities Aggregate	-4.74	-15.30	-6.25	9.95	-16.84	22.72	6.37	8.94
Benchmark	-5.15	-16.19	-6.19	9.77	-18.14	21.82	6.14	8.49
SSgA International Equities (1)	-5.33	-15.86	-6.09	9.73	-17.92	22.03	6.31	9.42
Benchmark	-5.41	-16.14	-6.18	9.64	-18.40	22.09	6.19	9.16
BlackRock International Equities (2)	-5.32	-15.89	-6.07	9.78	-17.88	22.11	6.41	8.78
Benchmark	-5.41	-16.14	-6.18	9.64	-18.40	22.09	6.19	8.50
Multi-Factor International Equity (3)	-4.11	-13.37	-6.69	9.92	-14.80	26.22	n.a	7.92
Benchmark	-5.41	-16.14	-6.18	9.64	-18.40	22.09	n.a	7.14
BCTL Australian Equity (4)	6.96	-17.88	-6.63	15.61	-5.19	9.12	3.75	6.83
Benchmark	7.25	-18.11	-6.74	15.68	-5.25	9.41	4.05	7.06

Notes: (1) SSGA's passive developed market mandate commenced in January 2012.

E. IAB ADVICE AND THE FUND GOING FORWARD

The Investment Advisory Board (IAB) advises the Minister of Finance on matters relating to the investment strategy and management of the Petroleum Fund as enacted by Article 16 of the Petroleum Fund Law. The IAB's advice is required to be published in the Annual Report according to Article 24 of the Petroleum Fund Law.

The IAB held 11 meetings and two workshops in 2022. The IAB's advice to the Minister of Finance in 2022 is included in full in Annex XII and is summarised below, along with the IAB's other activities during the year.

Independent review of the Petroleum Fund

The Minister of Finance met with the Investment Advisory Board in March 2022 to discuss the priorities for the Fund. A comprehensive independent review of the Petroleum Fund was identified as a priority in order to help promote strong governance via accountability and feedback. A review was timely in that the Fund and its institutions have not been

assessed for a number of years. The Investment Advisory Board wrote to the Minister on 18 July 2022, agreeing that a broad review of the Fund's governance structure, institutions, peoples, processes, and investments will be beneficial to Timor-Leste. The Board agreed to fund the review from its annual budget, with procurement to be undertaken by the

⁽²⁾ The 3-5 Years US Treasury Bonds mandate commenced in January 2012.

⁽³⁾ The performance of 5-10 Year US Treasury Bonds is a composite of two managers: BIS from December 2011 until April 2020, and the BCTL from May 2020.

⁽⁴⁾ The currency exposure of the Global Treasury Developed Markets ex US portfolio was hedged starting in May 2020 and is managed by the BIS. From July 2014 until April 2020, the portfolio was managed on an unhedged basis. Unhedged performance is not shown.

⁽²⁾ BlackRock's passive developed market mandate commenced in February 2013.

⁽³⁾ The Multi-factor developed market equity mandate commenced in August 2019. The composite is for two managers, Schroders and SSGA.

⁽⁴⁾ The BCTL's Australian equity mandate commenced in July 2016.

Ministry of Finance after accounting for input from the Board and BCTL. Other pressing commitments for the Fund's institutions, in particular, work on the proposed National Liberation Combatants' Fund (Veterans Fund), meant that the independent review commenced in 2023.

Managing the Fund for the benefit of current and future generations

The Minister of Finance attended the IAB's workshop in June. During the workshop, PFPMO presented an overview on the government's supplementary budget for 2022, whereby expenditure increased to \$3,185 million and withdrawals to \$2,553 million. The increase in the 2022 budget was largely due to the creation of a \$1 billion Veterans Fund.

The Board wrote to the Minister of Finance on 7 September 2022, noting that the Government, through the Ministry of Finance, need to ensure that the Petroleum Fund is being managed to benefit both current and future generations. The Board noted that future generations will benefit from preserving savings in the Fund to finance future withdrawals, which is the intention of the 3% ESI rule, and also from productive government expenditure, such as investments in infrastructure, health, and education, which enable future economic activity. However, if expenditure is simply funding economic activity and consumption there will be a sharp economic contraction when the Fund is depleted. This will

potentially be to the detriment of future generations, compared to those currently benefiting from the drawdown of the Fund. In addition, the large increase in withdrawals in 2023 undermined the purpose of the liquidity portfolio. The size of the portfolio was set at the beginning of the year to account for three years' of withdrawals, but the supplementary budget would withdraw much of that in one year. The Board's letter acknowledged the difficult choices between competing needs that are required to develop a long-term sustainable fiscal path.

The transfer to the Veterans Fund was ruled to be unconstitutional by the High Court in December on the grounds of proportionality and the fair, equitable, inclusive and sustainable use of Timor-Leste's natural resource wealth, and the transfer from the Petroleum Fund was not made. As noted earlier, government withdrawals in 2022 totalled \$1,404 million, and the liquidity portfolio ended the year at \$2,632 million, topped-up by higher than expected petroleum inflows.

Advice on US TIPS mandate

The IAB wrote to the Minister on 7 September 2022, advising on the final parameters for the US TIPS (Treasury Inflation Protected Securities) mandate, the recommended managers, and adjustments to the asset allocation to account for the new asset class. This followed receipt of reports from the BCTL in June and July 2022, after instructions from the Minister in December 2021 to commence a manager search.

The Board adopted the BCTL's recommendations on the parameters. The BCTL recommended an enhanced passive mandate in order to exploit inefficiencies in the TIPS market, and expanded the eligible instruments to facilitate that. A 10% allocation in the growth portfolio was chosen to provide some protection against the risk of persistently higher than expected inflation. The Board confirmed that the reports provided support the BCTL's conclusion that the recommended managers, Barings and Franklin Templeton, can be expected to meet the objectives of the mandate. The TIPS allocation will be funded from the US Treasury 3-5 year mandate, which will decline in weight to 35%.

The Minister of Finance adopted the IAB's advice, and, on 16 September, instructed the Governor of the BCTL to proceed with appointing the recommended managers and implementation.

Table 15 – Asset allocations in growth portfolio with US TIPS

Asset class	Allocation
US Government Treasury Notes 3-5 Years	35%
US Government Treasury Notes 5-10 Years	10%
US Government Treasury Inflation Protected Securities	10%
Global Developed Market Sovereign Bonds, Hedged	10%
Developed Market Equities	35%

Other work by the IAB in 2022

The Investment Advisory Board (IAB) usually meets on the first Wednesday of each month. At the beginning of each year, the Board helps to determine the priorities for the Petroleum Fund, including areas for research by its Secretariat. Each quarter, the BCTL presents the Fund's investment performance to the Board. The Board meetings also cover other matters relating to the Fund's investments and management. For example, in 2022, the valuation of the Fund's loans to Timor Gap E.P. were discussed, and the associated delays with the Fund's reporting. The terms of reference for the independent review of the Petroleum Fund were also agreed to.

In addition to its monthly meetings, the IAB usually holds two workshops each year. The IAB's first workshop was held online in June 2022. Briefing the Board on fiscal policy is essential, and, as noted, the workshop discussed the Government's supplementary budget. The BCTL also briefed the

The Fund going forward

The life of the Fund largely depends on the government's fiscal policy, along with the size and timing of petroleum inflows from Greater Sunrise and potentially other fields. The Ministry of Finance's modelling in the Grand Options Plan for 2024 showed that the life of the Fund could be extended to 2041 if adjustments were made to fiscal policy. On the other hand, if fiscal policy remains on the current path, the Fund is projected to be exhausted by 2035. The Petroleum Fund's segmentation framework automatically adjusts to new information about projected withdrawals. For example, if the expected withdrawals by the government for the next three years decline, then the size of the liquidity portfolio declines, allowing the Fund to take on more risk assets in the growth portfolio. For the framework to work most effectively, robust projections on government withdrawals are needed.

The independent review of the Fund's governance, resources, and investments in 2023 is an important project. Research has shown that strong governance

Board on the investment outlook, and the BCTL's progress on the US TIPS manager search. PFPMO presented a proposed governance policy, which was distributed to the Board by the Minister in May. The policy is designed to provide clarity of roles and responsibilities of the Fund's institutions.

The IAB's second workshop was held on 10-12 October in London. The fund's external managers – Schroders, SSGA, the BIS and BlackRock – presented, along with Professor Gordon Clark from Oxford University who has published well-known research on the governance of institutional investors. The meetings confirmed it is essential for the Board to regularly meet with the Fund's managers to be able to advise on the investment strategy. The workshop identified a number of items for the Secretariat to work on, which are included as research priorities for 2023.

can add significant value to institutional investors. While the Petroleum Fund is rated quite highly on the Linaburg-Maduell Transparency Index, and also follows the IFSWF's Santiago Principles on governance, independence and transparency (Annex XIII), the Ministry of Finance believes that there is scope for improvements that result in a more efficient and effective fund.

The Ministry of Finance is pleased with the more timely completion of the audited financial statements for 2022 and this annual report. Delays in the 2020 and 2021 reports related to the Fund's loans to Timor Gap E.P. Timely reporting was a priority for the Minister of Finance and a process was developed to limit delays for the 2022 report and future reports.

The Petroleum Fund's institutions, through the forum of the IAB, regularly assess the Fund's investment strategy to ensure it continues to serve the Fund's objectives. Reviews of components of the growth portfolio are being undertaken in 2023.

ANNEXES

Annex I. Statement by Director General of Treasury

Petroleum Fund of Timor-Leste General Information 31 December 2022

Minister of Finance Rui Augusto Gomes

Director General of Treasury Regina de Jesus de Sousa

Members of Investment Advisory Board Olgario de Castro

Gualdino da Silva Torres Trovik Prof. Michael Drew

Ex Officio (non-voting) Venancio Alves Maria

Regina de Jesus de Sousa (alternate, Filipe Nery Bernardo, from

February 2022)

Governor of Central Bank of Timor-Leste Abraão de Vasconselos

Executive Director of the Petroleum FundVenancio Alves Maria

Operational Manager Banco Central de Timor-Leste

Avenida Xavier do Amaral, no. 9

Dili

Timor-Leste

Investment Managers Banco Central de Timor-Leste

Bank for International Settlements

Schroders Investment Management Limited

State Street Global Advisors

BlackRock Investment Management Australia Limited

Members of Petroleum Fund Consultative Council Juvinal Dias

Nuno Eugénio Goulart

Izilda Imanuela da Luz Pereira Soares

Pe. Julio Crispim Ximenes Belo (until September 2022) Pe. Mouzinho Pereira Lopes (from September 2022)

Hernani Agostinho Soares Martinha da Silva de Jesus

Custodian J P Morgan Chase Bank N.A.

Independent Auditor Ernst & Young

Petroleum Fund of Timor-Leste Statement by the Director General of Treasury 31 December 2022

BACKGROUND

The Petroleum Fund Law No. 9/2005 promulgated on 3 August 2005, as amended by Law No. 12/2011, of the 28th September 2021 and Law No 2/2022, of 10th February 2022, established the Petroleum Fund of Timor Leste ("Petroleum Fund"). The Ministry of Finance is responsible for the overall management of the Petroleum Fund and the Banco Central de Timor Leste ("BCTL") is responsible for the operational management. In accordance with a Management Agreement dated 12 October 2005 and amended on 25 June 2009 between the Ministry of Finance and the BCTL, BCTL is also responsible for maintaining the books of account for the Petroleum Fund on behalf of the Director General of Treasury.

FINANCIAL STATEMENTS

In accordance with Article 21 of the Petroleum Fund Law, the financial statements have been prepared in accordance with International Financial Reporting Standards (IFRS). The statements are:

- Statement of profit or loss and other comprehensive income,
- · Statement of financial position,
- Statement of changes in capital,
- · Statement of cash flows, and
- Notes to the financial statements

These financial statements cover the year ended 31 December 2022

The Petroleum Fund's financial statements are the most complex International Financial Reporting Standards (IFRS) financial statements produced in Timor Leste. To optimize the readability of the notes to a wide audience, the notes are structured to provide the reader with:

- · a general introduction to the subject matter of the note,
- · financial tables elaborating on the data in the primary statements,
- · a description of the risks, important judgements or key assumptions that have been made in recording and presenting the data, and
- · the related accounting policies.

The financial statements have been independently audited by Ernst & Young whose audit opinion is attached to the financial statements.

PETROLEUM FUND CAPITAL

The Petroleum Fund had capital of US\$19.6 billion on 1 January 2022 (2021: US\$18.9 billion). During the year, additional capital received from taxes and other petroleum revenue under Article 6 of the Petroleum Fund were US\$1.1 (2021: US\$0.7 billion). Additional capital or fund received from taxes and other petroleum revenue is not subjected to tax and the Fund itself does not have taxes (other than withholding tax) on petroleum revenue. The Petroleum Fund recorded a loss of US\$2 billion (2021: Profit US\$1.1 billion) during the period. A summary of transactions for the income is given in the "Statement of profit or loss and other comprehensive income".

US\$1.4 billion was transferred from the Petroleum Fund to the Consolidated Fund during the year (2021: US\$1.1 billion). The capital of Petroleum Fund as at 31 December 2022 was US\$17.3 billion (2021: US\$19.6 billion). A summary of the transactions is given in the "Statement of changes in capital".

BENCHMARKS AND PERFORMANCE

The Board reviews the investment strategy and asset allocation of the Petroleum Fund regularly, taking into account the expected returns and risk of investments along with the projected cash flows for the Fund, including the Government's withdrawals. In July 2021, the Petroleum Fund's financial market investments were segmented into a liquidity portfolio and a growth portfolio in order to account for the expected withdrawals of the Government from the Fund. The liquidity portfolio is intended to finance the next three years of government withdrawals and is invested in cash, short-maturity US Treasury bonds and other short term liquid instruments. The remainder of the Fund is held in the growth portfolio, with an asset allocation of 65% fixed interest securities and 35% global equities. The allocation to private debt – the Investment in Petroleum Operations - is treated separately from financial market investments and is limited to 5% of the total value of the Fund under the Petroleum Fund Law.

The Investment Advisory Board considers this to be an appropriate risk level given the investment horizon of the Petroleum Fund

Petroleum Fund of Timor-Leste Statement by the Director General of Treasury 31 December 2022

Summary of benchmarks	As at 31 December 2022
Total Fund: 1. Investment in Petroleum Operations	3.94%
2. Financial Market Investments	96.06%
Total Fund	100.00%
	100.0070
Financial Market Instruments:	
1. Liquidity portfolio	16.06%
2. Growth portfolio	83.94%
Total for Financial Market Investments	100.00%
Actual weight as at the end of December 2022 are shown. The benchmark weight for the Financial Market Investment values at the end of the prior month.	portfolio are based on actual market
1. Liquidity portfolio	
3 Months US Treasury Bills	78.07%
ICE BOA Merrill Lynch US Government 1-3 Years	21.93%
Total for Liquidity Portfolio	100.00%
Actual weight as at the end of December 2022 are shown. The benchmark weight for the liquidity portfolio are based oprior month.	on actual market values at the end of the
2. Growth portfolio	
Fixed interest	
ICE BOA Merrill Lynch US Government 3-5 Years	45.00%
ICE BOA Merrill Lynch US Government 5-10 Years	10.00%
Developed Market Sovereigns - Custom	10.00%
Total fixed interest	65.00%
Global equities	
MSCI World	35.00%
Total global equities	35.00%
Total for Growth Portfolio	100.00%
	94 642.
The benchmark weights for the growth portfolio are fixed weights	
Summary of benchmarks	As at 31 December 2021
1. Investment in Petroleum Operations	3.37%
2. Financial Market Investments	96.63%
Total Fund	100.00%
Financial Market Instruments:	
Pinanciai Mai Ret Insti unicits.	
1. Liquidity portfolio	15.05%
2. Growth portfolio	84.95%
Total for Financial Market Investments	100.00%
Actual weight as at the end of December 2021 are shown. The benchmark weight for the Financial Market Investment values at the end of the prior month.	portfolio are based on actual market
1. Liquidity portfolio	
3 Months US Treasury Bills	48.43%
ICE BOA Merrill Lynch US Government 1-3 Years	51.57%
Total for Liquidity Portfolio Actual weight as at the end of December 2021 are shown. The benchmark weight for the liquidity portfolio are based prior month.	100.00% on actual market values at the end of the
2. Growth portfolio	
Fixed interest	
ICE BOA Merrill Lynch US Government 3-5 Years	45.00%
ICE BOA Merrill Lynch US Government 5-10 Years	10.00%
Developed Market Sovereigns - Custom	10.00%
Total fixed interest	65.00%
Global equities	
MSCI World	35.00%
	55.5076

Petroleum Fund of Timor-Leste Statement by the Director General of Treasury 31 December 2022

Total global equities	35.00%
Total for Growth Portfolio	100.00%

The benchmark weights for the growth portfolio are fixed weights

Performance

In accordance with the Article 24.1(a) of the Petroleum Fund Law and the provisions of the Management Agreement, the Petroleum Fund assets were invested in mandated instruments during the year. The list of instruments held as at 31 December 2022 is given at Note 24. The credit exposure by credit rating is given at Note 14(b)(iii). The performance of the Petroleum Fund during the period has been in accordance with the mandate of the Management Agreements.

Net loss on financial assets at fair value through the profit or loss has been significant at US\$2.3 billion in 2022 reflecting the performance of investment portfolio during the year. This does not include interest and dividend income from financial assets at fair value through profit or loss. Interest and dividend income from financial assets at fair value through profit or loss is presented separately.

During the period, the Ministry of Finance together with the BCTL have been able to accomplish the stewardship and fiduciary role for the Petroleum Fund.

SIGNIFICANT CHANGES IN THE STATE OF AFFAIRS

There were no significant changes in the state of affairs of the Petroleum Fund during the year.

APPROVAL OF FINANCIAL STATEMENTS

In the Ministry of Finance opinion, there are reasonable grounds to believe that the Petroleum Fund will be able to pay its debts as and when they become due and payable, and the attached financial statements and notes thereto are in accordance with the Petroleum Fund Law No. 9/2005, as amended by Law No. 12/2011 of the 28th September 2021 and Law No. 2/2022, of 10th February 2022, including compliance with accounting standards and giving a true and fair view of the financial position and performance of the Petroleum Fund. The accompanying financial statements for the year ended 31 December 2022 have been approved on behalf of the Ministry of Finance by:

Regina do Jesus de Sousa Director General of Treasury

Ministry of Finance Covernment of Timor-Leste

22 June 2023

Annex II. Audited Financial Statements



Ernst & Young 11 Mounts Bay Rd, Perth WA 6000, Australia PO Box 7034, Cloisters Square, WA 6850 Tel: (08) 6225 5150 ey.com/au

Independent auditor's report to The Ministry of Finance, Democratic Republic of Timor-Leste in respect of the Petroleum Fund of Timor-Leste financial report for the year ended 31 December 2022

Opinion

We have audited the financial report of Petroleum Fund of Timor-Leste (the "Petroleum Fund"), which comprises the statement of financial position as at 31 December 2022, statement of profit or loss and other comprehensive income, statement of changes in capital and statement of cash flows for the year then ended, and notes 1 to 23 to the financial statements, including a summary of significant accounting policies.

In our opinion, the accompanying financial report present fairly, in all material respects, the financial position of the Petroleum Fund as at 31 December 2022 and its financial performance and its cash flows for the year then ended in accordance with International Financial Reporting Standards (IFRS).

Basis for opinion

We conducted our audit in accordance with International Standards on Auditing (ISAs). Our responsibilities under those standards are further described in the *Auditor's responsibilities for the audit of the financial report* section of our report. We are independent of the Petroleum Fund in accordance with the ethical requirements of the *International Ethics Standards Board for Accountants'* Code of Ethics for Professional Accountants (including International Independence Standards) (IESBA Code) that are relevant to our audit of the financial report in Australia. We have also fulfilled our other ethical responsibilities in accordance with the Code.

We believe that the audit evidence we have obtained is sufficient and appropriate to provide a basis for our opinion.

Information other than the financial report and auditor's report thereon

Management is responsible for the other information. The other information obtained at the date of this auditor's report is the Annex I - Statement by the Director General of Treasury, Annex III - Treasury Statement on Accounting Policies and Annex VIII - Treasury Statement on Borrowings by Government of Timor-Leste and PART VII: Schedule of Financial Assets: 24. Schedule of financial assets valued through profit or loss.

Our opinion on the financial report does not cover the other information and accordingly we do not express any form of assurance conclusion thereon.

In connection with our audit of the financial report, our responsibility is to read the other information and, in doing so, consider whether the other information is materially inconsistent with the financial report or our knowledge obtained in the audit or otherwise appears to be materially misstated.

If, based on the work we have performed, we conclude that there is a material misstatement of this other information, we are required to report that fact. We have nothing to report in this regard.

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Responsibilities of the management and those charged with governance for the financial report

Banco Central de Timor-Leste, the operational manager ("management") is responsible for the preparation and fair presentation of the financial report in accordance with International Financial Reporting Standards, and for such internal control as management determines is necessary to enable the preparation of financial report that is free from material misstatement, whether due to fraud or error.

In preparing the financial report, management is responsible for assessing the Petroleum Fund's ability to continue as a going concern, disclosing, as applicable, matters related to going concern and using the going concern basis of accounting unless management either intends to liquidate the Petroleum Fund or to cease operations, or has no realistic alternative but to do so.

Auditor's responsibilities for the audit of the financial report

Our objectives are to obtain reasonable assurance about whether the financial report as a whole is free from material misstatement, whether due to fraud or error, and to issue an auditor's report that includes our opinion. Reasonable assurance is a high level of assurance but is not a guarantee that an audit conducted in accordance with International Standards of Auditing will always detect a material misstatement when it exists. Misstatements can arise from fraud or error and are considered material if, individually or in the aggregate, they could reasonably be expected to influence the economic decisions of users taken on the basis of this financial report.

As part of an audit in accordance with International Standards of Auditing, we exercise professional judgment and maintain professional scepticism throughout the audit. We also:

- Identify and assess the risks of material misstatement of the financial report, whether due to fraud or error, design and perform audit procedures responsive to those risks, and obtain audit evidence that is sufficient and appropriate to provide a basis for our opinion. The risk of not detecting a material misstatement resulting from fraud is higher than for one resulting from error, as fraud may involve collusion, forgery, intentional omissions, misrepresentations, or the override of internal control.
- ▶ Obtain an understanding of internal control relevant to the audit in order to design audit procedures that are appropriate in the circumstances, but not for the purpose of expressing an opinion on the effectiveness of the Petroleum Fund's internal control.
- Evaluate the appropriateness of accounting policies used and the reasonableness of accounting estimates and related disclosures made by management.

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- Conclude on the appropriateness of management's use of the going concern basis of accounting and, based on the audit evidence obtained, whether a material uncertainty exists related to events or conditions that may cast significant doubt on the Petroleum Fund's ability to continue as a going concern. If we conclude that a material uncertainty exists, we are required to draw attention in our auditor's report to the related disclosures in the financial report or, if such disclosures are inadequate, to modify our opinion. Our conclusions are based on the audit evidence obtained up to the date of our auditor's report. However, future events or conditions may cause the Petroleum Fund to cease to continue as a going concern.
- ► Evaluate the overall presentation, structure and content of the financial report, including the disclosures, and whether the financial report represent the underlying transactions and events in a manner that achieves fair presentation.

We communicate with the management and those charged with governance regarding, among other matters, the planned scope and timing of the audit and significant audit findings, including any significant deficiencies in internal control that we identify during our audit.

Ernst & Young

Earst & Young

Perth 22 June 2023

Petroleum Fund of Timor-Leste Statement of profit or loss and other comprehensive income for the year ended 31 December 2022

	Note	Year ended 31/12/2022 USD	Year ended 31/12/2021 USD
Income			
Interest income	4	197,731,024	154,290,664
Dividend income	5	105,765,775	118,539,323
Trust income	5	3,981,936	4,142,538
Other investment income		242	24,861
Net (losses)/gains on financial assets and liabilities at fair value through profit or			
loss	6	(2,349,596,165)	908,970,358
Net foreign exchange gains/(losses)	7	11,176,780	(4,204,872)
Total (loss)/income		(2,030,940,408)	1,181,762,872
Expenses			
External management and custody fees	20	(6,819,831)	(8,139,336)
Investment Advisory Board expenses	20	(287,254)	(139,781)
BCTL operational management fees	20	(6,210,821)	(7,711,743)
Other expenses		(8,040)	(966,635)
Withholding taxes expenses	9	(6,172,190)	(20,470,887)
Total expenses		(19,498,136)	(37,428,382)
(Loss)/Profit for the year		(2,050,438,544)	1,144,334,490
Other comprehensive income			
Total comprehensive (loss)/income for the year		(2,050,438,544)	1,144,334,490

Petroleum Fund of Timor-Leste Statement of financial position as at 31 December 2022

	Note	As at 31/12/2022 USD	As at 31/12/2021 USD
Assets			
Cash and cash equivalents	11	1,275,184,933	961,113,252
Other receivables	12	10,784,913	8,898,318
Financial assets at fair value through profit or loss	14	16,016,472,342	18,665,502,427
Total assets		17,302,442,188	19,635,513,997
Liabilities			
Financial liabilities at fair value through profit or loss	14,15	27,397,541	12,662,346
Payables for securities purchased		750	_
Accounts payable		2,042,175	1,827,928
Total liabilities		29,440,466	14,490,274
Net assets		<u>17,273,001,722</u>	19,621,023,723

Petroleum Fund of Timor-Leste Statement of changes in capital for the year ended 31 December 2022

	Note	Year ended 31/12/2022 USD	Year ended 31/12/2021 USD
Capital at the beginning of the year		19,621,023,723	18,904,964,471
Petroleum Fund gross receipts	16	1,106,416,543	719,597,762
(persuant to Article 6 of the Petroleum Fund Law)		20,727,440,266	19,624,562,233
Transfers to the Consolidated Fund of Timor-Leste (persuant to Article 7 of the Petroleum Fund Law)	16	(1,404,000,000)	(1,147,873,000)
Transfers for refunds of taxation (persuant to Article 10 of the Petroleum Fund Law)	16	-	-
Total comprehensive income/(loss) for the year		(2,050,438,544)	1,144,334,490
Capital at the end of the year		17,273,001,722	19,621,023,723

Petroleum Fund of Timor-Leste Statement of cash flows for the year ended 31 December 2022

	Note	Year ended 31/12/2022 USD	Year ended 31/12/2021 USD
Cash flows from operating activities			
Proceeds from sale and maturities of financial assets at fair value through profit or loss	1.4	12 022 027 002	14 406 571 612
	14	12,923,937,002	14,496,571,613
Purchases of financial assets at fair value through profit or loss	14	(12,593,363,946)	(14,695,957,844)
Interest received		196,830,311	121,490,485
Dividends received		97,787,157	112,025,542
Trust distributions received		3,933,049	4,394,342
Management and custody fees paid		(13,402,409)	(15,990,860)
Other operating receipts		244	24,863
Other operating payments		(8,040)	(1,728,961)
Net cash flow from operating activities	17	615,713,368	20,829,180
Cash flows from financing activities			
Petroleum Fund gross receipts	16	1,106,098,425	719,597,762
Transfer payments to the Consolidated Fund of Timor-Leste	16	(1,404,000,000)	(1,147,873,000)
Net cash flows utilised in financing activities		(297,901,575)	(428,275,238)
Net increase/(decrease) in cash and cash equivalents		317,811,793	(407,446,058)
Cash and cash equivalents at the beginning of the year		961,113,252	1,368,699,037
Effects of foreign currency exchange rate changes on cash and cash equivalents		(3,740,112)	(139,727)
Cash and cash equivalents at 31 December	11	1,275,184,933	961,113,252

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PART I: INTRODUCTION

1. Fund information

The Petroleum Fund of Timor-Leste ("Petroleum Fund") was established under the provisions of the Petroleum Fund Law No. 9/2005 as amended by Law No. 12/2011 on 28 September 2011 and Law No. 2/2022, of 10th February 2022.

The investment strategy and benchmarks of the Petroleum Fund are determined by the Ministry of Finance based on advice from the Investment Advisory Board (IAB).

The Banco Central de Timor-Leste (BCTL) having its office at Avenida Xavier do Amaral, no. 9, Dili, Timor-Leste, is responsible for the operational management of the Petroleum Fund and is the registered owner of all the assets of the Petroleum Fund. The management of the Petroleum Fund is undertaken according to a Management Agreement between the Ministry of Finance and the BCTL.

The Petroleum Fund's objective is to meet benchmark returns on its capital within the risk limit provided in mandates and within the limits established in Articles 14 and 15 of the Petroleum Fund Law relating to Investment Policy and Investment Rules.

The Petroleum Fund's investment portfolio of assets at fair value through profit or loss, assets at amortised costs and cash and cash equivalents complied with the legislative and contractual requirements throughout the period.

These financial statements were authorized for issue by the Director General of Treasury on 22 June 2023.

2. Statement of compliance with IFRS

In accordance with Article 21 of the Petroleum Fund Law, the financial statements have been prepared in accordance with International Financial Reporting Standards (IFRS).

The Petroleum Fund has adopted all of the IFRS standards and amendments that were applicable during the year.

Information about the impact of new and forthcoming IFRS on these financial statements is provided in Note 22.

3. Basis of preparation

Items included in the Petroleum Fund's financial statements are measured and presented in United States dollars, being the functional and official currency of the Democratic Republic of Timor-Leste.

The financial statements are prepared on the historical cost basis, except for certain financial investments that are measured at fair value through profit or loss, as explained in the accounting policies described herein.

The accounting policies have been consistently applied by the Petroleum Fund.

Estimates and judgements

The preparation of financial statements in conformity with IFRS requires management to make judgments, estimates and assumptions that affect the application of policies and reported amounts of assets, liabilities, income and expense. The estimates and associated assumptions are based on historical experience and other factors that are believed to be reasonable under the circumstances, the results of which form the basis of making the judgments about carrying values and assets and liabilities that are not readily apparent from other sources. Estimates use observable data to the extent practicable. However, areas such as potential market changes, credit risk, volatilities and correlations require management to make estimates that could affect the reported fair value of financial instruments. Actual results may therefore vary from these estimates. This process involves a high degree of judgement or complexity.

Revisions to accounting estimates are recognized in the period in which the estimate is revised if the revision affects only that period, or in the period of the revision, and future periods if the revision affects both current and future periods.

Assumptions and estimates that are significant to the financial statements are disclosed in the relevant notes, as are the judgements made by management which have a significant effect on the amounts recognized in the financial statements.

PART II: NOTES TO THE STATEMENT OF PROFIT OR LOSS AND OTHER COMPREHENSIVE INCOME

The statement of profit or loss and other comprehensive income, also known as the profit & loss account, is a report of income, expenses and the resulting profit or loss earned by the Petroleum Fund during the period from 1 January to 31 December each year.

The concept of income encompasses both revenue and gains. Revenue arises in the course of the normal activities of the Petroleum Fund and is referred to by a variety of names, including interest and dividends. Gains represent increases in economic benefits and include both realized and unrealized gains, including the revaluation of marketable securities and foreign exchange.

The concept of expenses encompasses losses as well as those expenses that arise in the course of the ordinary activities of the Petroleum Fund.

Other comprehensive income includes items of income or expense (including reclassification adjustments) that are not recognized in profit or loss as required or permitted by IFRS.

4. Interest income

Interest income is derived from the Petroleum Fund's investments in fixed interest securities, cash balances and short term cash investments.

	31/12/2022 USD	31/12/2021 USD
Interest from Fixed interest securities at fair value through profit or loss	197,314,841	154,290,664
Interest from cash and cash equivalents	416,183	
	197,731,024	154,290,664

Accounting policy

Interest income from fixed interest securities at fair value through profit loss is accrued based on contractual coupon rates. It is recognized in the statement of profit or loss and other comprehensive income and shown separately from other fair value movements.

5. Dividends and trust income

Dividends received are distributions from the Petroleum Fund's holding of equities and represent the Petroleum Fund's share of profits paid out to shareholders. Trust income is similar to dividends but is derived from the Petroleum Fund's investments in real estate entities that are incorporated as Real Estate Investment Trusts.

	Year ended 31/12/2022 USD	Year ended 31/12/2021 USD
Dividend income	105,765,775	118,539,323
Trust income	3,981,936	4,142,538
	<u>109,747,711</u>	122,681,861

Accounting policy

Dividend income from investments and unit trust distribution income are recognized when the shareholder's right to receive payment has been established. Dividend income and unit trust distributions are presented gross of any non recoverable withholding taxes and are disclosed separately in the statement of profit or loss and other comprehensive income.

6. Gain or loss on financial assets and liabilities at fair value through profit or loss

This item includes changes in the fair value of financial assets and liabilities held for trading or designated upon initial recognition as 'at fair value through profit or loss' and excludes interest and dividend income and expenses. These changes arise from changes in the market value of the financial investments (or liabilities) held by the Petroleum Fund.

	Year ended	Year ended
	31/12/2022	31/12/2021
	USD	USD
Net (losses)/gains on financial assets and liabilities at fair value through profit or loss	(2,349,596,165)	908,970,358

Accounting policy, estimates, assumptions, judgements and risks

See Note 14 which sets out information that relates to this item:

- details of the accounting policies relating to financial assets and liabilities designated as 'at fair value through profit or loss',
- the significant judgements and estimates that have been made and may be material in determining the reported gain or loss on financial
 assets and liabilities,
- · the risks associated with holding financial assets and liabilities that may impact on the reported profit or loss, and
- · an analysis of the sensitivity to changes in future market conditions that may give rise to gains or losses on financial assets and liabilities.

7. Foreign exchange gain/(losses)

Foreign exchange gains and losses arise when the Petroleum Fund invests in assets (except for those arising on financial instruments measured at fair value through profit or loss in accordance with IFRS 9) denominated in a currency other than the US dollar (the Petroleum Fund's functional currency). When the US dollar strengthens relative to another currency in which the Petroleum Fund holds assets, the Petroleum Fund will report a foreign exchange loss. Conversely, if the Petroleum Fund holds an asset denominated in a currency other than US dollars, and that currency strengthens, the Petroleum Fund will report a foreign exchange gain.

7. Foreign exchange gain/(losses) (continued)

Accounting policy

Foreign exchange gains and losses on financial instruments measured at fair value through profit or loss – namely, the Fund's investments in equities and fixed interest - are included in the gain or loss on those instruments reported in Note 6. Other foreign exchange gains and losses resulting from the settlement of transactions and from the translation at year end exchange rates of monetary and other financial assets and liabilities denominated in foreign currencies are disclosed in the statement of profit or loss separately below.

Year ended Year ended 31/12/2022 31/12/2021 USD USD

11,176,780 (4,204,872)

Net foreign exchange gains/(losses)

8. Expenses

In accordance with the provisions of the Petroleum Fund Law, all expenses of the Petroleum Fund other than the external audit fee (which is met from the state budget), not relating to the purchase or sale of securities and recognized in the sale or purchase price, are met by the BCTL and are covered by a management fee. This management fee is legally a deduction from the gross receipts of the Petroleum Fund (Art 6.3 of Petroleum Fund Law), although it is recognized as an expense in the statement of profit or loss and other comprehensive income.

Expenses which are incidental to the acquisition of an investment at amortised cost are included in the cost of that investment while transactions costs of an investment at fair value through profit or loss that are directly attributable to the acquisition of the financial asset or financial liability are expensed off.

Expenses that are incidental to the disposal of an investment are deducted from the disposal proceeds of the investment.

9. Taxation

The Petroleum Fund is exempt from all forms of taxation in Timor-Leste under Timor-Leste law. Therefore, the Petroleum Fund has a statutory tax rate of 0%.

Investment income and capital gains are subject to withholding tax in certain foreign jurisdictions and are the only items subject to taxation.

In the current year tax has been withheld from foreign dividend, unit trust income and interest received according to the applicable laws. Relief from withholding tax is available on application in some of these jurisdictions.

Accounting policy

Income of the Petroleum Fund earned in foreign jurisdictions subject to withholding taxes levied in those jurisdictions is recorded gross of withholding taxes in the statement of profit or loss and other comprehensive income. Withholding taxes, to the extent that they are not recoverable, are shown as a separate line item in the statement of profit or loss and other comprehensive income.

Critical accounting estimates, assumptions and judgements

Uncertainties exist with respect to the interpretation of complex tax regulations and changes in tax laws on income derived in foreign jurisdictions and the recoverability of amounts withheld. Given the wide range of international investments, differences arising between the actual investment income and the assumptions made, or future changes to such assumptions, could necessitate future adjustments to tax expense already recorded. The Petroleum Fund establishes provisions, based on reasonable estimates, for possible consequences of audits by the tax authorities of the respective countries in which it invests. The amounts of such provisions are based on various factors, such as experience of previous tax audits and differing interpretations of tax regulations by the taxable entity and the responsible tax authority. Such differences of interpretation may arise on a wide variety of issues depending on the conditions prevailing in the respective investment's domicile. As the Petroleum Fund assesses the probability for litigation and subsequent cash outflow with respect to taxes as remote, no contingent liability has been recognized.

PART III: NOTES TO THE STATEMENT OF FINANCIAL POSITION

The statement of financial position, also known as the balance sheet, presents the financial position of the Petroleum Fund as at the end of its financial year, 31 December. The statement of financial position comprises three main components: assets, liabilities and capital.

An asset is something that the Petroleum Fund owns or controls in order to get economic benefits from its use. The main assets of the Petroleum Fund are bonds and equities (shares).

A liability is an obligation that the Petroleum Fund owes to another party which in normal circumstances is settled in cash or other financial resources.

The capital is the net wealth of the Petroleum Fund that belongs to its ultimate owner, the Democratic Republic of Timor-Leste.

The statement of financial position presents assets and liabilities in decreasing order of liquidity and does not distinguish between current and non-current items.

10. Risk management

The Petroleum Fund's overall risk management programme seeks to maximize the returns derived for the level of risk to which the Petroleum Fund is exposed and seeks to minimize potential adverse effects on the Petroleum Fund's performance. Specific risks are managed as follows:

10.1. Financial risk

The Petroleum Fund's activities expose it to a variety of financial risks, being market risk (including equity price risk, interest rate risk and currency risk), credit risk and liquidity risk.

The financial risks associated with the Petroleum Fund are monitored by the Risk Management Division of the Petroleum Fund Management Department at the BCTL which prepares daily management reports for senior management and quarterly reports for the Ministry of Finance. The Petroleum Fund is subject to periodic audit by the Internal Audit Office of the BCTL which has operational independence from the management of the Petroleum Fund. The Internal Audit Office provides formal monthly reports to the Governor and half yearly reports to the Governor and the BCTL.

10.2. Market risk

Market risk is the risk that movements in market factors, such as foreign exchange rates, interest rates, credit spreads, equity prices and commodity prices, will reduce the Petroleum Fund's income or the value of its portfolios.

The objective of managing this risk is to manage and control market exposures, including for example the use of conservative benchmarks and tracking error in manager mandates, in order to optimize return on risk while ensuring solvency.

10.3. Credit risk

Credit risk is the risk that the issuer of a debt instrument is not able to repay the principal and/or interest on the due dates.

The Petroleum Fund manages the credit risk associated with private debt instruments by requiring issuers to comply with covenants, including amongst other things requirements for the issuer to provide regular financial and cash flow statements, and to maintain accumulated cash flow projections well in excess of outstanding repayments of principal and interest.

10.4. Liquidity risk

Liquidity risk is the risk that the Petroleum Fund may not be able to generate sufficient cash resources to settle its obligations which would primarily be to fund the State budget account, in full, or can only do so on terms that are materially disadvantageous.

The Liquidity Portfolio of low-risk, highly liquid investments is designed to finance the next three years of government withdrawals. Consequently, liquidity risk is limited. In addition, to manage this risk, the Ministry of Finance has agreed in the Management Agreement to provide the Central Bank with a forecast of the future cash requirements of the government, including the projected timings and amounts to be transferred from the Petroleum Fund.

Liabilities at the year end were US\$29.4 million (2021: US\$14.5 million) and consists of derivative liabilities, payables for securities purchased but not settled at the year end and management fees payable. These are expected to be settled within 30 days of the year end but are not considered to create a liquidity risk for the Petroleum Fund due to available cash which is sufficient to cover these liabilities. The Central Bank monitors the Petroleum Fund's liquidity position on a daily basis. Where there are potential shortfalls, financial assets will be sold to meet anticipated shortfall. The Petroleum Fund invests primarily in marketable securities and other financial instruments which, under normal market conditions are readily convertible to cash.

11. Cash and cash equivalents

The Petroleum Fund has a number of bank accounts in which it holds cash. Surplus cash is invested in overnight markets with banks or through reverse repurchase agreements which may be thought of as secured overnight deposits.

	As at 31/12/2022 USD	As at 31/12/2021 USD
Cash at bank	190,784,933	250,213,252
Overnight reverse repurchase agreements	1,084,400,000	710,900,000
	_1,275,184,933	961,113,252

Accounting policy

Cash comprises current deposits with banks which have maturities of less than 90 days. Cash equivalents are short term highly liquid investments that are readily convertible to known amounts of cash, are subject to an insignificant risk of changes in value and are held for the purpose of meeting short term cash commitments rather than for investment or other purposes.

Securities purchased under agreements to resell (reverse repurchase agreements) with a maturity period of greater than one financial day are reported not as purchases of securities but as receivables and are carried in the statement of financial position at amortized cost.

Interest earned on reverse repurchase agreements is recognized as interest income over the life of each agreement using the effective interest method.

Risks

Cash and cash equivalents are not subject to significant interest rate risk. Credit risk is managed by holding cash at financial institutions with a high reputation – the Federal Reserve Bank of New York with a Standard & Poor's rating of AA+ (very strong capacity to meet its financial commitments), JPMorgan Chase Bank N.V. with a Standard & Poor's short term issuer rating of A-2 (susceptible to adverse economic conditions however the obligor's capacity to meet its financial commitment on the obligation is satisfactory) and Bank for International Settlements.

12. Other receivables

Other receivables are financial assets that are classified as loans and receivables including cash balances due from financial intermediaries from the sale of securities, receivables from reverse repurchase agreements with a maturity of more than one business day and other short term loans and receivables including accruals for investment income receivables.

	As at 31/12/2022 USD	As at 31/12/2021 USD
Dividends receivables	3,842,643	3,608,173
Withholding tax receivables	5,989,812	4,721,227
Trust distributions receivables	447,451	419,168
Due from brokers receivables	_	451
Interest receivables	186,882	149,289
Application receivables	318,117	_
Other receivables	8	10
	10,784,913	8,898,318

Accounting policy

Loans and receivables (other than those classified as held for trading) are measured initially at their fair value plus any directly attributable incremental costs of acquisition or issue and subsequently measured at amortized cost.

Impairment of financial assets

The Petroleum Fund monitors all financial assets that are subject to the IFRS impairment requirements to assess whether there has been a significant increase in credit risk since initial recognition. If there has been a significant increase in credit risk the Petroleum Fund will measure the loss allowance based on lifetime rather than 12 month ECL. The Petroleum Fund's accounting policy is not to use the practical expedient that financial assets with 'low' credit risk at the reporting date are deemed not to have had a significant increase in credit risk. As a result the Petroleum Fund monitors all financial assets that are subject to impairment for significant increase in credit risk.

In assessing whether the credit risk on a financial instrument has increased significantly since initial recognition, the Petroleum Fund compares the risk of a default occurring on the financial instrument at the reporting date based on the remaining maturity of the instrument with the risk of a default occurring that was anticipated for the remaining maturity at the current reporting date when the financial instrument was first recognized. In making this assessment, the Petroleum Fund considers both quantitative and qualitative information that is reasonable and supportable, including historical experience and forward looking information that is available without undue cost or effort.

12. Other receivables (continued)

At 31 December 2022 and 31 December 2021, all other receivables, amounts due from brokers, cash and short term deposits are held with counterparties with a credit rating of AA/Aa or higher and are due to be settled within 1 week. Management consider the probability of default to be close to zero as the counterparties have a strong capacity to meet their contractual obligations in the near term. As a result, no loss allowance has been recognised based on 12 month expected credit losses as any such impairment would be wholly insignificant to the Fund.

Risks

Receivables, other than recoverable withholding taxes, are subject to minimal risk and are generally paid within a short timeframe in the normal course of business.

The recovery of withholding tax receivables is dependent on processing and approval by the relevant tax authorities.

13. Investment in private debt instruments

In 2019, the Petroleum Fund purchased certain private debt instruments issued by subsidiaries of Timor Gap Lda in relation to the purchase in April 2019 of participating interests and rights in the Greater Sunrise oil and gas field by the Democratic Republic of Timor-Leste.

The debt instruments carry a coupon rate of 4.5% and are repayable over a period of 18 years with a repayment grace period of 8 years.

Accounting policy

At 31 December 2022, the Petroleum Fund, in consultation with a third party valuer has estimated the fair value of the investment in the private debt instruments to be \$560,757,917 (2021: \$701,353,365) using a discounted cash flow model based on the contractual cashflows under the debt instruments and an implied market interest rate of 7.95% (2021: 4.87%). The implied interest rate was estimated using comparable curves adjusted for differences in the instrument's terms. If the discount rate increased/decreased by 1%, the fair value of the investment would decrease and increase by \$50.6 million and \$45.7 million respectively.

The movement in the fair value for the year ended 31 December 2021 and 31 December 2022 is summarised in the table below:

		USD	USD
Bal	lance at beginning of the year	701,353,365	615,700,000
Inte	erest income	32,985,307	29,737,500
Fai	ir value (loss)/gain	(173,580,755)	55,915,865
		560,757,917	701,353,365

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Risks

The private debt instruments owned by the Petroleum Fund have been issued by subsidiaries of Timor Gap Lda on the assumption that the cash flows from their investments in the Greater Sunrise oil and gas field will exceed the cost of the rights purchased and subsequent development costs. There are risks that:

- the cash flows from Timor Gap's share of oil and gas revenues may not be large enough to meet the contractual repayments of principal and/or interest; or
- the anticipated cash flows from oil and gas revenues may not materialize within the time frame assumed by the grace period; or
- other events may occur that impact the ability of the issuers to make the agreed repayments at the agreed times.

The Petroleum Fund has established procedures for regular reviews of the issuers' financial forecasts, covenants and other information that collectively provide an "early warning system" that the probability of one or more of these risks materializing may have increased.

The Timor Gap private debt instruments are denominated in US dollars. As a result, there is no exposure to foreign currency risk.

14. Financial assets and financial liabilities at fair value through profit or loss

The Petroleum Fund invests in a range of financial instruments in order to generate income. The investments include equities (shares) and fixed interest (bonds) and a limited number of derivative instruments.

Typically, derivative contracts serve as components of the Petroleum Fund's investment strategy and are utilized primarily to structure and hedge investments, to enhance performance and reduce risk to the Petroleum Fund (the Petroleum Fund does not designate any derivative as a hedging instrument for hedge accounting purposes).

14. Financial assets and financial liabilities at fair value through profit or loss (continued)

The Petroleum Fund uses derivative financial instruments to economically hedge its risks associated with foreign currency fluctuations. Additionally, derivative financial instruments may also be used for trading purposes where the investment manager believes this would be more efficient than investing directly in the underlying financial instruments. Derivatives often reflect, at their inception, only a mutual exchange of promises with little or no transfer of tangible consideration. However, these instruments frequently involve a high degree of leverage and are very volatile. A relatively small movement in the underlying of a derivative contract may have a significant impact on the profit or loss of the Petroleum Fund. Over the counter ("OTC") derivatives may expose the Petroleum Fund to the risks associated with the absence of an exchange market on which to close out an open position. Investment managers are instructed to closely monitor the Petroleum Fund's exposure under derivative contracts as part of the overall management of the Petroleum Fund's market risk.

The Minister of Finance has approved the use of equity index futures, bond and interest rate futures and currency forward contracts under Annex 1, Amendment Number 9, 19 May 2017 of the Management Agreement between the Minister and the BCTL.

A summary of financial assets held at financial position date is as follows:

	As at 31/1 US		As at 31/12/2021 USD		
At fair value through profit or loss	Fair value	% of investment/ asset allocation	Fair value	% of investment/ asset allocation	
Fixed interest securities					
United States treasury notes	9,416,390,896	59	10,565,876,678	57	
Australian government bonds	128,134,799	1	144,806,027	1	
Japanese government bonds	138,996,792	1	134,791,975	1	
United Kingdom government bonds	119,848,312	1	144,411,474	1	
European government bonds	392,640,735	2	417,926,338	2	
Investment in private debt instruments (note 13)	560,757,917	3	701,353,365	4	
Other government bonds	524,508,302	3	575,278,935	3	
Total fixed interest securities	11,281,277,753		12,684,444,792	69	
Equity securities					
United State equities	3,079,352,750	19	3,970,520,486	21	
Australian equities	119,518,475	1	131,898,798	1	
Japanese equities	288,927,578	2	366,834,625	2	
United Kingdom equities	212,770,036	1	251,563,125	1	
European equities	416,029,113	3	524,088,008	3	
Equities from other countries	466,832,249	3	582,969,225	3	
Total equity securities	4,583,430,201	29	5,827,874,267	31	
Money market securities					
United States treasury bills	150,382,501	1	149,993,280	1	
Total money market securities	150,382,501	1	149,993,280	1	
Derivatives					
United States equity futures	_	_	761,230	_	
Foreign currency forward contracts	1,381,887	_	2,428,858	_	
Total derivatives	1,381,887		3,190,088		
			_		
Total financial assets at fair value through					
profit or loss	<u>16,016,472,342</u>	100	18,665,502,427	100	
Financial liabilities - at fair value through profit or loss Derivatives					
United States equity futures	778,604	3	_		
Foreign currency forward contracts	26,618,937	97	12,662,346	100	
Total derivatives	27,397,541	100	12,662,346	100	
2000 200 400 00	21,071,041		12,002,340		
Total financial liabilities at fair value through					
profit or loss	27,397,541	100	12,662,346	100	

14. Financial assets and financial liabilities at fair value through profit or loss (continued)

Transactions in financial assets which arise either from the investment of new funds, the periodic rebalancing of the investment portfolio or sales to generate cash for budgetary transfers, are summarized as follows:

	As at	As at
	31/12/2022	31/12/2021
	USD	USD
Financial assets and financial liabilities at fair value through profit or loss		
Opening fair value	18,665,502,427	17,545,736,873
Purchases at cost	12,593,363,946	14,684,629,636
Proceeds from sales	(12,923,936,750)	(14,482,693,835)
Net unrealised (loss)/gains on financial assets/financial liabilities at fair value through		
profit or loss	(2,318,457,281)	917,829,753
Closing fair value	16,016,472,342	18,665,502,427

The following table provides an analysis of financial instruments that are measured subsequent to initial recognition at fair value, grouped into levels 1 to 3 (see accounting policies below for definitions of the levels) based on the degree to which the fair value is observable.

		As at 31/1 USI		
	Quoted market price (Level 1)	Valuation technique: market observable inputs (Level 2)	Valuation technique: non-market observable inputs (Level 3)	Total
Financial assets	(Level 1)	(Level 2)	(Level 3)	Total
Financial instruments at fair value through profit or loss				
Equity securities	4,583,430,201	_	_	4,583,430,201
Money market securities Fixed interest securities	150,382,501 10,720,519,836	_	560,757,917	150,382,501 11,281,277,753
Derivatives	10,720,519,830	1,381,887	300,737,917	1,381,887
Total	15,454,332,538	1,381,887	560,757,917	16,016,472,342
Financial liabilities				
Financial instruments at fair value through profit or loss				
Derivatives	(778,604)	(26,618,937)		(27,397,541)
Total	(778,604)	(26,618,937)		(27,397,541)
		As at 31/1 USI		
	Quoted market price	USI Valuation technique: market observable inputs	Valuation technique: non-market observable inputs	Total
Financial assets	•	USI Valuation technique: market observable	Valuation technique: non-market observable	Total
Financial instruments at fair value through profit or loss	price (Level 1)	USI Valuation technique: market observable inputs	Valuation technique: non-market observable inputs	
Financial instruments at fair value through profit or loss Equity securities	price (Level 1) 5,827,874,267	USI Valuation technique: market observable inputs	Valuation technique: non-market observable inputs	5,827,874,267
Financial instruments at fair value through profit or loss Equity securities Money market securities	price (Level 1) 5,827,874,267 149,993,280	USI Valuation technique: market observable inputs	Valuation technique: non-market observable inputs (Level 3)	5,827,874,267 149,993,280
Financial instruments at fair value through profit or loss Equity securities Money market securities Fixed interest securities	price (Level 1) 5,827,874,267 149,993,280 11,983,091,427	Valuation technique: market observable inputs (Level 2)	Valuation technique: non-market observable inputs	5,827,874,267 149,993,280 12,684,444,792
Financial instruments at fair value through profit or loss Equity securities Money market securities	price (Level 1) 5,827,874,267 149,993,280	USI Valuation technique: market observable inputs	Valuation technique: non-market observable inputs (Level 3)	5,827,874,267 149,993,280
Financial instruments at fair value through profit or loss Equity securities Money market securities Fixed interest securities Derivatives	price (Level 1) 5,827,874,267 149,993,280 11,983,091,427 761,230	Valuation technique: market observable inputs (Level 2)	Valuation technique: non-market observable inputs (Level 3)	5,827,874,267 149,993,280 12,684,444,792 3,190,088

There were no transfers between levels for the year ended 31 December 2022 (2021: nil).

There were no movements in all levels of instruments for the year ended 31 December 2022 (2021: nil).

A detailed schedule of financial assets at fair value through profit or loss is at Note 24.

14. Financial assets and financial liabilities at fair value through profit or loss (continued)

The following table sets out the fair values and notional amounts of derivative assets and liabilities held by the Petroleum Fund as at the reporting date.

	As at 31/1	12/2022	As at 31/12/2021		
Derivative financial instruments	Fair value USD			Notional value USD	
Equity futures	(778,604)	25,868,700	761,230	53,506,780	
Foreign currency forward contracts	(25,237,050)	4,116,402,237	(10,233,488)	1,437,476,723	
Total	(26,015,654)	4,142,270,937	(9,472,258)	1,490,983,503	

Accounting policies

Recognition

The Petroleum Fund recognizes a financial asset or a financial liability when, and only when, it becomes a party to the contractual provisions of the instrument.

As the Petroleum Fund's publicly traded financial assets are held within a business model whose objective is not to hold financial assets in order to collect contractual cash flows; or is achieved by both collecting contractual cash flows and selling the financial assets, all publicly traded financial assets are measured subsequently at fair value through profit or loss (FVTPL).

Purchases or sales of financial assets that require delivery of assets within the time frame generally established by regulation or convention in the marketplace (regular way trades) are recognized on the trade date, i.e., the date that the Petroleum Fund commits to purchase or sell the asset.

Financial assets and liabilities (initial measurement)

Financial assets and financial liabilities at fair value through profit or loss are recorded in the statement of financial position at fair value. All transaction costs for such instruments are recognized directly in profit or loss.

Derivatives embedded in other financial instruments are treated as separate derivatives and recorded at fair value if their economic characteristics and risks are not closely related to those of the host contract and the host contract is not itself classified as held for trading or designated as at fair value through profit or loss. Embedded derivatives separated from the host are carried at fair value with changes in fair value recognized in profit or loss.

Subsequent measurement

Financial assets and financial liabilities at fair value through profit or loss are recorded in the statement of financial position at fair value. Fair value is the price that would be received to sell an asset or paid to transfer a liability in an orderly transaction between market participants at the measurement date. The fair value of financial instruments is based on their quoted market prices at the statement of financial position date without any deduction for estimated future selling costs. Financial assets held or a liability to be issued are priced at current bid prices, while financial liabilities held and assets to be acquired are priced at current asking prices.

All changes to fair value, other than interest or dividend income, are recognized in the profit or loss as part of net gain from financial assets or liabilities at fair value through profit or loss. Interest and dividend income is presented separately from other fair value movements in the statement of profit or loss.

Derecognition

A financial asset (or, where applicable, a part of a financial asset or a part of a group of similar financial assets) is derecognized when:

- Either the rights to receive cash flows from the asset have expired, or the Petroleum Fund has transferred its rights to receive cash flows from the asset or has assumed an obligation to pay the received cash flows in full without material delay to a third party under a 'pass through' arrangement, and
- Either (a) the Petroleum Fund has transferred substantially all the risks and rewards of the asset or (b) the Petroleum Fund has neither transferred nor retained substantially all the risks and rewards of the asset but has transferred control of the asset.

When the Petroleum Fund has transferred its rights to receive cash flows from an asset (or has entered into a pass through arrangement) and has neither transferred nor retained substantially all of the risks and rewards of the asset nor transferred control of the asset, the asset is recognized to the extent of the Petroleum Fund's continuing involvement in the asset. In that case, the Petroleum Fund also recognizes an associated liability. The transferred asset and the associated liability are measured on a basis that reflects the rights and obligations that the Petroleum Fund has retained

The Petroleum Fund derecognizes a financial liability when the obligation under the liability is discharged, cancelled or expired.

14. Financial assets and financial liabilities at fair value through profit or loss (continued)

Offsetting

The Petroleum Fund offsets financial assets and financial liabilities if the Petroleum Fund has a legally enforceable right to set off the recognized amounts and interests and intends either to settle on a net basis or to realize the asset and settle the liability simultaneously.

Income and expenses are presented on a net basis only when permitted under IFRS.

Critical accounting estimates

The manner in which assets are valued can have a material effect on the financial position and profit of the Petroleum Fund. In order to assess the reliability and objectivity of the valuation process, the Petroleum Fund categorizes the method of valuation into three levels, as follows:

Level 1 (Quoted market price) fair value measurements are those derived from quoted prices in active markets for identical assets or liabilities. The Petroleum Fund does not adjust the quoted prices for these instruments.

Level 2 (Valuation technique: market observable inputs) fair value measurements are those derived from inputs other than quoted prices included within level 1 that are observable for the asset or liability, either directly (i.e. as prices) or indirectly (i.e. derived from prices). As level 2 investments include positions that are not traded in active markets and/or subject to transfer restrictions, valuations may be adjusted to reflect illiquidity and/or non transferability which are generally based on available market information. Financial instruments that trade in markets that are not considered to be active but are valued based on quoted market prices, dealer quotations or alternative pricing sources supported by observable inputs are classified within level 2. The level 2 instruments include over-the-counter derivatives.

Level 3 (Valuation technique: non market observable inputs) fair value measurements are those derived from valuation techniques that include inputs for the asset or liability that are not based on observable market data (unobservable inputs).

Risks

(a) Market risk

Market risk is the risk that changes in market prices, such as interest rates, equity prices, foreign exchange rates and credit spreads (not relating to changes in the obligor's/issuer's credit standing) will affect the Petroleum Fund's income or fair value of its holdings of financial instruments. The objective of market risk management is to manage and control market risk exposures within acceptable parameters, while optimizing the return.

The maximum risk resulting from financial instruments equals their fair value.

The Petroleum Fund's strategy for the management of market risks is driven by the Petroleum Fund's investment objectives, including diversification of its investment portfolio, by specifying benchmarks in individual investment mandates with risk limits defined by maximum or target tracking errors.

The Petroleum Fund's market risk is thus managed on a regular basis by the investment managers in accordance with these investment mandates.

(i) Equity price risk

Equity price risk is the risk of unfavorable changes in the fair values of equities or equity linked derivatives as the result of changes in the levels of equity indices and the value of individual shares. The equity price risk exposure arises from the Petroleum Fund's investments in equity securities and from equity linked derivatives. The Petroleum Fund manages this risk by investing in a variety of stock exchanges and by limiting exposure to any one company or issuing entity, excluding sovereign states, to 3% of net assets (consistent with Article 15.5a of the Petroleum Fund Law). The Petroleum Fund Law limits equity investments to no more than 5% of the share capital of a particular issuer (consistent with Article 15.3b of the Petroleum Fund Law).

Management's best estimate of the effect on the profit or loss for a year due to a reasonably possible change in equity indices, with all other variables held constant is indicated in the table below. There is no effect on 'other comprehensive income' as the Petroleum Fund has no assets classified as 'Financial assets at fair value through other comprehensive income' or designated hedging instruments. In practice, the actual trading results may differ from the sensitivity analysis below and the difference could be material. An equivalent decrease in each of the indices shown below would have resulted in an equivalent impact.

The Petroleum Fund manages its exposure to equity price risk by analyzing the portfolio by industrial sector and country each month and benchmarking the performance of each sector/country to the MSCI World Index by considering the performance of the Petroleum Fund attributable to stock allocation, security selection and the interaction effect.

The following table summarizes the sensitivity of the Petroleum Fund's operating profit and net assets to price risk. The analysis is based on reasonably possible movements in the benchmark with all other variables held constant and the fair value of the Petroleum Fund's portfolio moving according to the movement in the benchmark. The reasonably possible movements in the risk variables have been determined based on the investment managers' best estimates having regard to a number of factors including historical levels of changes in market index, security prices and/or benchmark returns and interest rates. However, actual movements in the risk variables may be greater or less than anticipated due to a number of factors, including unusually large market shocks resulting from changes in the performance of the economies, markets and securities to which the variable is exposed. As a result, historic variations in risk variables are not a definitive indicator of future variations in the risk variables. The table below shows the impact on operating profit/net assets resulting from a 10% change in the price of equities.

14. Financial assets and financial liabilities at fair value through profit or loss (continued)

Price risk Impact on profit/(loss) for the year/Net assets (-10.00%) (+10.00%) (500,648,393) 500,648,393 (596,354,407) 596,354,407

31 December 2022 31 December 2021

The Petroleum Fund has determined that a fluctuation in equity prices of 10% is reasonably possible within a one year period based on historical movements in global equity markets.

(ii) Interest rate risk

Interest rate risk arises from the possibility that an investment's fair value or associated future cash flows will change due to a change in the absolute level of interest rates, in the spread between two rates, in the shape of the yield curve or in any other interest rate relationship.

The majority of interest rate exposure arises on investments in Fixed interest securities in the United States of America and, to a lesser extent, the rest of the developed world. Most of the Petroleum Fund's investments in Fixed interest securities carry fixed interest rates and mature within ten years.

The Petroleum Fund manages this risk by investing according to benchmarks with specified duration target and tracking error limit. The assets and the Petroleum Fund will re price or mature within the following periods:

					I/12/2022 ISD			
FINANCIAL ASSETS	Statement of financial position	Non-interest sensitive	6 months or less	6 to 12 months	1 to 2 years	2 to 5 years	5 to 10 years	Over 10 years
Cash and cash equivalents	1,275,184,933	_	1,275,184,933	-	_	_	-	_
Other receivables	10,784,913	10,784,913	-	-	_	-	_	-
Financial assets at fair value through profit or loss	16,016,472,342	4,584,812,088	574,543,838	505,305,356	560,261,987	6,992,826,442	1,835,418,800	963,303,831
Total assets	17,302,442,188	4,595,597,001	1,849,728,771	505,305,356	560,261,987	6,992,826,442	1,835,418,800	963,303,831
FINANCIAL LIABILITIES								
Payables	2,042,925	2,042,925	_	_	_	_	-	_
Financial liabilities at fair value								
through profit or loss	27,397,541	27,397,541						
Total liabilities	29,440,466	29,440,466						
					I/12/2021 VSD			
FINANCIAL ASSETS	Statement of financial position	Non-interest sensitive	6 months or less			2 to 5 years	5 to 10 years	Over 10 years
FINANCIAL ASSETS Cash and cash equivalents				ι	VSD .	2 to 5 years	5 to 10 years	Over 10 years
	financial position		less	ι	VSD .	2 to 5 years _ _	5 to 10 years - -	Over 10 years
Cash and cash equivalents	financial position 961,113,252	sensitive –	less	ι	VSD .	2 to 5 years 7,614,380,765	5 to 10 years 2,015,234,175	Over 10 years
Cash and cash equivalents Other receivables Financial assets at fair value	financial position 961,113,252 8,898,318 18,665,502,427	sensitive - 8,898,318	less 961,113,252	6 to 12 months	1 to 2 years	-	-	-
Cash and cash equivalents Other receivables Financial assets at fair value through profit or loss	financial position 961,113,252 8,898,318 18,665,502,427	sensitive – 8,898,318 5,831,064,355	less 961,113,252 — 	6 to 12 months 721,154,710	1 to 2 years	7,614,380,765		
Cash and cash equivalents Other receivables Financial assets at fair value through profit or loss Total assets	financial position 961,113,252 8,898,318 18,665,502,427	sensitive – 8,898,318 5,831,064,355	less 961,113,252 — 	6 to 12 months 721,154,710	1 to 2 years	7,614,380,765		
Cash and cash equivalents Other receivables Financial assets at fair value through profit or loss Total assets FINANCIAL LIABILITIES Payables Financial liabilities at fair value	financial position 961,113,252 8,898,318 18,665,502,427 19,635,513,997	sensitive - 8,898,318 -5,831,064,355 -5,839,962,673 1,827,928	less 961,113,252 — 	6 to 12 months 721,154,710	1 to 2 years	7,614,380,765		
Cash and cash equivalents Other receivables Financial assets at fair value through profit or loss Total assets FINANCIAL LIABILITIES Payables	financial position 961,113,252 8,898,318 18,665,502,427 19,635,513,997	sensitive - 8,898,318 _5,831,064,355 _5,839,962,673	less 961,113,252 — 	6 to 12 months 721,154,710	1 to 2 years	7,614,380,765		

The following table summarizes the sensitivity of the Petroleum Fund's operating profit and net assets attributable to interest rate risk. The analysis is based on reasonably possible movements in the benchmark with all other variables held constant and the fair value of the Petroleum Fund's portfolio moving according to the movement in the benchmark. The reasonably possible movements in the risk variables have been determined based on the investment managers' best estimates, having regard to a number of factors, including historical levels of interest rates. However, actual movements in the risk variables may be greater or less than anticipated due to a number of factors, including unusually large market shocks resulting from changes in the performance of the economies, markets and securities to which the variable is exposed. As a result, historic variations in risk variables are not a definitive indicator of future variations in the risk variables.

14. Financial assets and financial liabilities at fair value through profit or loss (continued)

Interest rate risk

Impact on profit/ (loss) for the year/ Net assets

(-1.00%) (+1.00%) 450,069,343 (450,069,343) 522,140,897 (522,140,897)

The Petroleum Fund has determined that a fluctuation in interest rates of +1% / 1% is reasonably possible within a given one year time period, given the economic environment in which the Petroleum Fund operates.

In determining the impact of an increase/decrease in net assets arising from market risk, management of the Petroleum Fund has considered prior period and expected future movements of the portfolio based on market information.

(iii) Currency risk

Currency risk is the risk that the value of a financial instrument will fluctuate due to changes in foreign exchange rates.

The Petroleum Fund invests in fixed income and equity securities that are denominated in currencies other than the United States dollar. Accordingly, the Petroleum Fund's assets may be affected favorably or unfavorably by fluctuations in currency rates. Therefore, the Petroleum Fund is necessarily subject to foreign exchange risks. The Petroleum Fund's assets are 91% (2021: 91%) in US dollars after accounting for currency hedging, therefore exposure to currency movements are limited.

The assets of the Petroleum Fund to which the Petroleum Fund had significant currency exposure at financial position date, reported in United States dollar equivalents, are set out in the following table:

	USD	EUR	AUD	GBP	JPY	Other	As at 31/12/2022 USD
0.1.10.15.11.						Currencies	Total
Cash and Cash Equivalents Equity securities	1,56,551,801	2,582,258	1,261,430	1,198,160	2,626,315	10,964,969	1,275,184,933
Money market securities	3,079,352,744 150,382,501	416,029,112	119,518,480	212,770,038	288,927,577	466,832,250	4,583,430,201 150,382,501
Fixed interest securities at FVTPL	9,977,148,958	392,640,740	128,134,797	119,848,165	138,996,789	524,508,304	11,281,277,753
Receivables	3,603,088	566,191	190,395	437,411	433,606	5,554,222	10,784,913
Payables	(2,042,923)	_	-	_	-	-	(2,042,925)
Total physical exposure	14,464,996,167	811,818,301	249,105,102	334,253,774	430,984,287	1,007,859,745	17,299,017,376
Futures	(778,604)	-		-	-	-	761,230
Forward exchange contracts							-
- buy foreign currency	(1,408,881,072)	(835,213,929)	(266,677,589)	(259,325,315)	(286,926,372)	(1,084,615,010)	(4,141,639,287)
- sell foreign currency	2,707,566,137	438,106,125	137,935,710	132,800,160	147,159,801	552,834,304	4,116,402,237
Total derivative exposure	1,297,906,461	(397,107,804)	(128,741,879)	(126,525,155)	(139,766,571)	(531,780,706)	(24,475,820)
Total net exposure	15,762,902,673	414,710,497	120,363,223	207,728,619	291,217,716	476,079,039	17,274,541,556
Exposure (% of net assets)	91.25%	2.40%	0.70%	1.20%	1.69%	2.76%	100%
							As at 31/12/2021 USD
	USD	EUR	AUD	CRP	.IPV	Other Currencies	USD
Cash and Cash Equivalents	USD 941,442,233	EUR 1.078.696	AUD 1.937.634	GBP 2.020.017	JPY 4.638.747	Currencies	USD Total
Cash and Cash Equivalents Equity securities	941,442,233	1,078,696	1,937,634	2,020,017	4,638,747	Currencies 9,995,925	USD Total 961,113,252
Cash and Cash Equivalents Equity securities Money market securities						Currencies	USD Total
Equity securities	941,442,233 3,970,520,476 149993280	1,078,696 524,088,012	1,937,634 131,898,800	2,020,017	4,638,747 366,834,627	Currencies 9,995,925 582,969,228	USD Total 961,113,252 5,827,874,267 149,993,280
Equity securities Money market securities Fixed interest securities at	941,442,233 3,970,520,476 149993280 11,267,230,043	1,078,696 524,088,012 0 417,926,341	1,937,634 131,898,800 - 144,806,027	2,020,017 251,563,124 - 144,411,473	4,638,747 366,834,627 - 134,791,976	Currencies 9,995,925 582,969,228 - 575,278,932	USD Total 961,113,252 5,827,874,267 149,993,280 12,684,444,792
Equity securities Money market securities Fixed interest securities at FVTPL	941,442,233 3,970,520,476 149993280	1,078,696 524,088,012 0	1,937,634 131,898,800	2,020,017 251,563,124	4,638,747 366,834,627	Currencies 9,995,925 582,969,228	USD Total 961,113,252 5,827,874,267 149,993,280
Equity securities Money market securities Fixed interest securities at FVTPL Receivables	941,442,233 3,970,520,476 149993280 11,267,230,043 2,907,194	1,078,696 524,088,012 0 417,926,341	1,937,634 131,898,800 - 144,806,027	2,020,017 251,563,124 - 144,411,473	4,638,747 366,834,627 - 134,791,976	Currencies 9,995,925 582,969,228 - 575,278,932	USD Total 961,113,252 5,827,874,267 149,993,280 12,684,444,792 8,898,318
Equity securities Money market securities Fixed interest securities at FVTPL Receivables Payables	941,442,233 3,970,520,476 149993,280 11,267,230,043 2,907,194 (1,827,928) 14,943,821,096	1,078,696 524,088,012 0 417,926,341 331,350	1,937,634 131,898,800 - 144,806,027 157,701	2,020,017 251,563,124 - 144,411,473 573,401	4,638,747 366,834,627 - 134,791,976 420,042	Currencies 9,995,925 582,969,228 - 575,278,932 4,508,630	USD Total 961,113,252 5,827,874,267 149,993,280 12,684,444,792 8,898,318 (1,827,928) 19,630,495,981
Equity securities Money market securities Fixed interest securities at FVTPL Receivables Payables Total physical exposure	941,442,233 3,970,520,476 149993280 11,267,230,043 2,907,194 (1,827,928)	1,078,696 524,088,012 0 417,926,341 331,350	1,937,634 131,898,800 - 144,806,027 157,701	2,020,017 251,563,124 - 144,411,473 573,401	4,638,747 366,834,627 - 134,791,976 420,042	Currencies 9,995,925 582,969,228 - 575,278,932 4,508,630	USD Total 961,113,252 5,827,874,267 149,993,280 12,684,444,792 8,898,318 (1,827,928)
Equity securities Money market securities Fixed interest securities at FVTPL Receivables Payables Total physical exposure Futures	941,442,233 3,970,520,476 149993,280 11,267,230,043 2,907,194 (1,827,928) 14,943,821,096	1,078,696 524,088,012 0 417,926,341 331,350	1,937,634 131,898,800 - 144,806,027 157,701	2,020,017 251,563,124 - 144,411,473 573,401	4,638,747 366,834,627 - 134,791,976 420,042	Currencies 9,995,925 582,969,228 - 575,278,932 4,508,630	USD Total 961,113,252 5,827,874,267 149,993,280 12,684,444,792 8,898,318 (1,827,928) 19,630,495,981
Equity securities Money market securities Fixed interest securities at FVTPL Receivables Payables Total physical exposure Futures Forward exchange contracts	941,442,233 3,970,520,476 149993,280 11,267,230,043 2,907,194 (1,827,928) 14,943,821,096	1,078,696 524,088,012 0 417,926,341 331,350 - 1,127,263,821	1,937,634 131,898,800 - 144,806,027 157,701 - 278,800,162	2,020,017 251,563,124 - 144,411,473 573,401 - 398,568,015	4,638,747 366,834,627 - 134,791,976 420,042 - 506,685,392	Currencies 9,995,925 582,969,228 575,278,932 4,508,630 - 1,172,752,715	USD Total 961,113,252 5,827,874,267 149,993,280 12,684,444,792 8,898,318 (1,827,928) 19,630,495,981 761,230
Equity securities Money market securities Fixed interest securities at FVTPL Receivables Payables Total physical exposure Futures Forward exchange contracts - buy foreign currency	941,442,233 3,970,520,476 149993,280 11,267,230,043 2,907,194 (1,827,928) 14,943,821,096 761,230	1,078,696 524,088,012 0 417,926,341 331,350 - 1,127,263,821	1,937,634 131,898,800 - 144,806,027 157,701 - 278,800,162	2,020,017 251,563,124 - 144,411,473 573,401 - 398,568,015	4,638,747 366,834,627 - 134,791,976 420,042 - 506,685,392	Currencies 9,995,925 582,969,228 575,278,932 4,508,630 - 1,172,752,715	USD Total 961,113,252 5,827,874,267 149,993,280 12,684,444,792 8,898,318 (1,827,928) 19,630,495,981 761,230 . (1,447,710,211)
Equity securities Money market securities Fixed interest securities at FVTPL Receivables Payables Total physical exposure Futures - buy foreign currency - sell foreign currency	941,442,233 3,970,520,476 149993280 11,267,230,043 2,907,194 (1,827,928) 14,943,821,096 761,230	1,078,696 524,088,012 0 417,926,341 331,350 - 1,127,263,821 (424,866,193)	1,937,634 131,898,800 - 144,806,027 157,701 - 278,800,162	2,020,017 251,563,124 - 144,411,473 573,401 - 398,568,015	4,638,747 366,834,627 . 134,791,976 420,042 . 506,685,392 . (139,065,672)	Currencies 9,995,925 582,969,228 - 575,278,932 4,508,630 - 1,172,752,715 - (576,905,076)	USD Total 961,113,252 5,827,874,267 149,993,280 12,684,444,792 8,898,318 (1,827,928) 19,630,495,981 761,230 (1,447,710,211) 1,437,476,723

³¹ December 2022 31 December 2021*

^{*} Interest rate sensitivity for 2021 has been revised from the 2021 Annual Report

14. Financial assets and financial liabilities at fair value through profit or loss (continued)

The Petroleum Fund is primarily exposed to the Euro, Australian Dollar, Pound Sterling and Japanese Yen.

The following table details the Petroleum Fund's sensitivity to a 10% increase and decrease in the United States dollar against the relevant foreign currencies. 10% is the sensitivity rate used when reporting foreign currency risk internally to key management personnel and represents management's assessment of the reasonably possible change in foreign exchange rates. The sensitivity analysis includes only outstanding foreign currency denominated monetary items and adjusts their translation at the period end for a 10% change in foreign currency rates. The sensitivity analysis includes cash and cash equivalents, interest receivable and qualifying instruments. A negative number below indicates a decrease in profit where the United States dollar strengthens 10% against the relevant currency. For a 10% weakening of the United States dollar against the relevant currency, there would be a comparable impact on the profit, and the balances below would be a positive. The analysis presumes that all other variables, in particular interest rates, remain constant.

	As at	As at
	31/12/2022	31/12/2021
	USD	USD
EUR impact	(41,471,050)	(51,855,821)
AUD impact	(12,036,322)	(13,295,353)
GBP impact	(20,772,862)	(23,754,138)
JPY impact	(29,121,772)	(36,761,972)
Other currencies impact	(47,607,904)	(59,584,764)
Total currencies impact	(151,009,910)	(185,252,048)

This is mainly attributable to the exposure outstanding on all relevant foreign currencies relating to cash and cash equivalents, interest receivable and qualifying instruments in the Petroleum Fund at the end of the reporting period.

(b) Credit risk

Credit risk is the risk of loss that arises from a counterparty failing to meet their contractual commitments in full and on time or from losses arising from the change in value of a traded financial instrument as a result of changes in the credit risk on that instrument. It arises principally from Fixed interest securities held and also from derivative financial instruments, cash and cash equivalents, balances due from brokers and receivables from reverse repurchase agreements. For risk management reporting purposes the Petroleum Fund considers and consolidates all elements of credit risk exposure reflecting the fact that the main concentration to which the Petroleum Fund is exposed arises from the Petroleum Fund's investments in Fixed interest securities.

(i) Credit risk management

Article 15 of the Petroleum Fund Law provides broad constraints on the extent of credit risk that can be taken by the Petroleum Fund. To qualify as an eligible investment, debt must have a credit quality of at least equal to investment grade, while deposits are only held with financial institutions with a credit rating of at least investment grade. The investment grade rating reflects the credit rating agencies' assessment of capacity by the issuer to pay. Higher ratings reflect lower credit risk associated with the bonds. Credit risk is also managed by limiting exposure to any one company or issuer (except for a sovereign state) to 3% of the total value of the Petroleum Fund. The limits are reflected in the underlying investment mandates with managers and are monitored by the BCTL. The Petroleum Fund's maximum exposure to credit risk at reporting date in relation to each class of financial asset is the carrying amount of those assets as indicated in the statement of financial position. The Petroleum Fund is segmented into a liquidity and growth portfolio. The liquidity portfolio is comprised of US dollar cash and cash equivalents, money market securities, short-maturity US Treasury bonds and other short term liquid instruments. The target asset allocation weights for the growth portfolio were 65% fixed interest securities and 35% global equities at the end of December. The Fund's investment in private debt is separated from the financial market investments and is limited to 5% of the total value of the Fund under the Petroleum Fund Law. The IAB regularly monitors and reviews the Petroleum Fund's asset allocation at its meetings, with consideration to the desired risk profile of the Petroleum Fund. The Board considers the current asset allocation to be appropriate given the current investment horizon of the Petroleum Fund.

The mandate in the Operational Management Agreement prescribes that the performance of the Petroleum Fund shall be measured against benchmark indexes for a series of mandates, restricts the permissible investment universe to highly rated financial instruments and establishes tracking error limits restricting the permissible deviation of the portfolio investments from the benchmark for each mandate. The maximum loss that the Petroleum Fund would suffer from the default of a single issuer is the amount disclosed below with respect to investments in treasury notes issued by the United States Government and equity securities traded on developed market exchanges.

(ii) Concentration of credit exposure

Concentrations of credit risk arise when a number of financial instruments or contracts are entered into with the same counterparty, or when a number of counterparties are engaged in similar business activities or activities in the same geographic regions, or have similar economic features that would cause their ability to meet contractual obligations to be similarly affected by changes in economic, political or other conditions.

The allocation to each sovereign issuer is constantly monitored and any actual or anticipated changes to the credit risk profile of each issuing country will be considered in the allocation. Securities issued by US Treasury was 58% (2021: 59%) of the Petroleum Fund's Investments measured at fair value through profit or loss. Diversification within the non US sovereign bond mandate is achieved through limiting each country to a maximum weight of 10% of the index and the Euro zone weight to 30%.

14. Financial assets and financial liabilities at fair value through profit or loss (continued)

The Petroleum Fund's significant end of year concentrations of credit exposure by the industry or country of the issuer were as follows:

	As at 31/12/2022 USD	As at 31/12/2021 USD
Fixed interest securities and money market securities		
Financial assets at FVTPL - Sovereign issuers:		
United States Government	9,566,773,397	10,715,869,958
Australian Government	128,134,799	144,806,027
Japan Government	138,996,792	134,791,975
United Kingdom Government	119,848,312	144,411,474
European Governments	392,640,735	417,926,338
Timor-Leste Government (note 13)	560,757,917	701,353,365
Governments of other countries	524,508,302	575,278,935
	11,431,660,254	12,834,438,072

(iii) Credit exposure by credit rating

The following table presents an analysis of the Petroleum Fund's debt securities classified according to credit ratings of the issuer as at each period end. Credit ratings from Standard & Poor's, Moody's Investors Services and Fitch Ratings are assessed and the lower of the two highest ratings applies. If a rating is only available from one of the three agencies, this single rating applies. AAA is the highest rating possible and indicates that the entity has an extremely strong capacity to pay interest and principal. AA is a high grade rating, indicating a very strong capacity, and A is an upper medium grade, indicating a strong capacity to pay interest and principal. BBB is the lowest investment grade rating, indicating a medium capacity to pay interest and principal. Ratings lower than AAA can be modified by + or – signs to indicate relative standing within the major categories.

	As at 31/12/2022 USD	As at 31/12/2021 USD
International fixed interest securities and money market securities		
Standard & Poor's / Moody's credit rating		
AAA/Aaa	10,031,625,048	11,317,071,848
AA/Aa2	203,083,615	260,045,789
A/A2	78,255,983	113,518,414
BBB/Baa2	89,375,866	122,196,340
Not-rated	1,029,319,742	1,021,605,681
Total	11,431,660,254	12,384,438,072

(iv) Credit exposure by counterparty as a percentage of the Petroleum Fund's capital

No more than 1% (2021: 1%) of assets of the Petroleum Fund is exposed to a single sovereign issuer, other than the United States Government, all of which sovereigns are developed nations. The assets exposed to the United States Government amounted to 55% (2021: 54%) of the Petroleum Fund's capital. A change in the credit ratings of the Petroleum Fund's counterparties may have an impact on the future financial performance of the Petroleum Fund.

(c) Derivative financial instruments

The Petroleum Fund Law sets limits on the use of derivative financial instruments whereby derivatives may only be used to reduce the risk to the Petroleum Fund or to efficiently facilitate the desired exposure to an asset and whereby the risk arising from the use of the derivatives may not be higher than would result from direct exposure to the underlying assets. As such, the objective of using derivative instruments is to reduce financial risks and costs associated with implementing the investment strategy. The Petroleum Fund does not enter into or trade financial instruments, including derivative financial instruments, for speculative purposes. The individual investment mandates set by the IAB include rules for the use of derivatives within these statutory requirements.

Forward and futures contracts are contractual agreements to buy or sell a specified financial instrument at a specific price and date in the future. Forwards are customized contracts transacted in the OTC market. Futures contracts are transacted in standardized amounts on regulated exchanges and are subject to daily cash margin requirements. The main differences in the risk associated with forward and futures contracts are credit risk and liquidity risk. The Petroleum Fund has credit exposure to the counterparties of forward contracts. The credit risk related to futures contracts is considered minimal because the exchange ensures that these contracts are always honored. Forward contracts are settled gross and, therefore, considered to bear a higher liquidity risk than the futures contracts which are settled on a net basis. Both types of contracts result in market risk exposure.

15. Financial liabilities

Financial liabilities are amounts owed by the Petroleum Fund to third parties. One type of financial liability is the amount payable for securities purchased.

Another type of financial liabilities arises when derivative contracts are "out of the money", that is, an amount must be paid at the due date of the derivative contract. As a derivative is often used by the Petroleum Fund for hedging, an "out of the money" derivative may be indicative of a corresponding asset having risen in value.

There were financial instruments liabilities designated at fair value through profit or loss as at 31 December 2022 of \$27,397,541 (2021: \$12,662,346).

Accounting policy

Classification

The Petroleum Fund's financial liabilities are categorized as at fair value through profit or loss, unless otherwise noted.

Financial liabilities that are not at fair value through profit or loss include balances payable to financial intermediaries for the purchase of securities and other short term payables.

PART IV: NOTES TO THE STATEMENT OF CHANGES IN CAPITAL

The statement of changes in capital details the change in the net wealth of the Petroleum Fund over the year. Typically, this includes contributions to the Petroleum Fund by participants in the petroleum sector, withdrawals by the government, refunds of taxation and the net profit or loss from the Petroleum Fund's investments.

16. Capital receipts and payments

Capital receipts and payments reflect moneys received by the Petroleum Fund pursuant to the Petroleum Fund Law and amounts transferred to the State budget pursuant to an appropriation of Parliament.

Capital receipts are classified in the Petroleum Fund Law as follows:

- Article 6.1(a) receipts are the gross revenues, including tax revenue, of Timor-Leste from any petroleum operations.
- Article 6.1(b) receipts are amounts received by the National Petroleum Authority pursuant to the Timor Sea Treaty.
- Article 6.1(c) receipts are amounts received from the investment of the capital of the Petroleum Fund.
- Article 6.1(e) include any other petroleum related receipts.

The following table shows the capital receipts and payments of the Petroleum Fund.

16. Capital receipts and payments (continued)

Year ended 31/12/2022 USD

Month	Article 6.1(a) receipts	Article 6.1(b) receipts	Article 6.1(e) other receipts	To Consolidated Fund	Total
January	72,709,695	13,761,706	122,143	_	86,593,544
February	15,602,866	354,218,909	125,370	_	369,947,145
March	56,685,096	20,146,440	90,000	(150,000,000)	(73,078,464)
April	13,203,969	11,429,576	-	_	24,633,545
May	10,244,861	_	-	(300,000,000)	(289,755,139)
June	13,108,042	-	1,074,550	-	14,182,592
July	12,056,609	_	-	(104,000,000)	(91,943,391)
August	12,121,795	_	995,800	(300,000,000)	(286,882,405)
September	68,381,669	-	395,250	_	68,776,919
October	78,656,047	-	85,000	(350,000,000)	(271,258,953)
November	98,014,253	174,594,106	-	_	272,608,359
December	41,010,237	37,522,524	60,030	(200,000,000)	(121,407,209)
Totals	<u>491,795,139</u>	611,673,261	2,948,143	_(1,404,000,000)	(297,583,457)
Total Article 6.1			<u>1,106,416,543</u>		

Year ended 31/12/2021

USD

Month	Article 6.1(a) receipts	Article 6.1(b) receipts	Article 6.1(e) other receipts	To Consolidated Fund	Total
January	13,996,590	1,324,986		_	15,321,576
February	3,360,157	17,465,773	_	(200,000,000)	(179,174,070)
March	14,408,711	3,620,704	_	_	18,029,415
April	4,984,666	3,385,814	_	(150,000,000)	(141,629,520)
May	19,380,548	21,895,276	914,550	_	42,190,374
June	17,587,371	5,594,296	_	_	23,181,667
July	15,517,557	5,578,934	-	(197,873,000)	(176,776,509)
August	13,139,991	60,875,373	-	_	74,015,364
September	13,975,983	9,676,452	5,811,200	(250,000,000)	(220,536,365)
October	66,251,318	8,003,476	2,497,474	_	76,752,268
November	43,106,711	159,621,775	_	(350,000,000)	(147,271,514)
December	174,819,433	12,802,643			187,622,076
Totals	400,529,036	309,845,502	9,223,224	_(1,147,873,000)	(428,275,238)
Total Article 6.1			719,597,762		

Accounting policies, estimates, assumptions, judgements and risks

Capital

Judgments have been made as to whether certain transactions should be recognized as capital or revenue.

Petroleum Fund gross receipts

The Petroleum Fund Law requires certain parties to deposit taxes and other petroleum related payments payable to the Government of Timor-Leste directly into the Petroleum Fund. The Petroleum Fund recognizes these and other transactions as follows:

- Payments made as Petroleum Fund receipts in accordance with Article 6.1(a) are recognized as increases in the statement of changes in capital of the Petroleum Fund.
- Payments made by the Designated Authority in accordance with Article 6.1(b) are recognized as increases in the statement of changes in capital of the Petroleum Fund.
- Income earned by the Petroleum Fund from the investment of its assets is recognized in the statement of profit or loss and other comprehensive income in accordance with Article 6.1(c).

16. Capital receipts and payments (continued)

- It is noted that the main source of capital receipts currently relates to the oil revenues generated from the Bayu Undan Field for which gas production is expected to be exhausted around 2023. On 6 March 2018, the governments of Timor-Leste and Australia signed a new Maritime Boundaries Treaty, and in the same year, negotiations between the governments of Timor-Leste, Australia and the Sunrise Joint Venture on the new Greater Sunrise Production Sharing Contract commenced.
- It is expected that the start date of production from Greater Sunrise will become clearer once the Production Sharing Contract and development plan are agreed. Payments received by Timor-Leste relating directly to Petroleum Fund resources not covered in Article 6.1 (a) to (d) of the Petroleum Fund Law are recognized as increases in the statement of changes in capital of the Petroleum Fund in accordance with Article 6.1(e).
- Management fees paid from the gross receipts of the Petroleum Fund pursuant to Article 6.2 are recognized in the statement of profit or loss and other comprehensive income.
- Contractors pay both Corporate Income Tax (CIT) and Supplemental Petroleum Tax (SPT) in advance based upon forecast financial information. Where the amount of tax based upon actual financial information is less than the amount paid based upon forecast, an overpayment of tax may occur. In order to verify and validate the overpayment of taxes claimed by contractors, the Directorate General of Tax Authority conducts an audit exercise to verify the amount of the overpayment claimed by a contractor. The overpayment amount of taxes to be refunded is determined after the audit inspection is completed. It is possible that future tax refunds might be paid out in the upcoming years from the Petroleum Fund. Refunds of taxation made pursuant to Article 10 are recognized as reductions in the statement of changes in capital of the Petroleum Fund.

Transfers to the Consolidated Fund

The National Government of República Democrática de Timor-Leste comprises:

- · Central government ministries, and
- Autonomous agencies under significant control of Ministry of Finance.

The Consolidated Fund is the Government's State Budget Account at the BCTL. Transfers to the Consolidated Fund are appropriations approved by the National Parliament of Timor-Leste. All transfers to the Consolidated Fund are authorized and recognized when paid to the Consolidated Fund.

Objectives of managing capital

The Petroleum Fund is a mandatory financial reserve established with the objective of allocating financial wealth obtained from natural resources fairly and equitably between current and future generations of Timor-Leste citizens. The Petroleum Fund's capital structure consists solely of paid in capital derived from petroleum receipts and other sources as described in Note 16. The Petroleum Fund Law requires the Government to annually calculate Estimated Sustainable Income (ESI) which is defined as the maximum amount that can be appropriated from the Petroleum Fund in a fiscal year and leave sufficient resources in the Petroleum Fund for an amount of equal real value to be appropriated in all later fiscal years. The ESI calculation is submitted with the annual budget to Parliament who are required to take the ESI into consideration when determining the amount of capital to be appropriated from the Petroleum Fund. Transfers in excess of the ESI are permitted subject to certain provisions in the Petroleum Fund Law being satisfied.

There has been no change during the year in these objectives and policies for managing capital and the Petroleum Fund has complied with all legislative requirements relating to the management of the Petroleum Fund's capital

PART V: NOTES TO THE STATEMENT OF CASH FLOWS

The statement of cash flows, also known as the cash flow statement, presents the movement in cash flows over the period of 1 January to 31 December as classified under operating and financing activities.

Cash flow generally means cash movements in the Petroleum Fund's bank accounts and movements in short term investments that are highly liquid and involve very low risk of change in value.

Cash flow from operating activities presents the movement in cash during the year relating to the Petroleum Fund's revenue generating activities of the Petroleum Fund, namely investing in securities.

Cash flow from financing activities includes the movement in cash flow resulting from receipts into the Petroleum Fund deposited by participants in the exploitation of petroleum resources and transfers out of the Petroleum Fund to the Consolidated Fund or to refund tax.

For the purposes of the statement of cash flows, cash and cash equivalents comprise balances with an original maturity of less than 90 days.

17. Reconciliation of net cash flows

	Year ended 31/12/2022	Year ended 31/12/2021
	USD	USD
Profit/(loss) for the year	(2,050,438,544)	1,144,334,490
Increase/(decrease) in financial assets at fair value through profit or loss	2,663,765,281	(1,137,350,798)
Increase in receivables	2,171,635	14,615,856
Increase/(decrease) in accounts payable	214,246	(770,368)
Decrease in payables for securities purchased	750	_ =
Net cash provided by operating activities	615,713,368	<u>20,829,180</u>

Accounting policy

Cash inflows from investments are presented net of withholding taxes, when applicable.

PART VI: NON FINANCIAL DISCLOSURES

18. Personnel

The Petroleum Fund did not employ any personnel during the year (2021: nil). The BCTL as operational manager of the Petroleum Fund employs personnel as does the Ministry of Finance, the executive of the Petroleum Fund.

19. Contingent assets, contingent liabilities and commitments

There were no contingent assets, contingent liabilities or commitments as at 31 December 2022 (2021: nil).

20. Related parties

The management of the fund spreads the decision making process across various stakeholders to ensure prudent management with checks and balances

The Government, represented by the Minister of Finance, is responsible for the overall management and investment strategy of the Petroleum Fund. Minister of Finance is considered Key Management Personnel of the Fund. No remuneration was paid to the Ministry of Finance by Petroleum Fund.

The Central Bank of Timor-Leste (BCTL) is the operational manager responsible for operational management of the Petroleum Fund by implementing the investment policy determined by Minister of Finance. In doing so, the Central Bank ensures that the management of the Petroleum Fund is in line with the legal framework. BCTL management is the ultimate responsible for daily operations, however, they are not remunerated from the fund.

The Investment Advisory Board is responsible for developing performance benchmarks for the Minister of Finance and advises the Minister on investment policy and the management of the Fund providing advice to Minister of Finance (art 17 of the PF Law). Under article 17.1 the dispatch appointing the Members of the IAB shall determine their remuneration, in conformity with the applicable legislation. Please see IAB expenses in the table under BCTL.

The following parties are considered related parties of the Petroleum Fund:

The Government

The ultimate controlling party of the Petroleum Fund is the Democratic Republic of Timor-Leste ('the Government'). The Government, as stipulated in Article 11.1 of the Petroleum Fund Law, is the overall manager of the Petroleum Fund.

The Petroleum Fund receives receipts on behalf of the Government as disclosed in Note 16. The Government, through the State budget, meets the expenses of the Petroleum Fund, including the audit fee, not otherwise covered by the management fee.

The Petroleum Fund makes transfers to the Consolidated Fund of Timor-Leste (pursuant to Article 7 of the Petroleum Fund Law) as disclosed in the statement of changes in capital.

Banco Central de Timor-Leste (BCTL)

The BCTL is the operational manager of the Petroleum Fund, in accordance with Article 11.3 of the Petroleum Fund Law.

This means that the operational manager is, in particular, responsible for oversight of the investment managers and service providers, collection of dividends, interest and proceeds of matured securities, the exercise of options and, in general, for any other operation concerning the day to day administration of the securities and other assets and liabilities of the Petroleum Fund.

20. Related parties (continued)

In addition, the BCTL is also managing five (5) portfolios in-house consisting of three (3) fixed interests portfolios, one (1) Australia market equity and one (1) alternative portfolio

The management fee covers the operational management of the Petroleum Fund which is undertaken by the BCTL in accordance with the provisions of Article 11.3 of the Petroleum Fund Law. The audit fee and expenses incurred within the Ministry of Finance relating to the overall management of the Petroleum Fund are met directly from the State budget. The management fee paid to the BCTL for the period was composed as follows:

	Year ended	Year ended
	31/12/2022	31/12/2021
	USD	USD
Custody and external management services	6,819,831	8,139,336
IAB expenses	287,254	139,781
BCTL operating expenses	6,210,821	7,711,743
Total management expenses	13,317,906	15,990,860
Other expenses	8,040	966,635
Total	13,325,946	16,957,495

BCTL were entitled to receive a management fee for its respective services within the parameters of Annex 2 of the Operational Management Agreement Actualization dated 20 April 2015. In the current year, these fees amount to an aggregate of 0.08% (2020: 0.08%) per annum of the net assets of the Petroleum Fund as at 31 December 2022. Management fees are payable monthly in arrears. Total management fees for the year amounted to US\$13,317,906 (2021: US\$15,990,860).

The management fees payable as at 31 December 2022 is US\$ 1,138,526 (2021: US\$1,827,928).

National Petroleum and Minerals Authority

The National Petroleum and Minerals Authority manages the revenues from the production sharing contracts between Timor-Leste and Australia and transfers the Timor-Leste portion to the Petroleum Fund as Article 6.1(b) receipts as disclosed in Note 16.

Timor Gap E.P.

Timor Gap E.P. is the national petroleum company and has the mandate to conduct oil and gas business on behalf of the Timor-Leste Government. Timor Gap is building an integrated oil & gas company to cover upstream and downstream activities, as well as services to the sector.

During the year 2019 financial year certain subsidiaries of Timor Gap E.P. issued debt instruments with a face value of \$650,000,000 which were bought by the Petroleum Fund. Further details of these transactions are set out in Note 13.

21. Encumbrances on the Petroleum Fund

Encumbrances on the assets of the Petroleum Fund

In accordance with Article 20 of the Petroleum Fund Law, burdens or encumbrances, in any of their forms, may be put by way of contract or agreement on Petroleum Fund assets, up to a limit of 10% of the total value of the Petroleum Fund at the time the burden or encumbrances is put, provided that this is in compliance with the principles of the general system for creating, issuing and managing public debt.

During the 2022 financial year and as at the financial position date, there were no encumbrances or burdens on the assets of the Petroleum Fund.

22. Application of new and revised IFRS

This note provides information about new IFRS that have been adopted and forthcoming standards that are not yet effective.

22.1. New and revised IFRS applied with no material effect on the financial statements

Adopted all the new and revised IFRS that are relevant with no material impact.

22.2. Adoption of IFRS that are not yet effective

Certain new accounting standards and interpretations have been published that are not mandatory for 31 December 2022 reporting periods and have not been early adopted by the Petroleum Fund. These standards are not expected to have a material impact on the entity in the current or future reporting periods and on foreseeable future transactions.

23. Subsequent events

No subsequent events have occurred after the reporting date but prior to the issuance of the financial statements that have a material effect on the financial statements and therefore require adjustment or disclosure in the statements.

PART VII: SCHEDULE OF FINANCIAL ASSETS

24. Schedule of financial assets valued through profit or loss

(a) Fixed interest securities – issued by sovereign states and supranationals

Security	Nominal	Fair Value	Security	Nominal	Fair Value
Australia 5.50% 04/23	20,000,000	13,802,511	Canada 0.875% 08/27	10,000,000	6,498,723
Australia 2.75% 04/24	2,120,000	1,434,615	Canada 2.00% 06/28	15,000,000	10,391,660
Australia 3.70% 06/25	12,500,000	8,408,507	Canada 5.75% 06/33	6,447,000	5,777,756
Australia 0.25% 11/25	14,500,000	8,962,577	Canada 5% 06/37	21,600,000	18,964,266
Australia 2.75% 11/27	6,573,000	4,284,729	Canada 4% 06/41	11,155,000	8,962,548
Australia 4.75% 04/27	13,713,000	9,792,674	Canada 3.5% 12/45	8,331,000	6,321,665
Australia 3.30% 07/28	15,000,000	9,586,381	Canada 2.75% 12/48	2,825,000	1,888,011
Australia 3.45% 07/28	10,000,000	6,438,492	Canada 2% 12/51	12,000,000	6,750,879
Australia 2.75% 11/29	8,497,000	5,389,277	Canada 2.75% 12/64	2,545,000	1,658,123
Australia 3.25% 04/29	23,594,000	15,591,281			118,773,468
Australia 1.75% 11/32	32,000,000	17,703,557			
Australia 4.50% 04/33	12,640,000	8,970,072	Denmark 1.5% 11/23	200	28
Australia 3.75% 04/37	11,289,000	7,282,098	Denmark 7% 11/24	12,882,000	2,004,586
Australia 3.00% 03/47	19,272,000	10,488,028	Denmark 1.75% 11/25	109,158,000	15,282,283
		128,134,799	Denmark 0.5% 11/27	89,174,000	11,533,867
			Denmark 0.5% 11/29	70,000,000	8,683,419
Austria 2.10% 09/17	124,000	92,478	Denmark 0% 11/31	51,500,000	5,815,997
Austria 1.75% 10/23	274,000	291,044	Denmark 4.5% 11/39	144,817,200	26,021,969
Austria 0.00% 07/24	725,000	740,607	Denmark 0.25% 11/52	30,000,000	2,309,994
Austria 4.85% 03/26	2,438,000	2,865,944			71,652,143
Austria 0.50% 04/27	60,000	58,175			
Austria 6.25% 07/27	195,000	244,136	Finland 0.5% 09/29	2,290,000	2,080,537
Austria 0.50% 02/29	2,764,000	2,547,422	Finland 2.63% 07/42	250,000	250,203
Austria 2.40% 05/34	1,255,000	1,259,155			2,330,740
Austria 4.15% 03/37	1,624,000	1,959,376			
Austria 0.00% 10/40	1,800,000	1,080,111	France 0.01% 3/23	30,000,000	31,942,143
Austria 3.80% 01/62	153,000	190,163	France 0.75% 11/28	1,000,000	947,110
		11,328,611	France 0.5% 05/29	5,326,000	4,914,209
			France 0% 11/30	6,500,000	5,511,424
Belgium 0.50% 10/24	2,845,000	2,920,248	France 0% 11/31	7,000,000	5,736,864
Belgium 4.50% 03/26	1,034,000	1,200,773	France 5.75% 10/32	1,126,000	1,481,696
Belgium 0.80% 06/27	2,640,000	2,589,202	France 0% 05/32	7,000,000	5,618,452
Belgium 5.50% 03/28	559,000	699,542	France 2% 11/32	11,000,000	10,675,863
Belgium 0.90% 06/29	770,000	728,760	France 1.25% 05/34	3,200,000	2,798,401
Belgium 3.00% 06/34	5,100,000	5,370,801	France 1.25% 05/36	809,000	679,101
Belgium 4.25% 03/41	3,622,400	4,392,600	France 4% 10/38	798,124	925,029
Belgium 3.75% 06/45	892,000	1,020,562	France 1.75% 06/39	1,970,000	1,724,549
		18,922,488	France 2% 05/48	7,165,000	6,011,170
C1- 0.250/ 00/22	4.500.000	2 242 990	France 0.75% 05/52	6,000,000	3,412,176
Canada 0.25% 08/23	4,500,000	3,243,889	France 4% 04/55	7,214,000	8,887,210
Canada 0.25% 04/24	6,000,000	4,217,842	France 1.75% 05/66	626,000	458,508
Canada 1.50% 09/24	4,665,000	3,319,718			91,723,905
Canada 2.25% 03/24 Canada 2.50% 06/24	32,080,000	23,305,601	C 00/ 10/2/	20,000,000	10 407 514
	5,500,000	3,975,341	Germany 0% 10/26	20,000,000	19,407,514
Canada 0.625% 09/25	20,000,000	13,497,446	Germany 1.3% 10/27	5,000,000	5,071,727

Security	Nominal	Fair Value	Security	Nominal	Fair Value
Germany 0% 08/30	30,100,000	26,631,304	Japan 0.1% 9/29	1,512,300,000	11,229,865
Germany 1.7% 08/32	5,400,000	5,390,757	Japan 0.1% 12/29	1,500,000,000	11,111,481
Germany 0% 02/32	7,000,000	5,942,459	Japan 0.1% 9/30	990,000,000	7,283,451
Germany 4.75% 07/34	100	132	Japan 0.1% 12/30	700,000,000	5,138,565
Germany 0% 05/35	500,000	386,713	Japan 0.2% 3/32	890,000,000	6,613,935
Germany 2.5% 07/44	4,080,039	4,355,629	Japan 1.7% 6/33	714,500,000	6,018,484
Germany 2.50% 08/46	4,224,000	4,521,050	Japan 1.6% 3/33	501,650,000	4,204,458
Germany 0.00% 08/52	6,500,000	3,398,636	Japan 0.5% 9/36	550,000,000	3,945,273
		75,105,921	Japan 0.2% 6/36	453,350,000	3,128,992
			Japan 2.3% 3/39	438,900,000	3,921,078
Hong Kong 1.25% 06/27	47,000,000	5,416,153	Japan 0.4% 6/40	600,000,000	3,972,344
Hong Kong 2.49% 08/28	10,350,000	1,259,656	Japan 2.0% 9/40	43,550,000	372,598
		6,675,809	Japan 2.3% 3/40	38,750,000	345,923
			Japan 2.2% 3/41	1,163,050,000	10,230,364
Ireland 1.0% 05/26	2,210,000	2,254,416	Japan 1.9% 9/42	164,350,000	1,384,431
Ireland 1.1% 05/29	1,265,000	1,217,861	Japan 0.3% 6/46	656,000,000	3,867,184
Ireland 0.4% 05/35	1,885,000	1,440,226	Japan 0.8% 9/47	72,850,000	477,845
Ireland 1.7% 05/37	610,000	543,095	Japan 0.4% 3/50	160,000,000	920,394
Ireland 1.5% 05/50	298,000	221,440	Japan 0.7% 12/51	400,000,000	2,426,284
		5,677,038	Japan 0.7% 6/51	150,000,000	912,403
			Japan 1.3% 6/52	1,000,000,000	7,108,321
Italy 0.0% 08/24	11,000,000	11,151,560	Japan 2.0% 3/52	91,750,000	767,867
Italy 3.75% 09/24	2,795,000	3,045,029	Japan 0.4% 3/56	189,300,000	989,690
Italy 0.35% 02/25	5,698,000	5,723,971			138,996,792
Italy 1.45% 05/25	14,000,000	14,317,507			
Italy 2.5% 11/25	7,665,000	7,990,528	Luxemburg 0% 03/31	12,000,000	10,003,101
Italy 0.85% 01/27	800,000	766,715			10,003,101
Italy 0.95% 09/27	2,000,000	1,879,485			
Italy 2.05% 08/27	1,269,000	1,267,328	Netherland 5.5% 01/28	2,444,000	3,081,386
Italy 2.2% 06/27	11,410,000	11,447,458	Netherland 0.25% 07/29	645,000	587,188
Italy 6.5% 11/27	872,000	1,050,463	Netherland 2.5% 01/33	3,327,000	3,513,249
Italy 0.25% 03/28	13,000,000	11,453,785	Netherland 0.5% 01/40	2,871,000	2,108,078
Italy 4.75% 09/28	840,000	943,384	Netherland 2.75% 01/47	205,000	224,318
Italy 1.35% 04/30	9,150,000	8,025,535			9,514,219
Italy 6.0% 05/31	1,557,000	1,872,238			
Italy 2.45% 09/33	1,202,000	1,051,410	NZ 5.5% 04/23	13,000,000	8,335,955
Italy 3.35% 03/35	7,430,000	6,934,362	NZ 0.5% 05/26	30,000,000	16,531,595
Italy 3.1% 03/40	1,855,000	1,607,795	NZ 4% 05/27	15,000,000	9,055,458
Italy 5.0% 09/40	1,610,000	1,785,590	NZ 3% 04/29	10,246,000	5,994,572
Italy 1.8% 03/41	18,000,000	12,484,064	NZ 1.5% 05/31	21,935,000	11,059,909
Italy 3.85% 09/49	339,000	317,928	NZ 3.5% 04/33	12,019,000	7,044,024
Italy 2.45% 09/50	4,260,000	3,026,506	NZ 2.75% 04/37	5,984,000	3,063,615
Italy 2.8% 03/67	1,500,000	1,083,895			61,085,128
		109,226,536			
			Norway 0.1% 03/23	85,000,000	8,578,045
Japan 0.8% 9/23	226,550,000	1,730,993	Norway 3% 03/24	39,160,000	4,063,808
Japan 0.0% 1/23	3,600,000,000	27,285,506	Norway 1.75% 03/25	51,060,000	5,108,363
Japan 0.1% 12/26	314,500,000	2,378,046	Norway 2% 04/28	220,000,000	21,448,350
Japan 2.1% 3/27	99,100,000	815,419	Norway 1.75% 09/29	34,390,000	3,221,850
Japan 0.1% 6/29	1,400,000,000	10,415,598	Norway 1.375% 08/30	34,474,000	3,092,209
					45,512,625

Security	Nominal	Fair Value	Security	Nominal	Fair Value
			UK 0.375% 10/26	6,400,000	6,826,694
Portugal 0.70% 10/27	3,000,000	2,888,510	UK 1.25% 07/27	6,400,000	6,985,998
Portugal 1.95% 6/29	1,925,000	1,935,020	UK 0.875% 10/29	7,887,000	7,961,084
		4,823,530	UK 0.375% 10/30	3,500,000	3,294,039
			UK 0.25% 07/31	3,500,000	3,163,790
Singapore 2.75% 07/23	16,239,000	12,202,794	UK 4.25% 06/32	4,734,000	5,975,636
Singapore 3% 09/24	15,519,000	11,667,258	UK 4.25% 03/36	1,407,120	1,774,065
Singapore 3.5% 03/27	24,701,000	19,113,173	UK 1.75% 09/37	4,800,000	4,386,226
Singapore 2.875% 09/30	18,137,000	13,437,624	UK 4.75% 12/38	700,000	919,626
Singapore 1.625% 07/31	8,500,000	5,691,964	UK 4.25% 09/39	2,106,000	2,639,470
Singapore 3.375% 09/33	3,020,000	2,329,116	UK 4.25% 12/40	2,372,300	2,934,144
Singapore 2.25% 08/36	15,000,000	10,264,740	UK 3.25% 01/44	7,835,000	8,519,135
Singapore 2.75% 04/42	7,924,000	6,073,573	UK 3.5% 01/45	11,091,000	12,511,933
Singapore 2.75% 03/46	13,582,000	10,625,677	UK 4.25% 12/46	3,881,000	4,830,035
Singapore 1.875% 10/51	10,000,000	6,610,416	UK 1.5% 07/47	8,961,000	6,663,679
		98,016,335	UK 3.75% 07/52	12,766,500	15,088,794
Slovenia 3.12% 8/45	245,000	229,323	UK 1.625% 10/54	3,000,000	2,147,036
		229,323	UK 2.5% 07/65	1,024,000	938,082
			UK 3.5% 07/68	1,900	2,228
Spain 4.4% 10/23	11,750,000	12,805,838	UK 1.625% 10/71	2,500,000	1,683,682
Spain 4.65% 07/25	5,640,000	6,392,345			119,848,312
Spain 1.45% 04/29	10,035,000	9,738,391	US 0.125% 01/23	135,000,000	134,663,773
Spain 1.25% 10/30	21,609,000	19,805,321	US 0.125% 02/23	174,700,000	173,608,824
Spain 4.9% 07/40	860,000	1,069,818	US 1.375% 09/23	268,300,000	262,702,739
Spain 4.7% 07/41	2,164,000	2,614,361	US 2.75% 11/23	224,200,000	221,182,087
Spain 2.9% 10/46	703,000	645,633	US 2.375% 08/24	134,500,000	131,030,595
Spain 3.45% 07/66	710,000	683,616	US 2.25% 01/24	187,300,000	184,161,579
		53,755,323	US 2.25% 11/24	170,000,000	163,855,991
			US 1.5% 02/25	131,000,000	124,132,957
Sweden 0.1% 02/23	16,500,000	1,580,164	US 1.125% 10/26	1,832,200,000	1,644,494,400
Sweden 0.1% 03/23	75,000,000	7,169,932	US 0.75% 04/26	2,605,100,000	2,332,163,257
Sweden 1.5% 11/23	35,235,000	3,348,737	US 4.125% 10/27	1,029,100,000	1,041,837,600
Sweden 2.5% 05/25	124,610,000	12,070,131	US 2.75% 04/27	1,666,000,000	1,588,984,893
Sweden 0.75% 05/28	65,000,000	5,723,414	US 2.875% 08/28	200,600,000	191,455,461
Sweden 0.75% 11/29	81,790,000	7,031,163	US 2.75% 02/28	247,500,000	235,704,236
Sweden 2.25% 06/32	19,175,000	1,847,357	US 1.625% 08/29	161,300,000	141,302,142
Sweden 3.5% 03/39	58,910,000	6,748,613	US 2.625% 02/29	259,800,000	243,215,688
Sweden 0.5% 11/45	75,000,000	4,970,636	US 0.625% 08/30	56,600,000	44,818,875
		50,490,147	US 1.5% 02/30	148,500,000	127,727,654
			US 1.125% 02/31	190,100,000	156,236,824
Swiss 4% 02/23	4,500,000	4,991,688	US 1.25% 08/31	60,600,000	49,592,269
Swiss 0% 06/29	39,375,000	38,660,445	US 1.875% 02/32	180,600,000	155,028,904
Swiss 0.5% 05/30	4,000,000	4,020,882	US 2.75% 08/32	74,100,000	68,490,148
Swiss 0% 07/39	6,000,000	4,964,747			9,416,390,896
Swiss 0.5% 06/45	21,000,000	18,087,239	Total fixed interest securities		10,720,519,836
Swiss 0.5% 05/58	2,000,000	1,577,646			
		72,302,647	Private Debt Instruments		
			TL Debt Ins1 4.5% 4/37		123,366,742
UK 1% 04/24	8,028,000	9,367,612	TL Debt Ins2 4.5% 4/37		241,255,310
UK 0.625% 06/25	10,000,000	11,235,324	TL Debt Ins3 4.5% 4/37		195,488,837

24. Schedule of financial assets valued through profit or loss (continued)

 Security
 Nominal
 Fair Value

 TL Debt Ins4 4.5% 4/37
 647,028

 560,757,917
 560,757,917

(b) Equity Securities					
Security	Unit	Fair Value	Security	Unit	Fair Value
Australia			Suncorp Group Ltd	129,654	1,058,615
Ampol Ltd	24,638	472,510	Telstra Group Ltd	425,525	1,148,508
Anz Group Holdings Ltd	314,186	5,041,123	Transurban Group	331,084	2,914,330
Apa Group Stapled Security	121,966	889,972	Treasury Wine Estates Ltd	74,486	687,478
Aristocrat Leisure Ltd	62,048	1,284,216	Vicinity Ltd	401,540	544,609
Asx Ltd	20,048	924,226	Washington H Soul Pattinson	22,527	422,553
Aurizon Holdings Ltd	191,905	485,424	Wesfarmers Ltd	121,843	3,791,791
Bhp Group Ltd	540,902	16,733,995	Westpac Banking Corp	374,976	5,935,128
Bluescope Steel Ltd	51,287	585,700	Wisetech Global Ltd	15,219	523,469
Brambles Ltd	148,260	1,212,543	Woodside Energy Group Ltd	203,983	4,902,453
Cochlear Ltd	6,796	940,729	Woolworths Group Ltd	131,795	2,999,485
Coles Group Ltd	137,197	1,555,631	Xero Ltd	13,757	655,011
CBA	182,282	12,681,615			119,518,475
Computershare Ltd	55,700	989,274			
Csl Ltd	51,496	10,048,809	Canada		
Dexus	111,483	585,917	Agnico Eagle Mines Ltd	35,973	1,868,010
Endeavour Group Ltd	138,282	602,042	Air Canada	25,786	368,630
Fortescue Metals Group Ltd	174,400	2,424,521	Algonquin Power & Utilities	58,928	382,720
Goodman Group	173,116	2,038,040	Alimentation Couche-Tard	76,642	3,361,060
Gpt Group	197,022	561,164	Altagas Ltd	34,778	599,333
Idp Education Ltd	21,564	397,324	Arc Resources Ltd	76,650	1,030,712
Igo Ltd	69,145	631,149	B2Gold Corp	47,888	169,293
Insurance Australia Group	254,186	818,787	Bank Of Montreal	82,139	7,423,094
James Hardie Industries Plc	45,999	821,344	Bank Of Nova Scotia	114,714	5,608,917
Lendlease Corp Ltd	71,091	377,969	Barrick Gold Corp	137,430	2,354,146
Lottery Corp Ltd	228,587	694,473	Bce Inc	50,954	2,232,281
Macquarie Group Ltd	39,000	4,415,204	Brookfield Asset Mgmt	27,243	777,711
Medibank Pvt Ltd	284,811	569,777	Brookfield Corp	108,978	3,414,234
Mineral Resources Ltd	17,604	921,148	Brookfield Renewable Corp	13,061	358,974
Mirvac Group	406,521	587,203	Brp Inc	1,494	113,482
National Australia Bank Ltd	343,558	6,996,505	Cae Inc	20,227	390,522
Newcrest Mining Ltd	91,475	1,278,516	Cameco Corp	27,323	617,865
Northern Star Resources Ltd	114,875	849,137	Canadian Apart Prop	10,840	341,053
Orica Ltd	42,090	429,862	Canadian Imp. Bank of Com	77,272	3,119,509
Origin Energy Ltd	182,627	954,872	Canadian National Railway	69,169	8,193,894
Pilbara Minerals Ltd	257,181	654,027	Canadian Natural Resources	113,510	6,293,126
Qantas Airways Ltd	95,605	389,656	Canadian Pacific Railway Ltd	65,705	4,890,475
Qbe Insurance Group Ltd	152,060	1,384,894	Canadian Tire Corp Ltd	4,132	430,903
Ramsay Health Care Ltd	18,875	828,037	Canadian Utilities Ltd	14,550	391,952
Rea Group Ltd	5,499	413,115	Ccl Industries Inc	10,116	430,562
Reece Ltd	30,222	289,800	Cenovus Energy Inc	91,709	1,776,039
Rio Tinto Ltd	40,061	3,162,282	Cgi Inc	19,269	1,654,778
Santos Ltd	332,380	1,609,381	Constellation Software Inc	1,885	2,931,262
Scentre Group	537,511	1,049,798	Descartes Systems Group	6,580	456,878
Seek Ltd	34,847	494,607	Dollarama Inc	59,482	3,468,960
Sonic Healthcare Ltd	46,788	950,926	Element Fleet Mgmt Corp	27,026	366,410
South32 Ltd	480,828	1,304,294	Emera Inc	21,344	814,883
Stockland	245,160	603,507	Empire Co Ltd	9,522	250,533
Diockimia	243,100	003,307	Linpite Co Liu	9,344	230,333

Security	Unit	Fair Value	Security	Unit	Fair Value
Enbridge Inc	173,679	6,782,063	Tmx Group Ltd	4,227	421,437
Fairfax Financial Holdings	2,655	1,569,565	Toromont Industries Ltd	22,157	1,592,419
First Quantum Minerals Ltd	38,625	803,886	Toronto-Dominion Bank	212,661	13,748,923
Firstservice Corp	2,421	295,176	Tourmaline Oil Corp	26,669	1,342,356
Fortis Inc/Canada	41,017	1,638,016	Vermilion Energy Inc	7,268	128,415
Franco-Nevada Corp	14,846	2,019,569	West Fraser Timber Co Ltd	8,313	597,699
George Weston Ltd	14,322	1,772,400	Wheaton Precious Metals	33,986	1,323,371
Gfl Environmental Inc	9,619	280,062	Wsp Global Inc	11,895	1,375,920
Gildan Activewear Inc	11,699	318,173			166,329,763
Great-West Lifeco Inc	25,883	597,528			
Hydro One Ltd	20,437	545,560	Denmark		
Ia Financial Corp Inc	9,662	563,839	Ap Moller - Maersk A/S	874	1,958,418
Igm Financial Inc	7,580	211,129	Carlsberg As	9,289	1,230,472
Imperial Oil Ltd	19,736	958,579	Chr Hansen Holding A/S	10,274	739,013
Intact Financial Corp	14,840	2,132,986	Coloplast A/S	15,381	1,792,870
Ivanhoe Mines Ltd	50,481	398,274	Danske Bank A/S	55,030	1,084,749
Keyera Corp	18,987	413,105	Demant A/S	6,750	186,578
Kinross Gold Corp	116,998	475,781	Dsv A/S	16,509	2,607,426
Loblaw Cos Ltd	12,698	1,119,808	Genmab A/S	5,265	2,222,259
Lundin Mining Corp	57,323	351,566	Novo Nordisk A/S	174,426	23,508,465
Magna International Inc	25,095	1,405,557	Novozymes A/S	17,303	872,618
Manulife Financial Corp	218,075	3,886,868	Orsted As	16,189	1,466,985
Metro Inc/Cn	21,849	1,205,368	Pandora A/S	8,874	622,773
National Bank Of Canada	48,342	3,254,910	Rockwool A/S	638	149,431
Northland Power Inc	17,112	467,156	Tryg A/S	27,161	645,127
Nutrien Ltd	59,979	4,365,127	Vestas Wind Systems A/S	67,831	1,978,609
Nuvei Corp	4,786	120,979			41,065,793
Onex Corp	4,037	194,200			
Open Text Corp	19,815	585,697	Europe		
Pan American Silver Corp	17,941	291,701	Abn Amro Bank Nv	34,324	473,289
Parkland Corp/Canada	13,890	303,438	Acciona Sa	1,673	306,929
Pembina Pipeline Corp	39,617	1,341,765	Accor Sa	14,258	355,313
Power Corp Of Canada	52,215	1,225,845	Acs Actividades De Const	21,339	609,661
Quebecor Inc	12,750	283,239	Adidas Ag	13,711	1,864,838
Restaurant Brands Int. Inc	21,772	1,403,583	Adyen Nv	1,696	2,332,076
Riocan Re Investment Trust	11,651	181,264	Aegon Nv	175,124	885,537
Ritchie Bros Auctioneers Inc	9,239	532,404	Aena Sme Sa	4,670	584,630
Rogers Communications Inc	30,487	1,422,929	Aeroports De Paris	2,332	311,601
Royal Bank of Canada	148,714	13,956,583	Ageas Sa	22,455	992,634
Saputo Inc	26,868	664,487	Aib Group Plc	42,675	163,962
Shaw Communications	29,136	835,406	Air Liquide Sa	56,916	8,042,453
Shopify Inc	82,261	2,852,225	Airbus Se	40,815	4,836,010
Sun Life Financial	51,556	2,386,503	Akzo Nobel Nv	15,676	1,046,642
Suncor Energy Inc	144,540	4,578,513	Alfen N.V.	1,645	147,789
Tc Energy Corp	78,015	3,103,442	Allianz Se	33,900	7,275,753
Teck Resources Ltd	36,344	1,369,857	Alstom Sa	26,484	644,726
Telus Corporation	59,416	1,141,005	Amadeus It Group Sa	30,245	1,567,144
Tfi International Inc	6,823	680,764	Amg Advanced M	7,935	291,151
Thomson Reuters Corp	14,318	1,629,142	Amplifon Spa	9,294	276,344

Security	Unit	Fair Value	Security	Unit	Fair Value
Amundi Sa	3,155	178,292	Deutsche Lufthansa Ag	52,378	434,402
Anheuser-Busch Inbev	67,594	4,057,137	Deutsche Post Ag	84,482	3,180,064
Arcelormittal Sa	50,305	1,319,114	Deutsche Telekom Ag	273,362	5,450,975
Argenx Se	3,777	1,403,389	Diasorin Spa	2,296	319,043
Arkema Sa	5,268	471,596	D'Ieteren Group	1,815	347,121
Aroundtown Sa	78,720	184,747	Dr Ing Hc F Porsche Ag	7,801	790,934
Asm International	3,860	970,780	E.On Se	180,347	1,795,410
Asml Holding	36,891	19,835,573	Edenred	50,234	2,727,791
Asr Nederland	19,582	926,866	Edp - Energias De Portugal	393,636	1,956,023
Assicurazioni Generali	73,812	1,308,861	Edp Renovaveis Sa	17,508	384,546
Axa Sa	154,520	4,296,768	Eiffage Sa	6,897	676,607
Banco Bilbao VA Sa	684,221	4,114,143	Electricite De France Sa	47,079	602,941
Banco Santander Sa	1,352,923	4,046,550	Elia Group Sa	3,178	450,420
Bank Of Ireland Group Plc	71,779	677,964	Elisa Oyj	15,778	832,018
Basf Se	70,934	3,520,250	Enagas Sa	16,780	278,029
Bayer Ag	76,442	3,959,210	Endesa Sa	24,270	456,655
Bayerische Motoren Werke	31,453	2,773,515	Enel Spa	647,295	3,478,307
Be Semiconductor Ind. Nv	3,942	237,869	Engie Sa	195,107	2,787,756
Bechtle Ag	6,318	222,448	Eni Spa	292,411	4,146,237
Beiersdorf Ag	7,636	872,406	Eramet Sa	2,341	209,494
Biomerieux	2,693	281,432	Erste Group Bank Ag	33,124	1,059,841
Bnp Paribas Sa	106,094	6,029,435	Essilorluxottica Sa	23,141	4,161,178
Bollore Se	80,085	446,157	Eurazeo Se	2,870	177,808
Bouygues Sa	13,504	404,117	Eurofins Scientific Se	9,870	706,183
Brenntag Se	23,063	1,472,901	Euronext Nv	6,833	504,059
Bureau Veritas Sa	20,364	534,426	Evonik Industries Ag	13,503	258,319
Caixabank Sa	339,724	1,331,359	Exor Nv	7,730	562,969
Capgemini Se	13,169	2,191,817	Ferrari Nv Eur	18,481	3,946,742
Carl Zeiss Meditec Ag	3,099	392,093	Ferrovial Sa	38,364	1,001,490
Carrefour Sa	56,862	948,218	Finecobank Banca Fineco	39,147	648,420
Cellnex Telecom Sa	35,158	1,160,192	Flutter Entertainment Plc	9,568	1,303,491
Cie De Saint-Gobain	38,374	1,869,170	Fortum Oyj	38,245	634,704
Cie G. D. E. Michelin Sca	56,360	1,562,402	Fresenius Medical Care Ag	15,022	490,747
Cnh Industrial Nv	81,201	1,297,327	Fresenius Se & Co Kgaa	35,332	990,591
Commerzbank Ag	90,764	853,600	Galp Energia Sgps Sa	41,122	553,421
Continental Ag	8,959	537,165	Gea Group Ag	9,430	383,847
Corp Acciona Energ. Re Sa	2,632	101,517	Gecina Sa Reit	3,695	375,223
Covestro Ag	13,819	540,231	Getlink Se	26,073	416,283
Covivio	4,692	277,167	Grifols Sa	27,417	315,139
Credit Agricole Sa	98,247	1,030,716	Groupe Bruxelles Lambert	7,955	633,182
Crh Plc	61,959	2,447,314	Hannover Rueck Se	6,034	1,198,766
Daimler Truck Holding Ag	36,274	1,121,915	Heidelbergeement Ag	11,223	641,049
Danone Sa	55,822	2,932,928	Heineken Holding Nv	9,806	754,036
Dassault Aviation Sa	1,881	317,586	Heineken Nv	20,274	1,901,497
Dassault Systemes Se	51,300	1,833,301	Hellofresh Se	11,804	259,767
Davide Campari-Milano Nv	44,461	449,930	Henkel Ag & Co Kgaa	26,010	1,759,534
Delivery Hero Se	11,170	536,096	Hermes International	3,814	5,873,719
Deutsche Bank Ag	159,389	1,805,185	Iberdrola Sa	575,947	6,718,446
Deutsche Boerse Ag	14,733	2,537,034	Imcd Nv	4,093	581,633

Security	Unit	Fair Value	Security	Unit	Fair Value
Industria De Diseno Textil	117,148	3,106,901	Puma Se	7,031	425,618
Infineon Technologies Ag	88,491	2,690,181	Qiagen N.V.	13,834	691,857
Infrastrutture Wireless Ita	28,636	286,058	Randstad Nv	9,549	580,285
Ing Groep Nv	381,322	4,634,528	Rational Ag	457	270,448
Intesa Sanpaolo Spa	1,273,997	2,825,401	Recordati I.Chimica E Farma	17,998	741,443
Ipsen Sa	2,217	237,792	Red Electrica Corp Sa	80,984	1,404,922
Italgas Spa	47,747	264,472	Remy Cointreau Sa	1,635	274,830
Jde Peet'S Nv	3,695	106,474	Renault Sa	20,552	685,332
Jeronimo Martins Sgps Sa	28,277	608,401	Repsol Sa	196,755	3,118,304
Just Eat Takeaway.Com Nv	11,868	250,156	Rexel Sa	9,393	184,705
Kbc Group Nv	27,538	1,765,747	Rheinmetall Ag	2,802	558,314
Kering Sa	5,670	2,876,186	Rwe Ag	48,876	2,172,064
Kerry Group Plc	13,681	1,229,992	Safran Sa	23,131	2,886,353
Kesko Oyj	19,677	433,236	Sampo Oyj	33,411	1,744,741
Kingspan Group Plc	12,262	660,874	Sanofi	137,406	13,174,726
Klepierre Sa Reit	21,730	498,846	Sap Se	89,031	9,153,116
Knorr-Bremse Ag	6,845	372,426	Sartorius Ag	1,944	768,481
Kone Oyj	32,106	1,656,376	Sartorius Stedim Biotech	3,309	1,067,582
Koninklijke Ahold Delhaize	87,609	2,509,559	Schneider Electric Se	52,230	7,286,655
Koninklijke Dsm Nv	14,592	1,780,030	Scout24 Se	7,905	397,702
Koninklijke Kpn Nv	704,041	2,171,511	Seb Sa	2,118	176,766
Koninklijke Philips Nv	77,586	1,159,582	Shell Plc	37,295	1,053,787
La Française Des Jeux Saem	3,742	150,081	Siemens Ag	63,307	8,740,130
Leg Immobilien Se	5,201	337,931	Siemens Energy Ag	30,928	581,764
Legrand Sa	25,443	2,031,665	Siemens Healthineers Ag	23,295	1,160,788
L'Oreal Sa	27,048	9,630,024	Smurfit Kappa Group Plc	19,829	731,376
Lvmh Moet Hennessy Se	25,973	18,846,613	Snam Spa	155,586	751,705
Medioban Banca Di Credito	53,565	513,019	Societe Generale Sa	83,602	2,094,985
Mercedes-Benz Group Ag	67,134	4,399,234	Sodexo Sa	5,459	521,204
Merck Kgaa	11,420	2,212,730	Sofina Sa	1,293	283,719
Moncler Spa	45,939	2,419,061	Soitec	672	109,551
Mtu Aero Engines Ag	3,572	772,736	Solvay Sa	9,685	976,369
Muenchener R-G Ag	11,968	3,875,282	Stellantis Nv	191,123	2,706,483
Naturgy Energy Group Sa	17,772	461,092	Stmicroelectronics Nv	52,102	1,834,715
Nemetschek Se	5,298	269,540	Stora Enso Oyj	49,440	696,496
Neste Oyj	33,431	1,538,845	Symrise Ag	10,815	1,174,430
Nexi Spa	28,689	225,657	Telecom Italia Spa	879,829	203,387
Nn Group Nv	35,660	1,452,298	Telefonica Deutschland Hold	103,314	253,051
Nokia Oyj	359,074	1,662,224	Telefonica Sa	432,847	1,563,259
Oci Nv	21,022	749,802	Teleperformance	5,123	1,217,070
Omv Ag	21,214	1,091,505	Tenaris Sa	40,196	698,399
Orange Sa	137,304	1,360,016	Terna - Rete Elettrica Naz	242,158	1,783,258
Orion Oyj	9,432	515,797	Thales Sa	8,171	1,040,356
Pernod Ricard Sa	30,223	5,926,948	Totalenergies Se	230,225	14,410,753
Porsche Automobil Holding	11,508	628,097	Ubisoft Entertainment Sa	6,914	194,879
Poste Italiane Spa	47,073	458,980	Ucb Sa	10,643	835,095
Prosus Nv	73,682	5,068,162	Umicore	14,812	542,534
Prysmian Spa	18,044	667,464	Unibail-Rodamco-Westfield	11,107	256,959
Publicis Groupe Sa	17,309	1,096,559	Unibail-Rodamco-Westfield	11,107	318,710

${\bf 24. \ Schedule \ of \ financial \ assets \ valued \ through \ profit \ or \ loss \ \it{(continued)}}$

Unilever Plc 34,906 1,746,068 Wh Group Ltd 760,587 44 United Internet Ag 7,883 159,429 Wharf Real Estate Inv. 138,000 80 Universal Music Group 46,440 1,115,417 Xinyi Glass Holdings Ltd 196,000 36 Upm-Kymmene Oyj 47,994 1,790,195 35,31 Valeo 25,275 450,208 Veolia Environnement 51,547 1,320,325 Israel	22,193 42,420 02,721 64,630 4,280 65,685 25,840 61,713 33,039 42,402 73,096 66,965
United Internet Ag 7,883 159,429 Wharf Real Estate Inv. 138,000 80 Universal Music Group 46,440 1,115,417 Xinyi Glass Holdings Ltd 196,000 36 Upm-Kymmene Oyj 47,994 1,790,195 35,31 Valeo 25,275 450,208 Veolia Environnement 51,547 1,320,325 Israel	22,721 64,630 64,280 25,685 25,840 61,713 83,039 82,402 73,096 96,965
Universal Music Group 46,440 1,115,417 Xinyi Glass Holdings Ltd 196,000 36 Upm-Kymmene Oyj 47,994 1,790,195 35,31 Valeo 25,275 450,208 Veolia Environnement 51,547 1,320,325 Israel	64,630 4,280 65,685 25,840 61,713 83,039 12,402 73,096 66,965
Upm-Kymmene Oyj 47,994 1,790,195 35,31 Valeo 25,275 450,208 Veolia Environnement 51,547 1,320,325 Israel	35,685 25,840 31,713 33,039 42,402 73,096 96,965
Valeo 25,275 450,208 Veolia Environnement 51,547 1,320,325 Israel	35,685 25,840 51,713 33,039 42,402 73,096 06,965
Veolia Environnement 51,547 1,320,325 Israel	25,840 51,713 33,039 42,402 73,096 06,965
	25,840 51,713 33,039 42,402 73,096 06,965
Various A. 14126 1197210 4-11 Committee 2000 000	25,840 51,713 33,039 42,402 73,096 06,965
Verbund Ag 14,136 1,187,319 Azrieli Group Ltd 3,560 23	51,713 33,039 42,402 73,096 96,965
Vinci Sa 46,464 4,625,138 Bank Hapoalim Bm 103,022 92	33,039 12,402 73,096 06,965
Vivendi Se 55,802 530,751 Bank Leumi Le-Israel Bm 126,611 1,05	12,402 73,096 06,965
Voestalpine Ag 7,260 192,001 Bezeq The Israeli Telcom Co 165,075 28	73,096 06,965
Volkswagen Ag 17,573 2,293,958 Elbit Systems Ltd 2,730 44	06,965
Vonovia Se 64,730 1,517,065 Icl Group Ltd 93,321 67	
Warehouses De Pauw Cva 10,933 311,542 Israel Discount Bank Ltd 97,166 50	
Wartsila Oyj Abp 42,374 357,177 Mizrahi Tefahot Bank Ltd 12,952 41	8,091
Wendel Se 2,046 190,409 Nice Ltd 4,944 95	2,790
Wolters Kluwer Nv 39,987 4,168,604 Teva Pharmaceutical Ind 20,189 18	88,530
Worldline Sa/France 16,210 629,724 Tower Semiconductor Ltd 7,690 33	4,101
Zalando Se 11,550 410,234 6,01	2,252
416,029,113	
Japan	
Hong Kong Advantest Corp 15,400 98	88,579
Aia Group Ltd 1,034,800 11,508,163 Aeon Co Ltd 48,900 1,03	1,034
Boc Hk Holdings Ltd 307,000 1,044,318 Age Inc 24,700 82	2,741
Budweiser Brewing Co Apac 181,300 569,107 Aisin Corp 24,800 66	52,549
Ck Asset Holdings 145,841 897,848 Ajinomoto Co Inc 51,300 1,56	66,857
Ck Hutchison Holdings 197,740 1,186,954 Ana Holdings Inc 24,000 50	9,212
Ck Infrastructure Holdings 52,500 274,778 Asahi Group Holdings 37,400 1,16	57,253
Clp Holdings Ltd 110,500 806,280 Asahi Intece Co Ltd 21,600 35	3,602
Esr Group Ltd 196,000 410,837 Asahi Kasei Corp 99,200 70	7,395
Galaxy Ent. Group Ltd 169,000 1,117,291 Astellas Pharma Inc 328,000 4,98	86,684
	31,390
Hang Seng Bank Ltd 69,600 1,157,481 Bandai Namco Holdings Inc 16,900 1,06	54,760
Henderson Land Dev. Co Ltd 83,953 292,573 Bridgestone Corp 47,500 1,68	38,753
	7,985
	26,593
	3,536
Hk Exchanges & Clearing 98,575 4,256,244 Central Japan Railway Co 11,400 1,39	9,674
Hsbc Holdings Plc 96,400 599,648 Chiba Bank Ltd 43,200 31	3,985
Link Reit 174,300 1,278,506 Chubu Electric Power Co 175,200 1,80	7,171
	5,974
	36,065
	3,441
The state of the s	31,072
	37,231
	31,344
	08,736
	8,875
Swire Properties Ltd 110,523 280,380 Daito Trust Construction Co 5,200 53	3,222

Security	Unit	Fair Value	Security	Unit	Fair Value
Daiwa House Industry Co	50,700	1,167,739	Kansai Electric Power Co Inc	63,600	616,502
Daiwa House Reit Invest.	270	599,977	Kao Corp	42,800	1,704,604
Daiwa Securities Group Inc	127,000	560,188	Kddi Corp	251,600	7,589,283
Denso Corp	38,000	1,878,904	Keio Corp	8,600	315,139
Dentsu Group Inc	18,000	565,463	Keisei Electric Railway Co	12,000	340,596
Dexerials Corp	8,000	154,489	Keyence Corp	15,260	5,946,942
Disco Corp	2,300	657,168	Kikkoman Corp	11,200	588,245
Dowa Holdings Co Ltd	4,200	131,623	Kintetsu Group Holdings Co	15,500	511,596
East Japan Railway Co	25,900	1,475,738	Kirin Holdings Co Ltd	148,000	2,255,137
Eisai Co Ltd	18,700	1,233,155	Kobayashi Pharmaceutical	4,400	300,792
Eneos Holdings Inc	201,200	683,145	Kobe Bussan Co Ltd	14,000	402,137
Fanuc Corp	15,600	2,341,567	Koei Tecmo Holdings Co Ltd	13,840	250,692
Fast Retailing Co Ltd	3,900	2,375,854	Koito Manufacturing Co Ltd	18,000	270,931
Fuji Electric Co Ltd	10,100	384,266	Komatsu Ltd	69,100	1,505,908
Fujifilm Holdings Corp	31,800	1,596,447	Konami Group Corp	8,600	387,161
Fujitsu Ltd	15,100	2,014,173	Kose Corp	4,400	480,867
Glp J-Reit	346	395,444	Kubota Corp	85,800	1,180,892
Gmo Payment Gateway Inc	3,300	273,114	Kurita Water Industries Ltd	9,900	408,920
Hakuhodo Dy Holdings Inc	14,000	141,119	Kyocera Corp	20,300	1,007,269
Hamamatsu Photonics Kk	13,100	627,474	Kyowa Kirin Co Ltd	22,400	512,698
Hankyu Hanshin Holdings	19,200	569,692	Lasertec Corp	8,100	1,334,295
Hikari Tsushin Inc	2,500	351,472	Lixil Corp	20,200	306,188
Hirose Electric Co Ltd	2,891	363,717	M3 Inc	36,200	981,648
Hitachi Const. Machinery	5,200	116,221	Makita Corp	18,500	431,146
Hitachi Ltd	81,100	4,104,018	Marubeni Corp	210,000	2,411,232
Honda Motor Co Ltd	174,200	4,001,669	Mazda Motor Corp	130,500	993,994
Hoshizaki Corp	8,800	310,129	Mcdonald'S Holdings Japan	4,500	170,355
Ноуа Согр	31,300	3,012,695	Meiji Holdings Co Ltd	10,000	510,061
Hulic Co Ltd	40,100	316,071	Minebea Mitsumi Inc	34,900	520,544
Ibiden Co Ltd	9,900	357,899	Misumi Group Inc	19,700	429,848
Idemitsu Kosan Co Ltd	16,886	392,891	Mitsubishi Chemical	99,400	515,438
Iida Group Holdings Co Ltd	14,500	219,898	Mitsubishi Corp	104,600	3,394,575
Inpex Corp	267,000	2,824,904	Mitsubishi Electric Corp	161,700	1,609,708
Isuzu Motors Ltd	96,600	1,132,595	Mitsubishi Estate Co Ltd	93,900	1,217,295
Ito En Ltd	5,300	192,406	Mitsubishi Gas Chemical Co	17,500	241,654
Itochu Corp	125,500	3,942,533	Mitsubishi Hc Capital Inc	38,000	186,623
Itochu Techno-Solutions	20,200	469,233	Mitsubishi Heavy Industries	21,700	860,797
Japan Airlines Co Ltd	15,500	316,120	Mitsubishi Motors Corp	76,900	297,237
Japan Exchange Group Inc	42,000	603,843	Mitsubishi Ufj Financial	937,100	6,310,306
Japan Metro Fund Invest	599	475,314	Mitsui & Co Ltd	135,600	3,958,704
Japan Post Bank Co Ltd	33,000	281,867	Mitsui Chemicals Inc	16,000	360,756
Japan Post Holdings Co Ltd	169,600	1,425,491	Mitsui Fudosan Co Ltd	67,800	1,241,977
Japan Post Insurance Co Ltd	14,300	251,546	Mitsui Osk Lines Ltd	26,100	649,805
Japan RE Investment Corp	105	458,373	Mizuho Financial Group	167,790	2,360,213
Japan Tobacco Inc	102,500	2,066,780	Monotaro Co Ltd	57,800	813,480
Jfe Holdings Inc	38,700	450,222	Ms&Ad Insurance Hold	35,500	1,136,204
Jsr Corp	15,300	299,982	Murata Manufacturing Co	43,900	2,190,259
Kajima Corp	51,300	596,805	Nec Corp	22,300	782,515
Kakaku.Com Inc	15,600	249,586	Nexon Co Ltd	46,300	1,035,166

Security	Unit	Fair Value	Security	Unit	Fair Value
Ngk Insulators Ltd	37,900	481,990	Sbi Holdings Inc	20,280	386,864
Ngk Spark Plug Co Ltd	17,300	319,659	Scsk Corp	10,000	151,654
Nidec Corp	34,500	1,787,950	Secom Co Ltd	24,400	1,392,674
Nihon M&A Center	31,000	382,493	Seiko Epson Corp	24,900	362,522
Nintendo Co Ltd	90,000	3,773,390	Sekisui Chemical Co Ltd	35,700	498,926
Nippon Building Fund Inc	123	548,137	Sekisui House Ltd	39,200	692,673
Nippon Express Holdings Inc	5,700	325,295	Seven & I Holdings Co Ltd	66,000	2,830,679
Nippon Paint Holdings Co	59,500	468,081	Sg Holdings Co Ltd	25,800	357,635
Nippon Prologis Reit Inc	173	402,524	Sharp Corp/Japan	27,900	199,822
Nippon Sanso Holdings Corp	22,000	319,466	Shimadzu Corp	19,300	547,061
Nippon Shinyaku Co Ltd	4,200	237,781	Shimano Inc	6,000	951,078
Nippon Steel Corp	65,624	1,139,698	Shimizu Corp	37,200	198,201
Nippon T&T Corp	206,000	5,873,447	Shin-Etsu Chemical Co	31,200	3,835,416
Nippon Yusen Kk	56,400	1,329,372	Shionogi & Co Ltd	21,400	1,068,013
Nissan Chemical Corp	9,800	427,072	Shiseido Co Ltd	26,400	1,291,738
Nissan Motor Co Ltd	217,100	687,934	Shizuoka Financial	44,500	355,474
Nisshin Seifun Group Inc	14,995	187,516	Smc Corp	4,700	1,979,810
Nissin Foods Holdings Co	7,700	608,087	Softbank Corp	382,700	4,314,421
Nitori Holdings Co	6,400	826,769	Softbank Group Corp	95,000	4,057,183
Nitto Denko Corp	10,400	600,614	Sompo Holdings	29,000	1,287,741
Nomura Holdings Inc	230,300	852,640	Sony Group Corp	97,800	7,434,416
Nomura Real Estate Holdings	5,300	113,636	Square Enix Holdings Co	9,200	427,421
Nomura RE Master Fund Inc	398	491,373	Subaru Corp	83,600	1,284,619
Nomura Research Institute	32,921	777,210	Sumco Corp	24,600	327,391
Ntt Data Corp	51,400	752,233	Sumitomo Chemical Co	120,900	434,322
Obayashi Corp	77,200	583,337	Sumitomo Corp	117,400	1,951,699
Obic Co Ltd	8,500	1,248,475	Sumitomo Electric Industries	78,300	891,034
Odakyu Electric Railway Co	25,000	323,999	Sumitomo Heavy Industries	10,100	202,161
Oji Holdings Corp	58,700	236,233	Sumitomo Metal Mining Co	18,900	668,651
Olympus Corp	80,100	1,427,528	Sumitomo Mitsui Financial	120,700	4,832,757
Omron Corp	13,900	674,642	Sumitomo Mitsui Trust Hold	29,600	1,029,253
Ono Pharmaceutical Co Ltd	101,400	2,369,292	Sumitomo Realty & Develop	22,900	540,110
Open House Group Co Ltd	3,400	124,203	Suntory Beverage & Food	13,200	450,188
Oracle Corp Japan	8,100	522,422	Suzuki Motor Corp	30,600	989,812
Oriental Land Co Ltd/Japan	13,000	1,887,264	Sysmex Corp	12,800	775,111
Orix Corp	101,100	1,622,872	T&D Holdings Inc	46,500	669,597
Osaka Gas Co Ltd	30,900	498,821	Taisei Corp	25,400	817,181
Otsuka Corp	10,700	336,947	Takeda Pharmaceutical Co	114,438	3,564,668
Otsuka Holdings Co Ltd	32,800	1,069,925	Tdk Corp	30,200	989,920
Pan Pacific Int. Holdings Co	28,700	533,346	Technopro Holdings Inc	10,600	283,186
Panasonic Holdings Corp	183,900	1,547,076	Terumo Corp	53,700	1,519,692
Persol Holdings Co Ltd	19,000	407,230	Tis Inc	25,200	662,731
Rakuten Group Inc	104,900	473,042	Tobu Railway Co Ltd	12,200	284,323
Recruit Holdings Co Ltd	110,600	3,497,087	Toho Co Ltd/Tokyo	9,900	379,658
Renesas Electronics Corp	118,600	1,063,351	Tokio Marine Holdings Inc	171,000	3,659,241
Resona Holdings Inc	178,000	975,496	Tokyo Electric Power Co Hol	106,200	382,318
Ricoh Co Ltd	59,600	454,414	Tokyo Electron Ltd	13,100	3,858,168
Rohm Co Ltd	6,800	490,629	Tokyo Gas Co Ltd	35,100	687,396
Rohto Pharmaceutical Co Ltd	18,200	320,012	Tokyo Seimitsu Co Ltd	5,600	181,015
TOMO I IMIMOVANIONI CO DA	10,200	520,512	Longo Dominion Co Diu	5,000	101,015

Security	Unit	Fair Value	Security	Unit	Fair Value
Tokyu Corp	48,600	611,805	Singapore		
Toppan Inc	27,100	401,329	Capitaland Ascendas	388,995	791,796
Toray Industries Inc	101,200	564,809	Capitaland Integ. Commerc	599,552	907,464
Toshiba Corp	30,700	1,070,759	Capitaland Investment Ltd	246,600	678,463
Tosoh Corp	31,000	368,866	City Developments Ltd	40,000	244,557
Toto Ltd	10,000	340,672	Dbs Group Holdings Ltd	220,158	5,567,968
Toyota Industries Corp	13,400	734,260	Genting Singapore Ltd	512,800	363,227
Toyota Motor Corp	1,086,200	14,920,895	Keppel Corp Ltd	80,100	433,586
Toyota Tsusho Corp	31,700	1,172,428	Mapletree Logistics Trust	260,569	306,963
Trend Micro Inc/Japan	13,200	612,255	Mapletree Pan Asia Comerce	288,000	356,457
Unicharm Corp	38,400	1,474,651	Oversea-Chinese Banking Co	490,178	4,451,512
Uss Co Ltd	40,500	642,745	Singapore Airlines Ltd	97,750	403,040
Visional Inc	1,800	118,822	Singapore Exchange Ltd	75,100	501,152
Welcia Holdings Co Ltd	9,500	221,039	Singapore Tech Engineering	202,100	504,798
West Japan Railway Co	17,300	750,766	Singapore Telecom Ltd	816,100	1,563,806
Yakult Honsha Co Ltd	10,500	681,193	United Overseas Bank Ltd	100,063	2,290,437
Yamaha Corp	13,400	498,647	Uol Group Ltd	53,884	269,982
Yamaha Motor Co Ltd	49,100	1,118,234	Venture Corp Ltd	16,500	209,756
Yamato Holdings Co Ltd	18,900	298,945	Wilmar International Ltd	214,800	667,847
Yaskawa Electric Corp	15,200	486,142			20,512,811
Yokogawa Electric Corp	18,500	295,002			
Z Holdings Corp	223,000	560,944	Sweden		
Zozo Inc	16,500	407,670	Alfa Laval Ab	26,928	777,125
		288,927,578	Assa Abloy Ab	80,846	1,738,040
			Atlas Copco Ab	420,115	4,783,635
New Zealand			Boliden Ab	42,645	1,604,176
Auckland Int Airport Ltd	96,065	473,899	Electrolux Ab	22,738	307,305
Fisher & Paykel Healthcare	54,264	768,065	Embracer Group Ab	41,789	191,007
Mercury Nz Ltd	66,889	233,095	Epiroc Ab	94,293	1,642,200
Meridian Energy Ltd	184,966	612,984	Eqt Ab	26,459	560,948
Spark New Zealand Ltd	366,477	1,250,444	Essity Ab	59,543	1,559,507
		3,338,487	Evolution Ab	29,748	2,904,709
			Fastighets Ab Balder	41,616	194,111
Norway			Getinge Ab	17,722	369,084
Adevinta Asa	18,292	121,718	H & M Ab	58,445	629,352
Aker Bp Asa	39,986	1,234,366	Hexagon Ab	152,431	1,589,484
Dnb Bank Asa	71,389	1,408,793	Holmen Ab	3,681	146,788
Equinor Asa	157,521	5,624,608	Husqvarna Ab	40,095	282,064
Gjensidige Forsikring Asa	13,034	253,906	Industrivarden Ab	24,529	597,240
Kongsberg Gruppen Asa	7,449	314,112	Indutrade Ab	18,996	385,955
Mowi As	34,574	586,821	Investment Ab	10,696	203,665
Norsk Hydro Asa	103,822	772,526	Investor Ab	205,013	3,729,647
Orkla Asa	62,559	450,506	Kinnevik Ab	24,824	341,882
Salmar Asa	4,404	172,029	L E Lundbergforetagen	6,467	276,568
Telenor Asa	45,969	427,352	Lifco Ab	22,253	372,681
Yara International Asa	26,135	1,142,129	Nibe Industrier Ab	103,352	992,901
	20,100	12,508,866	Nordea Bank Abp	244,483	2,622,335
		,- 30,000	Sagax Ab	15,134	343,654
			Sandvik Ab	89,860	1,628,252
				,	, , , , , , , , , , , , , , , , , , , ,

Security	Unit	Fair Value	Security	Unit	Fair Value
Securitas Ab	52,833	442,561	Swiss Prime Site Ag	4,525	392,000
Skandinaviska Ens. Banken	302,855	3,480,674	Swiss Re Ag	23,219	2,170,319
Skanska Ab	32,739	520,173	Swisscom Ag	1,819	995,613
Skf Ab	33,083	505,953	Temenos Ag	5,065	277,666
Svenska Cellulosa Ab	41,873	531,676	Ubs Group Ag	380,307	7,070,126
Svenska Handelsbanken Ab	100,803	1,017,269	Vat Group Ag	2,324	635,006
Swedbank Ab	70,458	1,198,925	Zurich Insurance Group	14,309	6,840,543
Swedish Orphan Biovitrum	13,267	275,412			137,855,989
Tele2 Ab	54,035	442,880			
Telefonaktie Lm Ericsson	228,064	1,333,429	United Kingdom		
Telia Co Ab	213,755	547,338	3I Group	81,006	1,306,212
Volvo Ab	140,074	2,541,984	Abrdn	175,127	398,675
Volvo Car Ab	41,348	188,575	Admiral Group	15,399	395,661
Zalando Se	2,614	92,844	Anglo American	128,956	5,015,067
		43,894,008	Antofagasta	29,878	555,457
			Ashtead Group	36,185	2,054,471
Switzerland			Ass. British Foods	30,376	575,859
Abb Ltd	131,321	3,982,779	Astrazeneca	155,534	20,987,964
Adecco Group Ag	11,700	385,068	Auto Trader Group	73,413	455,319
Alcon Inc	33,527	2,288,765	Aveva Group	6,329	244,610
Bachem Holding Ag	2,025	174,769	Aviva	253,256	1,348,953
Baloise Holding Ag	3,821	589,339	Bae Systems	246,485	2,538,013
Banque Cantonale Vaudoise	1,204	115,429	Barclays	1,715,020	3,270,264
Barry Callebaut Ag	287	567,051	Barratt Developments	102,145	487,549
Bkw Ag	843	115,170	Berkeley Group Holdings	11,562	524,746
Chocolade Lindt & Spruengli	117	1,932,415	Bp	1,892,366	10,810,277
Cie Financiere Richemont Sa	41,580	5,388,502	British Amc Tobacco	167,098	6,595,887
Clariant Ag	14,841	234,999	British Land Co	63,591	302,226
Credit Suisse Group Ag	254,383	759,960	Britvic	29,846	278,957
Ems-Chemie Holding Ag	661	447,240	Bt Group	632,508	852,526
Geberit Ag	2,927	1,377,449	Bunzl	54,158	1,797,396
Givaudan Sa	793	2,428,198	Burberry Group	58,792	1,434,927
Holcim Ag	47,041	2,434,418	Centrica	789,100	916,176
Julius Baer Group	24,832	1,445,581	Coca-Cola Hbc Ag	17,414	412,348
Kuehne + Nagel International	4,701	1,093,445	Compass Group	136,478	3,147,948
Logitech International Sa	14,965	922,939	Croda International	11,054	878,124
Lonza Group Ag	5,761	2,820,723	Dcc	8,054	395,277
Nestle Sa	284,373	32,930,959	Diageo	264,018	11,591,935
Novartis Ag	218,798	19,767,969	Drax Group	51,924	437,840
Partners Group Holding Ag	2,001	1,765,690	Entain	36,948	587,337
Roche Holding Ag	80,084	25,306,141	Experian	79,777	2,699,460
Schindler Holding Ag	5,577	1,037,306	Ferguson	19,082	2,395,223
Sgs Sa	569	1,322,255	Flutter Entertainment	1,599	217,060
Sig Group Ag	22,096	482,425	Glencore	761,558	5,060,416
Sika Ag	11,413	2,734,827	Gsk	435,026	7,522,857
Sonova Holding Ag	4,623	1,095,289	Haleon	419,769	1,652,669
Straumann Holding Ag	9,674	1,103,643	Halma	35,260	837,257
Swatch Group Ag/The	8,926	975,634	Hargreaves Lansdown	24,574	253,093
Swiss Life Holding Ag	2,811	1,448,339	Hikma Pharmaceuticals	16,622	310,316

Security	Unit	Fair Value	Security	Unit	Fair Value
Hsbc Holdings	1,858,135	11,524,436	Whitbread	14,509	448,539
Ig Group Holdings	69,140	650,378	Wise	25,874	174,916
Imperial Brands	70,666	1,760,436	Wpp	81,592	805,002
Informa	111,222	828,956			212,770,036
Intercontinental Hotels	29,816	1,701,467			
Intertek Group	13,768	667,926	United States of America		
J Sainsbury	136,169	356,588	3M Co	64,329	7,714,334
Jd Sports Fashion	164,243	249,232	A O Smith Corp	10,419	596,383
Johnson Matthey	18,558	474,819	Abbott Laboratories	168,287	18,482,961
Kingfisher	161,778	459,457	Abbvie	164,675	26,616,420
Land Securities Group	66,439	496,620	Accenture Plc	59,774	15,947,105
Legal & General Group	456,911	1,371,298	Activision Blizzard	60,800	4,654,240
Lloyds Banking Group	6,912,796	3,776,024	Adobe	41,568	13,987,632
London Stock Exc Group	24,824	2,130,866	Advance Auto Parts	4,643	682,614
M&G	183,160	413,877	Advanced Micro Devices	150,502	9,748,015
Man Group /Jersey	122,940	316,029	Aercap Holdings Nv	10,821	631,081
Melrose Industries	374,667	605,949	Aes Corp	56,825	1,633,718
Mondi	43,208	732,586	Affiliated Managers Group	5,626	891,045
National Grid	305,055	3,659,966	Affirm Holdings	13,627	131,501
Natwest Group	641,834	2,047,509	Aflac	55,639	4,002,670
Next	8,391	585,829	Agco Corp	1,910	264,898
Nmc Health	6,918	416	Agilent Technologies	28,201	4,219,716
Ocado Group	38,026	282,133	Air Products and Chemicals	19,278	5,942,636
Pearson	62,374	704,679	Airbnb	36,454	3,115,359
Persimmon	27,778	406,650	Akamai Technologies	12,367	1,042,538
Phoenix Group Holdings	59,626	436,513	Albemarle Corp	9,797	2,123,696
Plus500 Ltd	15,867	344,319	Alcoa Corp	11,736	533,518
Prudential	206,275	2,797,645	Alexandria RE Equities	11,902	1,734,002
Reckitt Benckiser Group	98,587	6,823,686	Align Technology	6,135	1,293,626
Relx	238,804	6,572,448	Allegion Plc	14,114	1,485,922
Rentokil Initial	186,459	1,139,401	Alliant Energy Corp	20,210	1,115,794
Rio Tinto	133,691	9,324,164	Allison Transmission Hold	8,210	341,536
Rolls-Royce Holdings	614,921	688,576	Allstate Corp	26,115	3,540,933
Sage Group	100,366	900,165	Ally Financial	28,580	698,495
Schroders	64,569	338,641	Alnylam Pharmaceuticals	7,786	1,847,774
Segro	117,487	1,078,876	Alphabet	1,146,838	101,457,412
Severn Trent	18,550	591,539	Altria Group	134,414	6,144,064
Shell	698,412	19,541,186	Amazon.Com	721,954	60,629,697
Smith & Nephew	66,635	887,719	Amcor Plc	119,140	1,418,957
Smiths Group	38,159	733,735	Amdocs Ltd	27,411	2,491,112
Spirax-Sarco Engineering	5,758	735,227	Ameren Corp	17,794	1,582,065
Sse	88,529	1,822,603	American Electric Power Co	42,313	4,016,773
St James'S Place	38,788	510,906	American Express Co	51,063	7,542,516
Standard Chartered	330,347	2,473,258	American Financial Group	6,825	936,936
Taylor Wimpey	355,006	434,083	American Homes 4 Rent	21,076	635,020
Tesco	599,863	1,617,772	American Int. Group	64,577	4,083,849
Unilever	220,857	11,110,272	American Tower Corp	35,997	7,625,964
United Utilities Group	42,640	508,505	American Water Works Co	13,813	2,105,516
Vodafone Group	2,151,202	2,179,862	Ameriprise Financial	10,268	3,196,634

Security	Unit	Fair Value	Security	Unit	Fair Value
Amerisourcebergen Corp	10,317	1,709,630	Bio-Rad Laboratories	1,876	788,839
Ametek	20,264	2,831,286	Bio-Techne Corp	15,508	1,284,528
Amgen	54,010	14,179,785	Black Knight	12,386	764,216
Amphenol Corp	45,833	3,489,725	Blackrock	12,953	9,176,035
Analog Devices	47,081	7,720,813	Blackstone Group	55,624	4,127,301
Annaly Capital Management	36,102	761,030	Block	35,645	2,240,288
Ansys	6,419	1,550,124	Bloom Energy Corp	7,916	151,275
Aon Plc	25,322	7,597,106	Boeing Co/The	38,430	7,323,221
Apa Corp	22,713	1,060,016	Boise Cascade Co	4,796	329,149
Apollo Global Management	26,491	1,689,861	Booking Holdings	3,130	6,307,826
Apple	1,439,122	186,956,339	Booz Allen Hamilton Hold	10,247	1,071,016
Applied Materials	80,185	7,808,415	Borgwarner	39,604	1,594,061
Aptiv Plc	18,200	1,694,420	Boston Properties	11,415	771,426
Aramark	14,489	598,830	Boston Scientific Corp	110,876	5,130,233
Arch Capital Group Ltd	41,141	2,582,421	Bristol-Myers Squibb Co	222,637	16,014,279
Archer-Daniels-Midland Co	53,466	4,964,318	Broadcom	34,756	19,432,775
Ares Management Corp	10,569	723,131	Broadridge Fin Solutions	9,168	1,229,704
Arista Networks	28,229	3,425,871	Brown & Brown	22,907	1,305,012
Array Technologies	14,589	282,005	Brown-Forman Corp	42,303	2,777,615
Arrow Electronics	4,828	504,767	Bunge Ltd	11,317	1,129,097
Arthur J Gallagher & Co	16,882	3,184,283	Burlington Stores	4,916	996,768
Aspen Technology	2,056	421,871	Cabot Oil & Gas Corporation	61,239	1,504,642
Assurant	4,033	504,367	Cadence Design Systems	29,546	4,744,792
Assured Guaranty Ltd	4,793	298,364	Caesars Entertainment	14,177	589,480
At&T	617,026	11,347,108	Camden Property Trust	7,311	817,955
Ati	14,730	439,838	Campbell Soup Co	14,695	833,941
Atkore	6,045	685,563	Canadian Pacific Railway	20,864	1,556,246
Atmos Energy Corp	12,269	1,375,478	Capital One Financial	31,298	2,909,462
Autodesk	14,815	2,767,738	Cardinal Health	21,242	1,632,660
Automatic Data Processing	44,492	10,620,240	Carlisle Cos	6,437	1,516,171
Autozone	2,172	5,353,589	Carlyle Group	15,199	453,538
Avalonbay Communities	12,076	1,950,395	Carmax	10,752	654,582
Avantor	43,682	921,253	Carnival Corp	137,539	1,107,189
Avery Dennison Corp	6,744	1,220,529	Carrier Global Corp	66,871	2,758,429
Axcelis Technologies	2,683	212,816	Catalent	11,108	499,971
Baker Hughes Co	66,805	1,972,084	Caterpillar	41,596	9,964,738
Ball Corp	24,653	1,260,508	Cboe Global Markets	9,979	1,252,065
Bank Of America Corp	700,870	23,205,806	Cbre Group	25,914	1,994,341
Bank of NY Mellon	100,516	4,574,483	Cdw Corp/De	10,818	1,931,121
Bank Ozk	7,317	292,973	Celanese Corp	11,309	1,156,119
Bath & Body Works	20,459	862,142	Centene Corp	46,766	3,834,812
Baxter International	38,969	1,986,250	Centerpoint Energy	45,128	1,353,389
Becton Dickinson And Co	22,242	5,656,141	Ceridian Hcm Holding	9,897	634,893
Bentley Systems	11,655	430,419	Cf Industries Holdings	18,915	1,611,369
Berkshire Hathaway	128,243	39,623,240	Ch Robinson Worldwide	10,593	969,683
Best Buy Co	17,874	1,433,316	Charles River	3,677	800,336
Bill.Com Holdings	6,185	673,732	Charles Schwab Corp	115,128	9,584,406
Biogen	12,156	3,364,781	Charter Communications	9,250	3,136,213
Biomarin Pharmaceutical	11,794	1,219,618	Check Point Software Tech	17,960	2,264,936

Security	Unit	Fair Value	Security	Unit	Fair Value
Chemours Co	15,803	483,730	Darling Ingredients	16,790	1,050,550
Cheniere Energy	16,140	2,420,032	Datadog	30,179	2,217,251
Chesapeake Energy Corp	6,194	584,156	Davita	4,495	335,597
Chevron Corp	162,141	29,107,552	Deere & Co	19,642	8,424,847
Chewy	7,150	265,122	Dell Technologies	20,869	839,142
Chipotle Mexican Grill	1,902	2,637,199	Delta Air Lines	13,689	449,821
Choice Hotels International	2,250	253,350	Dentsply Sirona	16,085	511,825
Chubb Ltd	36,495	8,053,352	Devon Energy Corp	52,780	3,246,498
Church & Dwight Co	21,667	1,746,360	Dexcom	27,084	3,066,992
Cigna Corp	28,577	9,469,560	Diamondback Energy	13,944	1,906,842
Cincinnati Financial Corp	13,298	1,361,183	Digital Realty Trust	22,942	2,299,936
Cintas Corp	7,347	3,316,068	Discover Financial Services	28,466	2,784,259
Cisco Systems	400,568	19,083,060	Dish Network Corp	18,355	257,521
Citigroup	184,030	8,321,837	Docusign	12,970	718,538
Citizens Financial Group	35,466	1,395,942	Dollar General Corp	18,442	4,541,527
Clarivate Plc	26,631	222,103	Dollar Tree	15,193	2,148,290
Cleveland-Cliffs	33,077	532,540	Dominion Energy	65,967	4,046,416
Clorox Co/The	11,014	1,545,374	Domino'S Pizza	3,326	1,151,395
Cloudflare	27,470	1,241,919	Doordash	14,251	695,734
Cme Group	29,883	5,024,229	Doubleverify Holdings	8,264	181,477
Cms Energy Corp	18,852	1,193,897	Dover Corp	11,742	1,589,867
Coca-Cola Co	410,409	26,106,116	Dow	57,728	2,908,337
Coca-Cola Europacific	17,107	946,359	Dr Horton	28,272	2,519,883
Cognex Corp	13,528	636,763	Dropbox	34,944	781,697
Cognizant Tech Solutions	45,281	2,590,073	Dte Energy Co	13,291	1,562,224
Coinbase Global	23,402	827,729	Duke Energy Corp	62,142	6,400,005
Colgate-Palmolive Co	101,952	8,032,798	Dupont De Nemours	41,188	2,826,321
Comcast Corp	410,355	14,341,907	Dynatrace	35,937	1,376,387
Con Edison Comp of NY	28,678	2,733,300	Eastman Chemical Co	9,768	795,506
Conagra Brands	37,996	1,470,445	Eaton Corp Plc	34,714	5,449,404
Conocophillips	117,799	13,900,282	Ebay	59,969	2,486,914
Constellation Brands	12,837	2,974,846	Ecolab	19,806	2,882,961
Constellation Energy Corp	22,082	1,903,027	Edison International	28,896	1,838,364
Cooper Cos /The	3,832	1,266,361	Edwards Lifesciences Corp	57,178	4,264,335
Copart	32,930	2,005,108	Elanco Animal Health	32,910	401,831
Corning	61,646	1,968,357	Electronic Arts	29,716	3,630,107
Corteva	66,850	3,929,443	Elevance Health	18,611	9,552,282
Costar Group	30,875	2,385,403	Eli Lilly & Co	66,166	24,200,215
Costco Wholesale Corp	45,754	20,886,701	Emerson Electric Co	56,980	5,472,929
Crocs	5,887	638,386	Encore Wire Corp	4,058	557,732
Crowdstrike Holdings	22,930	2,413,841	Enphase Energy	12,888	3,414,676
Crown Castle	33,735	4,577,165	Entegris	9,796	642,716
Crown Holdings	9,710	798,065	Entergy Corp	15,075	1,695,938
Csx Corp	187,007	5,791,607	Eog Resources	52,095	6,747,865
Cummins	12,705	3,078,294	Epam Systems	6,411	2,101,077
Cvs Health Corp	102,191	9,523,179	Eqt Corp	27,924	944,390
Cyberark Software Ltd	2,558	331,619	Equifax	8,281	1,609,412
Danaher Corp	59,785	15,872,918	Equinix	7,151	4,683,547
Darden Restaurants	8,586	1,187,701	Equitable Holdings	26,874	771,015

Security	Unit	Fair Value	Security	Unit	Fair Value
Equity Lifestyle Properties	15,120	976,601	General Electric Company	73,966	6,197,611
Equity Residential	27,260	1,608,340	General Mills	66,498	5,575,192
Erie Indemnity Co	2,195	544,997	General Motors Co	107,942	3,630,089
Essent Group Ltd	7,670	298,133	Genuine Parts Co	9,581	1,662,208
Essential Utilities	21,080	1,005,938	Gilead Sciences	131,906	11,321,492
Essex Property Trust	5,850	1,239,615	Global Payments	22,406	2,225,364
Estee Lauder Cos	24,981	6,200,534	Globe Life	8,109	977,540
Etsy	8,468	1,014,382	Godaddy	10,513	786,478
Everest Re Group Ltd	6,637	2,197,643	Goldman Sachs Group	27,926	9,588,951
Evergy	23,185	1,459,032	Goodrx Holdings	49,724	231,217
Eversource Energy	29,275	2,454,709	Grab Holdings Ltd	79,292	255,320
Evertec	9,071	293,719	Graco	5,363	360,554
Exact Sciences Corp	11,552	571,940	Graphic Packaging Holding	16,925	376,412
Exelon Corp	81,783	3,534,661	H&R Block	36,637	1,337,617
Expedia Group	10,484	918,084	Halliburton Co	61,359	2,413,863
Expeditors Int. of Washington	14,938	1,551,909	Harley-Davidson	6,347	263,908
Extra Space Storage	14,396	2,118,083	Hartford Fin Services Group	43,315	3,284,576
Exxon Mobil Corp	360,419	39,757,820	Hasbro	11,865	723,528
F5	5,099	731,350	Hca Healthcare	18,652	4,476,667
Factset Research Systems	7,117	2,856,052	Healthcare Realty Trust	23,884	460,006
Fair Isaac Corp	1,672	999,003	Healthpeak Properties	35,123	879,831
Fastenal Co	57,492	2,719,372	Heico Corp	12,111	1,662,131
Federated Hermes	9,130	331,419	Henry Schein	11,534	920,990
Fedex Corp	19,596	3,393,831	Hershey Co	22,738	5,265,211
Ferguson Plc	19,082	2,422,460	Hess Corp	18,523	2,626,932
Fidelity National Financial	21,692	816,053	Hewlett Packard Ent. Co	100,188	1,596,997
Fidelity Nat. Information Svc	46,837	3,177,422	Hf Sinclair Corp	10,082	522,953
Fifth Third Bancorp	81,061	2,658,801	Hilton Worldwide Holdings	18,387	2,323,381
First Citizens Bancshares	890	674,077	Hologic	18,252	1,365,432
First Horizon Corp	36,789	900,963	Home Depot /The	102,062	32,237,303
First Republic Bank/Ca	14,401	1,755,338	Honeywell International	61,082	13,087,429
First Solar	6,524	976,773	Hongkong Land Holdings Ltd	84,100	386,860
Firstenergy Corp	41,733	1,750,699	Horizon Therapeutics Plc	14,243	1,620,141
Fiserv	48,201	4,871,193	Hormel Foods Corp	27,093	1,233,815
Fleetcor Technologies	6,223	1,142,792	Host Hotels & Resorts	56,247	902,764
Fmc Corp	9,067	1,131,562	Houlihan Lokey	6,024	524,751
Ford Motor Co	345,277	4,015,572	Howmet Aerospace	45,740	1,803,071
Fortinet	77,395	3,783,068	Нр	105,159	2,825,622
Fortive Corp	26,750	1,718,420	Hubbell	3,740	878,264
Fortune Brands Innovations	10,519	600,635	Hubspot	3,894	1,127,157
Fox Corp	71,245	2,118,887	Humana	10,871	5,568,017
Franklin Resources	37,251	982,681	Huntington Bancshares	112,978	1,591,860
Freeport-Mcmoran	99,077	3,763,935	Huntington Ingalls Industries	3,500	807,310
Futu Holdings Ltd Adr	29,028	1,178,247	Huntsman Corp	9,811	269,508
Gaming And Leisure Prop	15,903	828,387	Idex Corp	7,743	1,767,882
Garmin Ltd	14,029	1,294,736	Idexx Laboratories	6,723	2,741,639
Gartner	5,662	1,903,961	Illinois Tool Works	27,188	5,989,245
Generac Holdings	4,272	429,977	Illumina	12,198	2,464,972
General Dynamics Corp	19,600	4,862,956	yte Corp	13,457	1,080,732

Security	Unit	Fair Value	Security	Unit	Fair Value
Ingersoll Rand	25,884	1,352,698	Lincoln Electric Holdings	2,004	289,398
Insulet Corp	4,517	1,327,682	Lincoln National Corp	13,927	427,698
Intel Corp	351,476	9,285,996	Linde Plc	39,454	12,869,106
Intercontinental Exchange	42,876	4,399,935	Live Nation Entertainment	11,081	772,678
IBM Corp	68,939	9,712,126	Livent Corp	25,964	515,645
Inter Flavors & Fragrances	19,555	2,050,146	Lkq Corp	22,651	1,209,563
International Paper Co	26,716	924,908	Lockheed Martin Corp	20,459	9,955,349
Interpublic Group of Cos	29,798	992,273	Loews Corp	14,249	831,002
Intuit	27,672	10,764,961	Lowe'S Cos	49,146	9,792,341
Intuitive Surgical	28,345	7,517,661	Lpl Financial Holdings	5,241	1,132,213
Invesco Ltd	28,212	507,252	Lucid Group	28,346	193,036
Invitation Homes	47,675	1,412,610	Lululemon Athletica	10,778	3,453,163
Iqvia Holdings	13,070	2,676,475	Lumen Technologies	78,288	408,663
Iron Mountain	22,814	1,137,050	Lyondellbasell Industries Nv	20,432	1,697,082
J M Smucker Co/The	9,046	1,433,429	M&T Bank Corp	13,915	2,018,092
Jack Henry & Associates	10,452	1,834,431	Marathon Oil Corp	47,196	1,277,124
Jacobs Solutions	10,153	1,218,868	Marathon Petroleum Corp	42,556	4,953,518
Jardine Matheson Holdings	17,900	911,110	Markel Corp	1,186	1,558,831
Jazz Pharmaceuticals Plc	6,598	1,050,863	Marketaxess Holdings	2,890	805,616
Jb Hunt Transport Services	7,292	1,271,141	Marriott International /Md	18,447	2,746,020
Johnson & Johnson	277,896	49,095,886	Marsh & Mclennan Cos	45,895	7,596,999
Johnson Controls Internat	52,388	3,352,832	Martin Marietta Materials	4,744	1,602,381
Jpmorgan Chase & Co	278,130	37,300,014	Marvell Technology	62,953	2,331,779
Juniper Networks	21,131	675,347	Masco Corp	33,388	1,557,884
Kellogg Co	22,925	1,633,177	Masimo Corp	4,859	718,840
Keurig Dr Pepper	58,070	2,070,196	Mastercard	81,610	28,379,061
Keycorp	130,771	2,279,339	Match Group	17,653	732,423
Keysight Technologies	18,678	3,195,059	Mccormick & Co /Md	20,171	1,671,571
Kimberly-Clark Corp	35,454	4,813,590	Mcdonald'S Corp	77,468	20,412,043
Kimco Realty Corp	36,454	771,731	Mckesson Corp	13,141	4,929,452
Kinder Morgan	148,398	2,683,036	Medical Properties Trust	43,472	483,843
Kkr & Co	37,650	1,747,337	Medtronic Plc	126,522	9,833,290
Kla Corp	13,753	5,184,606	Mercadolibre	3,622	3,064,212
Knight-Swift Transp. Hold	13,978	732,587	Merck & Co	269,440	29,891,674
Kraft Heinz Co	57,959	2,358,931	Meta Platforms	211,889	25,498,722
Kroger Co	55,690	2,482,660	Metlife	66,538	4,814,690
L3Harris Technologies	15,769	3,284,367	Mettler-Toledo Int.	2,428	3,504,939
Laboratory Co of America Ho	7,450	1,754,103	Mgic Investment Corp	23,319	303,147
Lam Research Corp	13,091	5,500,969	Mgm Resorts International	25,301	848,090
Lamb Weston Holdings	9,833	878,677	Microchip Technology	43,723	3,071,104
Las Vegas Sands Corp	22,371	1,075,374	Micron Technology	93,434	4,669,831
Lear Corp	4,774	591,833	Microsoft Corp	709,580	170,171,476
Leidos Holdings	9,924	1,043,806	Mid-America Apart Com	9,512	1,493,289
Lennar Corp	22,952	2,077,156	Moderna	27,004	4,847,488
Lennox International	2,591	619,560	Mohawk Industries	6,056	619,044
Liberty Broadband Corp	10,944	834,261	Molina Healthcare	3,788	1,250,835
Liberty Global Plc	39,825	766,121	Molson Coors Beverage Co	15,526	799,900
Liberty Med Co-Liberty F1	15,679	937,291	Mondelez International	120,355	8,019,254
Liberty Med Co - Siriusxm T.	19,112	748,812	Mongodb	4,625	910,385

${\bf 24. \ Schedule \ of \ financial \ assets \ valued \ through \ profit \ or \ loss \ \it{(continued)}}$

Security	Unit	Fair Value	Security	Unit	Fair Value
Monolithic Power Systems	3,416	1,207,898	Paychex	45,028	5,202,535
Monster Beverage Corp	50,098	5,085,448	Paycom Software	6,330	1,963,693
Moody'S Corp	14,290	3,979,908	Paylocity Holding Corp	5,962	1,157,343
Morgan Stanley	126,069	10,717,126	Paypal Holdings	91,348	6,506,718
Mosaic Co/The	40,312	1,768,084	Pentair Plc	13,097	588,841
Motorola Solutions	13,228	3,408,194	Pepsico	143,920	25,997,709
Msci	6,531	3,040,181	Perkinelmer	10,542	1,477,461
Mueller Industries	3,613	213,167	Pfizer	568,538	29,137,573
Nasdaq	26,361	1,616,984	Pg&E Corp	97,946	1,592,602
Netapp	27,059	1,624,352	Philip Morris Int.	132,056	13,369,349
Netflix	29,931	8,825,455	Phillips 66	36,548	3,803,916
Neurocrine Biosciences	7,243	864,090	Pinterest - Class A	36,989	897,353
Newell Brands	32,718	427,297	Pioneer Natural Resources	20,159	4,604,114
Newmont Corp	61,805	2,917,196	Plug Power	37,760	466,714
News Corp	34,857	634,049	Pnc Financial Services	38,386	6,064,604
Nexstar Media Group	4,313	754,473	Pool Corp	3,371	1,019,121
Nextera Energy	151,783	12,686,023	Ppg Industries	18,402	2,313,683
Nike	111,087	12,999,401	Ppl Corp	56,720	1,657,358
Nisource	26,809	735,103	Primerica	4,240	601,190
Nmi Holdings	7,693	160,707	Principal Financial Group	20,486	1,718,571
Nordson Corp	3,849	914,599	Procter & Gamble Co	247,450	37,510,946
Norfolk Southern Corp	18,835	4,639,437	Progress Software Corp	4,465	225,081
Northern Trust Corp	25,054	2,216,778	Progressive Corp/The	48,023	6,229,544
Northrop Grumman Corp	11,802	6,443,066	Prologis	80,888	9,121,740
Nortonlifelock	82,278	1,762,395	Prudential Financial	36,233	3,603,010
Novocure Ltd	6,789	497,294	Ptc	8,188	982,396
Nrg Energy	19,141	609,067	Public Service Ent Group	35,392	2,168,468
Nucor Corp	21,860	2,881,804	Public Storage	15,968	4,472,158
Nvidia Corp	224,233	32,771,653	Pultegroup	20,421	929,564
Nyr	270	1,245,397	Pure Storage	14,943	399,576
Nxp Semiconductors Nv	17,422	2,753,199	Qorvo	8,519	772,162
Occidental Petro Corp	62,479	3,934,927	Qualcomm	94,069	10,341,946
Okta	9,184	627,267	Qualys	3,881	435,215
Old Dominion Freight Line	8,814	2,498,857	Quanta Services	9,141	1,302,410
Old Republic Int. Corp	14,573	351,938	Quest Diagnostics	8,964	1,402,059
Omnicom Group	40,757	3,324,548	Radian Group	21,455	408,932
On Semiconductor Corp	34,133	2,128,875	Raymond James Financial	27,597	2,949,015
Oneok	30,074	1,975,862	Raytheon Technologies	115,767	11,683,206
Oracle Corp	148,084	12,104,386	Realty ome Corp	51,349	3,256,554
O'Reilly Automotive	6,768	5,711,448	Regency Centers Corp	11,084	692,528
Otis Worldwide Corp	41,020	3,211,866	Regeneron Pharmaceuticals	8,415	6,070,918
Ovintiv Ovintiv	24,118	1,223,024	Regions Financial Corp	112,150	2,417,954
Owens Corning	14,465	1,223,024	Reinsurance G of America	3,641	517,350
Paccar	30,104	2,979,092	Renaissancere Holdings Ltd		290,699
Packaging Corp of America	12,502	1,599,381	Repligen Corp	1,578 3,701	625,950
Palantir Technologies	107,313	687,876	Republic Services	32,291	4,164,893
Palo Alto Networks	30,240	4,218,480	Resmed	12,954	2,695,598
Paramount Global	30,240 46,695	4,218,480 787,745		12,934 5,794	2,695,598
	,	,	Ringcentral	5,794 21,358	,
Parker-Hannifin Corp	10,136	2,948,258	Rivian Automotive	21,338	393,414

Security	Unit	Fair Value	Security	Unit	Fair Value
Robert Half International	8,462	624,496	Sysco Corp	34,699	2,652,392
Roblox Corp	23,689	674,426	T Rowe Price Group	25,930	2,827,148
Rockwell Automation	9,145	2,355,295	Take-Two Interactive Sw	12,827	1,335,804
Roku	7,581	308,319	Targa Resources Corp	12,809	941,205
Rollins	16,268	594,270	Target Corp	39,731	5,921,111
Roper Technologies	8,333	3,599,273	Te Connectivity Ltd	25,886	2,971,195
Ross Stores	27,791	3,224,590	Teledyne Technologies	3,428	1,370,994
Royal Caribbean Cruises Ltd	14,785	730,675	Teleflex	3,336	832,499
Royalty Pharma Plc	22,368	883,312	Tenable Holdings	15,252	581,253
Rpm International	10,383	1,011,304	Teradyne	13,987	1,221,764
S&P Global	28,512	9,548,954	Tesla	209,344	25,799,555
Sabra Health Care	26,503	329,432	Teva Pharma Industries Ltd	71,180	649,162
Salesforce	73,590	9,757,298	Texas Instruments	89,440	14,776,382
Sba Communications Corp	7,362	2,063,642	Texas Pacific Land Corp	345	805,419
Schlumberger Ltd	95,989	5,132,532	Textron	17,237	1,220,379
Sea Ltd	25,300	1,316,359	Thermo Fisher Scientific	33,182	18,272,996
Seagate Technology Holdings	16,251	854,803	Tjx Cos/The	97,820	7,786,472
Seagen	8,674	1,114,609	T-Mobile Us	49,361	6,910,540
Sealed Air Corp	8,705	434,205	Toast	17,131	308,872
Sei Investments Co	8,723	508,115	Toro Co/The	2,653	300,320
Sempra Energy	24,913	3,850,304	Tractor Supply Co	14,373	3,232,200
Sensata Tech Hdg Plc	12,067	487,024	Trade Desk /The	45,802	2,052,846
Servicenow	17,759	6,900,259	Tradeweb Markets	9,519	618,069
Sherwin-Williams Co/The	18,860	4,475,289	Trane Technologies	19,308	3,245,482
Shift4 Payments	6,586	368,684	Transdigm Group	4,465	2,810,137
Signature Bank/Ny	4,776	550,100	Transunion	14,508	823,329
Silgan Holdings	13,216	685,117	Travelers Cos	23,240	4,358,894
Simon Property Group	22,276	2,616,984	Trimble	19,536	987,349
Sirius Xm Holdings	62,482	364,270	Triton International Ltd	2,628	180,622
Skyworks Solutions	12,981	1,182,829	Truist Financial Corp	136,891	5,890,420
Snap	73,991	661,480	Twilio	11,079	542,428
Snap-On	12,930	2,954,117	Tyler Technologies	3,106	1,001,281
Snowflake	14,976	2,149,655	Tyson Foods	25,450	1,584,008
Solaredge Technologies	6,567	1,859,643	Uber Technologies	100,229	2,477,661
Sonoco Products Co	20,460	1,241,922	Udr	22,203	859,922
Southern Co/The	84,822	6,057,139	Ugi Corp	21,074	781,213
Southwest Airlines Co	8,066	271,582	U-Haul Holding Co	5,715	314,039
Splunk	10,730	923,209	Ulta Beauty	4,023	1,886,787
Ss&C Tech Hold	15,367	799,545	Union Pacific Corp	58,605	12,132,993
Stanley Black & Decker	12,688	952,869	United Parcel Service	72,844	12,658,830
Starbucks Corp	91,099	9,034,288	United Rentals	8,115	2,884,152
State Street Corp	42,388	3,287,189	United Therapeutics Corp	2,245	624,290
Steel Dynamics	20,473	1,999,803	United Health Group	87,790	46,552,403
Steris Plc	8,224	1,518,726	Unity Software	15,597	445,918
Stryker Corp	33,061	8,081,100	Universal Health Services	6,565	924,812
Sun Communities	9,362	1,338,204	Unum Group	18,953	777,452
Svb Financial Group	3,800	874,000	Us Bancorp	156,675	6,834,164
Synchrony Financial	37,024	1,216,609	Vail Resorts	3,055	728,128
Synopsys	15,588	4,974,443	Valero Energy Corp	31,322	3,972,569

Security	Unit	Fair Value	Security	Unit	Fair Value
Veeva Systems	11,033	1,779,844	Zim Integrated Shipping	5,291	90,846
Ventas	25,403	1,144,151	Zimmer Biomet Holdings	15,786	2,012,399
Verisign	8,017	1,646,852	Zoetis	38,074	5,579,363
Verisk Analytics	16,390	2,888,901	Zoom Video Com	18,418	1,246,714
Verizon Communications	430,222	16,950,746	Zoominfo Technologies	44,296	1,333,753
Vertex Pharmaceuticals	20,409	5,889,833	Zscaler	11,924	1,334,296
Vf Corp	26,882	741,674			3,079,352,750
Viatris	99,253	1,103,693			
Vici Properties	73,003	2,365,297	Total equity securities	4,583,430,201	
Visa	167,711	34,857,054			
Vistra Corp	32,035	743,212			
Vmware	20,139	2,472,062			
Vontier Corp	15,677	302,723			
Vulcan Materials Co	11,400	1,995,912			
W R Berkley Corp	18,181	1,319,213			
Walgreens Boots Alliance	57,130	2,133,234			
Walmart	128,667	18,243,694			
Walt Disney Co/The	127,469	11,073,232			
Warner Bros Discovery	193,387	1,833,309			
Waste Connections	20,069	2,660,146			
Waste Management	49,296	7,733,556			
Waters Corp	10,623	3,637,209			
Watsco	3,536	882,409			
Webster Financial Corp	12,564	594,277			
Wec Energy Group	27,528	2,581,025			
Wells Fargo & Co	375,114	15,488,457			
Welltower	34,318	2,248,859			
Wesco International	4,765	596,530			
West Pharmaceutical Services	5,803	1,365,678			
Western Digital Corp	26,105	823,351			
Western Union Co/The	33,285	458,002			
Westinghouse Air Brake Tech	13,897	1,387,059			
Westlake Corp	1,508	154,615			
Westrock Co	20,700	727,605			
Weyerhaeuser Co	57,622	1,786,282			
Whirlpool Corp	5,580	789,458			
Williams Cos/The	82,119	2,700,894			
Willis Towers Watson Plc	11,003	2,691,004			
Wix.Com Ltd	3,788	290,956			
Wolfspeed	8,451	583,288			
Workday	16,457	2,752,269			
Wp Carey	13,153	1,027,907			
Ww Grainger	8,431	4,689,744			
Wynn Resorts Ltd	6,778	558,914			
Xcel Energy	47,600	3,336,760			
Xylem /Ny	13,566	1,499,721			
Yum Brands	22,486	2,878,433			
Zebra Technologies Corp	3,894	998,460			
Zillow Group	11,613	373,706			

${\bf 24. \ Schedule \ of \ financial \ assets \ valued \ through \ profit \ or \ loss \ \it{(continued)}}$

(c) Derivatives

Security Money market securities	Unit holding	Fair Value	Security Buy Sgd: Sell Usd 2/2/2023 Buy Nzd: Sell Usd 2/2/2023	Unit holding 96,967,672 62,679,139	Fair Value 96,967,671 62,679,139
US Treasury Bills	151,000,000	150,382,501	Buy Cad: Sell Usd 2/2/2023	119,961,409	119,961,409
Co Treating Emb	101,000,000	150,382,501	Buy Dkk: Sell Usd 2/2/2023	71,917,305	71,917,305
		, ,	Buy Gbp: Sell Usd 1/11/2023	6,637,698	6,637,698
Security	Unit holding	Fair Value	,,	.,,	4,116,402,237
S&P500 EMINI FUT Equity	25,868,700	-778,604			, , ,
Index 17/3/2023			Buy Aud: Sell Usd 1/4/2023	(6,828,100)	(6,828,100)
Familia CCV find annual			Buy Aud: Sell Usd 1/4/2023	(131,200,626)	(131,200,626)
Foreign CCY fwd contract Sell Aud: Buy Usd 1/4/2023	6,828,100	6,781,500	Buy Cad: Sell Usd 1/4/2023	(7,444,718)	(7,444,718)
Sell Aud: Buy Usd 1/4/2023	131,200,626	131,154,209	Buy Cad: Sell Usd 1/4/2023	(121,570,900)	(121,570,900)
Sell Cad: Buy Usd 1/4/2023	7,444,718	7,380,346	Buy Chf: Sell Usd 1/4/2023	(77,460,675)	(77,460,675)
Sell Cad: Buy Usd 1/4/2023	121,570,900	121,554,301	Buy Dkk: Sell Usd 1/4/2023 Buy Dkk: Sell Usd 1/4/2023	(3,266,432) (74,949,783)	(3,266,432) (74,949,782)
Sell Chf: Buy Usd 1/4/2023	77,460,675	77,388,672	Buy Eur: Sell Usd 1/4/2023	(24,286,924)	(24,286,924)
Sell Dkk: Buy Usd 1/4/2023	3,266,432	3,300,875	Buy Eur: Sell Usd 1/4/2023	(413,449,790)	(413,449,790)
•		, ,	Buy Gbp: Sell Usd 1/4/2023	(6,143,418)	(6,143,418)
Sell Dkk: Buy Usd 1/4/2023	74,949,783	75,087,724	Buy Gbp: Sell Usd 1/4/2023	(126,791,984)	(126,791,984)
Sell Eur: Buy Usd 1/4/2023	24,286,924	24,546,750	Buy Hkd: Sell Usd 1/4/2023	(7,183,070)	(7,183,070)
Sell Eur: Buy Usd 1/4/2023	413,449,790	413,559,375	Buy Jpy: Sell Usd 1/4/2023	(5,699,407)	(5,699,407)
Sell Gbp: Buy Usd 1/4/2023	6,143,418	6,014,500	Buy Jpy: Sell Usd 1/4/2023	(141,385,146)	(141,385,145)
Sell Gbp: Buy Usd 1/4/2023	126,791,984	126,785,660	Buy Nok: Sell Usd 1/4/2023	(45,873,911)	(45,873,911)
Sell Hkd: Buy Usd 1/4/2023	7,183,070	7,174,934	Buy Nzd: Sell Usd 1/4/2023	(62,658,511)	(62,658,511)
Sell Jpy: Buy Usd 1/4/2023	5,699,407	5,759,976	Buy Sek: Sell Usd 1/4/2023	(3,889,792)	(3,889,792)
Sell Jpy: Buy Usd 1/4/2023	141,385,146	141,399,826	Buy Sek: Sell Usd 1/4/2023	(51,868,320)	(51,868,320)
Sell Nok: Buy Usd 1/4/2023	45,873,911	45,883,667	Buy Sgd: Sell Usd 1/4/2023	(96,929,569)	(96,929,569)
Sell Nzd: Buy Usd 1/4/2023	62,658,511	62,422,815	Sell Sgd: Buy Usd 1/4/2023	(95,837,506)	(97,673,725)
Sell Sek: Buy Usd 1/4/2023	3,889,792	3,838,956	Sell Nzd: Buy Usd 1/4/2023 Sell Eur: Buy Usd 1/4/2023	(61,677,137) (426,875,625)	(62,422,815) (438,106,124)
Sell Sek: Buy Usd 1/4/2023	51,868,320	51,873,890	Sell Aud: Buy Usd 1/4/2023	(137,165,414)	(137,935,710)
Sell Sgd: Buy Usd 1/4/2023	96,929,569	96,928,124	Sell Jpy: Buy Usd 1/4/2023	(140,592,116)	(147,159,801)
Buy Sgd: Sell Usd 1/4/2023	95,837,506	95,837,506	Sell Gbp: Buy Usd 1/4/2023	(132,588,302)	(132,800,160)
Buy Nzd: Sell Usd 1/4/2023	61,677,137	61,677,137	Sell Cad: Buy Usd 1/4/2023	(129,341,127)	(128,934,647)
Buy Eur: Sell Usd 1/4/2023	426,875,625	426,875,625	Sell Hkd: Buy Usd 1/4/2023	(7,175,881)	(7,174,934)
Buy Aud: Sell Usd 1/4/2023	137,165,414	137,165,413	Sell Nok: Buy Usd 1/4/2023	(45,747,715)	(45,883,667)
Buy Jpy: Sell Usd 1/4/2023	140,592,116	140,592,116	Sell Sek: Buy Usd 1/4/2023	(55,301,325)	(55,712,846)
• ••			Sell Dkk: Buy Usd 1/4/2023	(76,403,235)	(78,388,599)
Buy Gbp: Sell Usd 1/4/2023	132,588,302	132,588,302	Sell Chf: Buy Usd 1/4/2023	(75,716,446)	(77,388,672)
Buy Cad: Sell Usd 1/4/2023	129,341,127	129,341,127	Sell Aud: Buy Usd 2/2/2023	(128,768,167)	(128,741,879)
Buy Hkd: Sell Usd 1/4/2023	7,175,881	7,175,881	Sell Sek: Buy Usd 2/2/2023	(51,955,288)	(51,966,660)
Buy Nok: Sell Usd 1/4/2023	45,747,715	45,747,715	Sell Hkd: Buy Usd 2/2/2023	(7,187,414)	(7,179,493)
Buy Sek: Sell Usd 1/4/2023	55,301,325	55,301,325	Sell Eur: Buy Usd 2/2/2023	(396,968,043)	(397,107,804)
Buy Dkk: Sell Usd 1/4/2023	76,403,235	76,403,235	Sell Nok: Buy Usd 2/2/2023 Sell Chf: Buy Usd 2/2/2023	(45,927,368) (74,550,904)	(45,941,473) (74,507,324)
Buy Chf: Sell Usd 1/4/2023	75,716,446	75,716,446	Sell Gbp: Buy Usd 2/2/2023	(119,907,444)	(119,910,506)
Buy Aud: Sell Usd 2/2/2023	128,768,167	128,768,167	Sell Jpy: Buy Usd 2/2/2023	(139,716,459)	(139,766,570)
Buy Sek: Sell Usd 2/2/2023	51,955,288	51,955,288	Sell Sgd: Buy Usd 2/2/2023	(96,967,672)	(96,981,737)
Buy Hkd: Sell Usd 2/2/2023	7,187,414	7,187,414	Sell Nzd: Buy Usd 2/2/2023	(62,679,139)	(62,451,301)
Buy Eur: Sell Usd 2/2/2023	396,968,043	396,968,043	Sell Cad: Buy Usd 2/2/2023	(119,961,409)	(119,947,995)
Buy Nok: Sell Usd 2/2/2023	45,927,368	45,927,368	Sell Dkk: Buy Usd 2/2/2023	(71,917,305)	(72,059,121)
Buy Chf: Sell Usd 2/2/2023	74,550,904	74,550,904	Sell Gbp: Buy Usd 1/11/2023	(6,637,698)	(6,614,650)
Buy Gbp: Sell Usd 2/2/2023	119,907,444	119,907,444			(4,141,639,287)
Buy Jpy: Sell Usd 2/2/2023	139,716,459	139,716,459			(25,237,050)
7 -F7: 200 E-E-E	,,,,,,,,,,	,,,			

Annex III. Statements on accounting policies of the Petroleum Fund for the fiscal year 2022



República Democrática de Timor-Leste Ministério das Finanças



Direção Geral do Tesouro

REF NO: 388/VIII/DGT-MF/06/2023

GERAL DO

Regina de Jesus de Sous Director General of Treasury

22 June 2023

Treasury Statement on Accounting Policies of the Petroleum Fund for the Fiscal Year 2022

This statement on the Accounting Policies of the Petroleum Fund is made in accordance with the provisions of Article 24.1 (d) of the Petroleum Fund Law, No. 12/2011. It may be retained for Petroleum Fund records.

In accordance with Article 21 of the Petroleum Fund Law, the Financial Statements of the Petroleum Fund for the Fiscal Year ended 31st December, 2022 have been prepared in accordance with International Financial Reporting Standards (IFRS) which comprise standards and interpretations approved by the International Accounting Standards and Standing Interpretations Committee interpretations approved by the International Accounting Standards Committee (IASC) that remained in effect at the balance sheet date of the Petroleum Fund.

During the 2022 Fiscal Year, the Petroleum Fund has adopted all new and revised IFRS that were relevant. Adoption of these new and revised IFRS did not have a material impact.

Previously adopted accounting standards have continued to be applied.

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Annex IV. Comparison of income derived from the investment of the Petroleum Fund assets with the previous three fiscal years

Comparison of Income Derived from the Investment of the Petroleum Fund Assets with the Previous Three Fiscal Years

(As per Article 24.1 (e) of the Petroleum Fund Law No. 9/2005, of 3^{rd} of August as amended by the Law No. 12/2011, of 28^{th} of September)

Please refer to the Audited Financial Statements for details.

Fiscal Year	Fiscal Year	Fiscal Year	Fiscal Year
2022	2021	2020	2019
US\$ (2,050,438,544)	US\$ 1,144,334,490	US\$ 1,773,297,623	US\$ 2,100,923,843

Annex V. Comparison of nominal income on the investment of the Petroleum Fund assets with the real returns after adjusting for inflation

Comparison of Nominal Income on the Investment of the Petroleum Fund Assets with the Real returns After Adjusting for Inflation

(As per Article 24.1 (f) of the Petroleum Fund Law No. 9/2005, of 3rd of August as amended by the Law No. 12/2011, of 28th of September)

Petroleum Fund's nominal and real return:

Return	2022	2021	2020
Nominal return	-10.36%	6.25%	10.17%
Inflation ¹⁰	6.45%	7.04%	1.36%
Real return	-15.79%	-0.74%	8.69%

The Petroleum Fund's nominal return for 2022 was -10.36%. The real return of the Fund for the year was -15.79%, after adjusting for the US inflation of 6.45%.

Annex VI. Comparison of nominal income on the investment of the Petroleum Fund assets with the benchmark index performance

Comparison of Nominal Income on the Investment of the Petroleum Fund Assets with the Benchmark Performance Index

(As per Article 24.1 (g) of the Petroleum Fund Law No. 9/2005, of 3rd of August as amended by the Law No. 12/2011, of 28th of September)

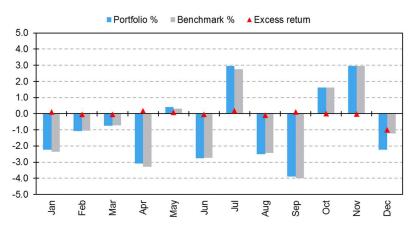


Figure 25 - Petroleum Fund Monthly Returns (Jan - Dec 2022)

Table 16 - Petroleum Fund Monthly Return (Jan - Dec 2022)

Period	Portfolio	Benchmark	Excess return
January	-2.23%	-2.34%	0.12%
February	-1.08%	-1.03%	-0.05%
March	-0.74%	-0.71%	-0.03%
April	-3.09%	-3.28%	0.19%
May	0.41%	0.31%	0.10%
June	-2.76%	-2.72%	-0.04%
July	2.95%	2.76%	0.19%
August	-2.51%	-2.42%	-0.09%
September	-3.89%	-3.99%	0.10%
October	1.63%	1.61%	0.02%
November	2.95%	2.96%	-0.01%
December	-2.22%	-1.22%	-0.99%
Fiscal Year 2022	-10.36%	-9.90%	-0.46%

Annex VII. Comparison of the Estimated Sustainable Income for the fiscal year 2022 with the sum of transfers from the Petroleum Fund for the same year

Comparison of the Estimated Sustainable Income for the Fiscal Year 2022 with the Sum of Transfers from the Petroleum Fund for the Same Year

(As per Article 24.1 (h) of the Petroleum Fund Law No. 9/2005, of 3rd of August as amended by the Law No. 12/2011, of 28th of September)

The total withdrawals from the Petroleum Fund for the Financial Year 2022 were US\$ 1,404.0 million which was US\$ 849.9 million higher than the Estimated Sustainable Income (ESI) amount of US\$ 554.1 million projected for the year.

Please refer to Statement of Changes in Capital and Notes to the Financial Statements in Annex II for further details.

Annex VIII. Treasury statement on borrowings



República Democrática de Timor-Leste Ministério das Finanças



Direção Geral do Tesouro

REF NO: 389/DGT-MF/6/2023

22 June 2023

Treasury Statement on Borrowings by Government of Timor-Leste for Fiscal Year 2022

This statement is made in accordance with the requirement under Article 24.1 (i) of the Petroleum Fund Law No. 12/2011 to declare if there have been any borrowings by the Government of Timor-Leste in which the Petroleum Fund is being used as collateral as detailed in Article 20.2.

While sovereign loans negotiated and entered into from time to time by Timor-Leste with international financial institutions such as World Bank, Asian Development Bank, and EFA - Australia, engage all of Timor-Leste's assets for payment of interest and re-payment of principal, such sovereign loans do not have any specific collateral requirements that encumber the Petroleum Fund, under their terms and conditions.

Four new loans were signed with the World Bank, Asian Development Bank, and EFA - Australia during the fiscal year ended 31st December 2022 for around US\$289 million. Total value of all loans committed or signed up to 31st December 2022 at exchange rates ruling on that date amounted to approximately US\$968 million. This also includes Special Drawing Rights (SDRs) and Yen denominated liabilities which can vary according to ruling exchange rates.

Regina de Jesus de Sousa

Director General of Treasury

Annex IX. List of persons holding positions relevant for the operations and performance of the Petroleum Fund

List of Persons Holding Relevant positions for the Operations and Performance of the Petroleum Fund in 2022

(As per Article 24.1 (j) of the Petroleum Fund Law No. 9/2005, of 3rd of August as amended by the Law No. 12/2011, of 28th of September)

The list of persons holding relevant positions for the operation and performance of the Petroleum Fund is given below:

A. Minister of Finance

Mrs. Santina Viegas Cardoso (from 3 July 2023) Mr. Rui Augusto Gomes (to 3 July 2023)

Vice-Minister of Finance

Mr. Helder Lopes (from 3 July 2023)

Mrs. Sara Lobo Brites (Vice-Minister, 25 June 2018 – 22 March 2022)

Mr. Antonio Freitas (22 March 2022 – 3 July 2023)

B. The Director General of Treasury:

Ms. Regina de Jesus de Sousa

C. The members of the Investment Advisory Board (IAB):

Name	Position
Mr. Olgário de Castro	Chairman of the IAB
Mr. Torres Trovik	Member of the IAB
Mr. Gualdino da Silva	Member of the IAB
Prof. Michael Drew	Member of the IAB
Mr. Abraão Fernandes de Vasconselos	Governor of the Central Bank of Timor-Leste
(Alternate Mr. Venancio Alves Maria)	(Vice-Governor, Representative from BCTL)
Ms. Regina de Jesus de Sousa	Director General of Treasury
(Alternate Mr. Filipe Nery Bernardo)	(Coordinator, PFPMO, Representative from MoF)

Note: See page 100 for the details.

D. Operational Manager:

• Banco Central de Timor-Leste (BCTL) – from 12 October 2005.

E. The External Investment Managers:

- Bank for International Settlements (BIS) from 3 June 2009.
- Schroders Investment Management Limited from 8 October 2010.
- State Street Global Advisors (SSgA) from 14 September 2011 (implementation commenced in January 2012).
- BlackRock Investment Management Australia Limited from April 2012 (implementation commenced in February 2013).

F. Custodian

• JP Morgan Chase Bank N.A.

G. Independent Auditor

• Ernst & Young

H. The Governor of the Central Bank

Mr. Abraão Fernandes de Vasconselos

I. The Petroleum Fund Consultative Council (PFCC).

Members of PFCC for financial year 2022 are as the following:

Mr. Juvinal Dias is President of the PFCC. He joined PFCC in December 2017 representing civil society organizations. He is one of the Commissioners for Greater Sunrise Governance Board. He also heads Core Group Transparency Timor-Leste, Publish What You Pay Timor-Leste and was former researcher at Lao Hamutuk.

Mr. Nuno Eugénio Goulart is Vice President of the PFCC. He joined PFCC in October 2019 represented the Parliament. He is Education Coordinator at PHD Australia.

Mrs. Izilda Imanuela da Luz Pereira is a former member of the Parliament. She joined PFCC in December 2017 representing the Parliament. She is holding important position in Legal Counsel and Audit at AEMTL.

Pe. Mauzinho Pereira Lopes replaced Pe. Julio Crispim Ximenes Belo as member of PFCC from September 2022. He is a Catholic priest and lecturer at Universidade Católica Timorense (UCT) and Instituto Filosofia e Teologia (ISFIT).

Mr. Hernani Agostinho Soares is member of PFCC. He represents private sector in PFCC since October 2019. He is Vice President of Timor-Leste Chamber of Commerce and adviser to Minister of Tourism, Industry and Commerce.

Mrs. Martinha da Silva Jesus Pinto is member of PFCC. She joined PFCC since October 2019 representing civil society organizations. She is Director of NGO Feto Hadomi Família (FFHF).

Membros do Comité de Assessoria para o Investimento (CAI)













Olgario de Castro is Chairman of the Investment Advisory Board. He has been with the Petroleum Fund for more than 10 years. He is a Timorese national and chartered accountant and partner in De Castro Sullivan Lai Practice in Darwin, Australia. His areas of expertise include tax, financial and management accounting and auditing.

Dr. Torres Trovik is a long-serving member of the IAB. He is one of the architects in setting up the Petroleum Fund in 2005. He is a Norwegian national and an investment professional with international experience in financial markets, sovereign wealth funds and pension funds. He is currently a Senior Advisor and Developer at KLP, Oslo and a member of the Advisory Committee for the International Forum of Sovereign Wealth Funds (IFSWF).

Gualdino da Silva has been with the Petroleum Fund for 6 years. He holds geological engineering qualification from RMIT and currently serves as the President of the National Authority for Petroleum and Minerals.

Prof. Dr. Michael Drew joined the Petroleum Fund in April 2017. He is a Professor of Finance at Griffith University and co-founder of Drew, Walk & Co., a firm of consulting financial economist specializing in the areas of investment governance and pension plan design.

He also serves as a Trustee Director of CareSuper and is Chair of the Investment Committee.

Venancio M. Alves is Executive Manager of the Petroleum Fund at the Central Bank and is the Deputy Governor of the Central Bank. He is a Timorese national with more than 17 years' experience in managing the Petroleum Fund's investments. He is a non-voting member at the IAB representing the Operational Manager (BCTL) appointed by the Governor of the Central Bank.

Mr. Filipe Nery Bernardo joined the Petroleum Fund in September 2009 as an analyst and has been leading and coordinating the works at the PFPMO at the Ministry of Finance since 2012. He is the representative of the Ministry of Finance on Timor-Leste's EITI Multi-stakeholders Working Group. He is a non-voting member of the IAB, as the appointed alternate to the Director General of Treasury from February 2022.

Annex X. Statement on total withdrawals versus the approved appropriation amount

Statement affirming that Total Withdrawals from the Fund did not exceed the Approved Appropriation Amount for the Fiscal Year

(As per Article 7.2 of the Petroleum Fund Law No. 9/2005, of 3rd of August as amended by the Law No. 12/2011, of 28th of September)

In accordance with Article 7 of Law No.9/2005, of the 3rd August as amended by the Law No.12/2011, of the 28th September, Petroleum Fund Law, the total transfer amount for the Petroleum Fund for a Fiscal year shall not exceed the appropriation amount approved by the Parliament for the Fiscal year.

In accordance with Article 7 of Law No. 1/2022, of the 3th January as amended by the Law No. 6/2022, of the 18th May on the General State Budget for 2022 and the establishment of the National Liberation Combatants' Fund, the transfer amount from the Petroleum Fund to the General State Budget for 2022 is not to exceed US\$2,552.6 million.

The total actual transfer amount from the Petroleum Fund to the Consolidated Fund of Timor-Leste for 2022 was US\$1,404.0 million.

The total transfer amount from the Petroleum Fund for 2022 was in compliance with Article 7.2 of the Petroleum Fund Law No.9/2005 as amended by Law No.12/2011.

Annex XI. Article 35 report on the Petroleum Fund receipts from Ernst & Young



Ernst & Young 11 Mounts Bay Road Perth WA 6000 Australia GPO Box M939 Perth WA 6843 Tel: +61 8 9429 2222 Fax: +61 8 9429 2436 ey.com/au

Compilation report to the Ministry of Finance, Democratic Republic of Timor-Leste in respect of the Statement of Petroleum Fund Receipts for the year ended 31 December 2022

We have compiled the accompanying Statement of Petroleum Fund Receipts detailing the payments made to the Petroleum Fund of Timor-Leste ("the Petroleum Fund") for the year ended 31 December 2022 based on information provided to us by the Petroleum Fund's operational manager, Banco Central de Timor-Leste ("the operational manager").

We performed this compilation engagement in accordance with International Standard on Related Services 4410 (Revised) Compilation Engagements.

We have applied our expertise in accounting and financial reporting to assist you in the preparation and presentation of the Statement of Petroleum Fund Receipts. We have complied with relevant ethical requirements, including principles of integrity, objectivity, professional competence and due care.

The National Petroleum Authority and the National Directorate of Petroleum Tax Revenue are responsible for monitoring that all payments that should have been made under the Petroleum Fund Law No. 9/2005 dated 3 August 2005, as amended by Law No. 12/2011 dated 28 September 2011 (the "Petroleum Fund Law") have been made for the year ended 31 December 2022. This Statement of Petroleum Fund Receipts and the accuracy and completeness of the information used to compile it are the responsibility of the operational manager.

Since a compilation engagement is not an assurance engagement, we are not required to verify the accuracy or completeness of the information you provided to us to compile the Statement of Petroleum Fund Receipts. Accordingly, we do not express an audit opinion or a review conclusion on the Statement of Petroleum Fund Receipts.

As stated in Note 1, the Statement of Petroleum Fund Receipts is prepared and presented in accordance with the requirements under the Petroleum Fund Law. Accordingly, the Statement of Petroleum Fund Receipts is for use only in connection with that purpose and may not be suitable for any other purpose.

Our compilation report is intended solely for the use by the Ministry of Finance as required under the Petroleum Fund Law. We disclaim all responsibility to any other party for any loss or liability that the other party may suffer or incur arising from or relating to or in any way connected with the contents of our report, the provision of our report to the other party or the reliance upon our report by the other party.

Ernst & Young Perth

East & Found

22 June 2023

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Article 6.1(a) receipts	US\$
Pavee:	
Atlas Programmed Marine P/L	256,146
Babcock Offshore services Australia P/L	634,109
BGP INC China National Pet.Corp. RP	12,044
Brunel Energy Pty Ltd	30,148
BU12 Australia P/L	77,456,648
BU13 Australia P/L	43,671,022
Calidus Process Solutions P/L	3,738
Caltech Unipessoal Lda • Offshore	998,428
Cameron Services International P/L	18,082
Carnarvon on Petroleum Timor, Unipessoal.Lda	1,246,045
Chandler Macleod Group Limited	46,876
Clough Amec P/L	1,707,765
Compass Group (Australia) Pty Ltd	2,412,315
Eni JPDA 03-13 Ltd Branch	68,818,377
ENI JPDA 06-105 PTY LTD	392,789
ENI JPDA 11-106 BV	95,000
ENI Timor - Leste S.P.A (PSC area 4)	9,620
FSIP and Farstad GVoup Accounts	8,039
Halliburton Australia P/L	81,704
Hertel Modern P/L	161,088
Inpex Sahul Ltd	40,840,133
Inpex Timor Sea	126,754
Japan Energy E P JPDA LTD Konnekto Unipesseoal Lda	1,325 262,687
Kotug Maritime Services (Bayu Undan) P/L	226,780
Labrador Petro Management P/L	98,834
Laloran Marine Services Lda	84,980
MMA Offshore Vessel Operations P/L	241,023
Noble Int'l Finance	1,594
Noble Services International Limited	33,409
Oceaneering Australia P/L	41,234
Rigforce Pty Ltd	394,215
Santos (JPDA 91-12) Pty Ltd	47,181,086
Santos NA (19-13) P/L	90,410,683
Santos NA Bayu Undan P/L	33,370,898
Santos NA EMET P/L	4,200,500
Santos NA Timor Leste P/L	387,402
Santos NA Timor Sea P/L	34,042,555
Schlumberger Australia P/L	1,898,410
SGS Australia P/L	211,648
Sodexo Timor Unipessoal Lda	37,208
Solar Turbines International Co	25,692
Spectrum Geo Aust Pty Ltd	4,784
Sunda Gas Pte Ltd	98,231

PETROLEUM FUND OF TIMOR-LESTE STATEMENT OF PETROLEUM FUND RECEIPTS FOR THE YEAR ENDED 31 DECEMBER 2022

Article 6.1(a) receipts (continued)	US\$
Payee:	
Timor Gap Chudith Unip.Lda	4,578
Timor Gap E.P	7,377
Timor Gap Greater Sunrise	30,495
Timor Gap Offshore Block Unipessoal	19,611
Timor Gap Onshore Block C Unip Lda	19,791
Timor Gap onshore Block Unip Lda	22,358
Timor Gap PSC 11-106 Unip Lda	18,759
Timor Gap Pualaka Block Unip Lda	49,033
Timor Resources Pty Ltd	182,134
Tokyo Timor Sea Resources P/L	39,038,648
Weatherford Australia Pty limited	84,959
Wood Group PSN Australia	624
Woodside Energy P/L	34,724
Total Article 6.1(a) receipts per the Petroleum Fund and National	-
Directorate of Petroleum and Mineral Revenue (NDPMR) for the year	491,795,139

Article 6.1(b) receipts	US\$
2022 Article 6.1(b) receipts collected and paid per Autoridade Nacional do Petroleo	507.044.555
e Minerals (ANPM) Add: December 2021 Article 6.1(b) receipts collected and paid to Petroleum Fund in	597,911,555
January 2022	13,761,706
Total Article 6.1(b) receipts per the Petroleum Fund for the year	611,673,261
Article 6.1(e) receipts	
BlueWater Holding B.V)	15,000
ENI JPDA 06-105 Pty Ltd	322,500
ENI JPDA 11-106 BV Branch	80,000
ENI Timor - Leste S.P.A (PSC area 4)	154,000
Esperanca Timor Oan	30,000
PC Hits Exploration Ltd	15,000
Santos (JPOA 91-12) P/L	1,989,100
Santos Ltd/ TL	5,000
Santos NA (19-12) P/L	15,000
Sunda Gas Pte Ltd	107,143
Timor Gap Offshore Block Unipessoal	110,370
Timor Gap Pualaka Unip. Lda	45,000
Timor Resources Pty Ltd	60,030
Total Article 6.1(e) receipts per the Petroleum Fund for the year	2,948,143
Summary of Receipts for the year ended 31 December 2022 per the Petroleum Fund Article 6.1(a) receipts Article 6.1(b) receipts	491,795,139 611,673,261
Article 6.1(e) receipts	2,948,143
Total Article 6.1 receipts per the Petroleum Fund for the year	1,106,416,543

PETROLEUM FUND OF TIMOR-LESTE STATEMENT OF PETROLEUM FUND RECEIPTS FOR THE YEAR ENDED 31 DECEMBER 2022

Note 1 Basis of Preparation

The Statement of Petroleum Fund Receipts details the payments made to the Petroleum Fund of Timor-Leste ("the Petroleum Fund") for the year ended 31 December 2022 as required under article 35 of the Petroleum Fund Law No. 9/2005 dated 3 August 2005, as amended by Law No. 12/2011 dated 28 September 2011 ("the Law").

The National Petroleum Authority and the National Directorate of Petroleum Tax Revenue are responsible for monitoring that all payments that should have been made under the Law have been made for the year ended 31 December 2022.

Banco Central de Timor-Leste, the operational manager of the Petroleum Fund of Timor-Leste is responsible for the accuracy and completeness of the information contained in the Statement of Petroleum Fund Receipts.

The petroleum receipts are received in US\$ and the Statement of Petroleum Fund Receipts is presented in US\$.

The petroleum receipts are recorded in the Statement of Petroleum Fund Receipts on a receipt basis. The Statement of Petroleum Fund Receipts include the following types of receipts for the financial year ended 31 December 2022:

- Article 6.1 (a) receipts the gross revenue, including Tax Revenue, of Timor-Leste from any Petroleum Operations, including prospecting or exploration for, and development, exploitation, transportation, sale or export of petroleum, and other activities relating thereto
- Article 6.1 (b) receipts any amount received by Timor-Leste from the Designated Authority pursuant to the Treaty
- Article 6.1 (d) any amount received from direct or indirect participation of Timor-Leste in Petroleum Operations. There is no receipt under this category for the current financial year; and
- Article 6.1 (e) any amount received by Timor-Leste relating directly to petroleum resources not covered in paragraphs above.

Annex XII. Advice provided by the Investment Advisory Board

Investment Advisory Board

Date: 18 July 2022

To
H. E. Rui Augusto Gomes
Minister of Finance
Democratic Republic of Timor-Leste

Subject:

Independent review of the Petroleum Fund

Dear Minister,

Thank you for your letter dated 6 June regarding the independent review of the Petroleum Fund. The Investment Advisory Board agrees that a review of the Fund's governance structure, institutions, people, processes, and investments will be beneficial to Timor-Leste.

Accordingly, the Board has made the decision to fund the Independent Review from the IAB's annual budget. The Board supports the Ministry of Finance undertaking of the procurement of the consultant in this special case, as it will allow representatives from the Board and the BCTL to provide inputs during the procurement process. The Board agrees with Your Excellency's suggestion that representatives from the three parties, namely, the Banco Central of Timor-Leste, the Investment Advisory Board, and the PFPMO from the Ministry of Finance, be included in correspondence with the consultant during the review.

The Board has agreed that the Ministry of Finance draft the initial terms of reference for the Board and the BCTL to review and comment on.

If the Board can be of any further assistance, please contact us.

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Yours sincerely,

Olgario de Castro

Chairman

Investment Advisory Board

Date: 7 September 2022

To
H. E. Rui Augusto Gomes
Minister of Finance
Democratic Republic of Timor-Leste

Subject: IAB Advice on US TIPS mandate			Inthonormal International Engineering	
	Subject:	IAB Advice on US TIPS mandate		

Dear Minister,

The Investment Advisory Board have reviewed the BCTL's report, "Proposal for Appointment of Treasury Inflation Protected Securities (TIPS) Manager(s)" dated 22 June 2022, along with the Governor's letter to Your Excellency dated 27 July 2022.

We are writing to advise the Ministry of Finance on the final parameters for the mandate, the recommended managers and the changes to the growth portfolio's asset allocation to incorporate the new asset class.

1. Parameters for the US TIPS mandate

The Board adopts the parameters for the US TIPS mandate proposed in the Governor's letter dated 27 July 2022.

Objective	To provide inflation protection
Weight	10% of the total growth portfolio
Benchmark Index	Bloomberg Barclays US TIPS Index 1-10 Years
Eligible instruments	US TIPS, US Treasury nominal bonds, US bond futures, US bond forwards, US CPI Swaps
Style of management	Enhanced passive with a maximum ex ante tracking error of 50 basis points and outperformance of 20-25 basis points

These parameters are in line with the initial guidelines that the Board proposed to Your Excellency on 14 December 2021 in order to guide the BCTL's manager selection process. The parameters were settled after reviewing additional portfolio modelling and accounting for the information from the BCTL's search. In particular, we note the following:

- The recommended allocation of 10% of the growth portfolio is designed to provide some degree of protection against the risk of persistently higher than expected inflation.
- Enhanced passive management was recommended by the BCTL on the basis that fund managers may
 exploit inefficiencies in the TIPS market.

The list of eligible instruments incorporates feedback from the recommended managers to the BCTL
on what instruments they require for efficient implementation of their enhanced passive strategies.
The annex to the Governor's letter dated 27 July confirms that the derivative instruments can be
implemented.

2. Recommended managers

The Investment Advisory Board has reviewed the BCTL's June report and the Governor's letter dated 27 July including the annex, "Questions and Answers on US TIPS recommendations". The BCTL's reports provide support for the operational manager's conclusion that the two recommended managers, Barings and Franklin Templeton, are expected to meet the objectives of the US TIPS mandate as set out above. The BCTL believes that the two managers' strategies complement each other.

3. Adjusting the asset allocation of the growth portfolio

The Investment Advisory Board agrees with the Secretariat's recommendation to finance the 10 per cent allotted to the new mandate from the 3-5 year US Treasury mandate. The resulting allocation in the growth portfolio is as follows:

Asset class	Allocation
US Government Treasury Notes 3-5 Years	35%
US Government Treasury Notes 5-10 Years	10%
US Government Treasury Inflation Protected Securities	10%
Global Developed Market Sovereign Bonds, Hedged	10%
Developed Market Equities	35%

Implementation

If your Excellency agrees with the above recommendations, the BCTL will be advised to appoint the managers. The Ministry of Finance will then incorporate these changes in Annex 1 of the Operational Management Agreement. As per our usual practice, the BCTL will brief the Board and the Ministry of Finance on their planned process to implement this change and provide regular updates on its progress.

If the Board can be of any further assistance, please contact us.

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Yours sincerely,

Chairman

Investment Advisory Board

Date: 7 September 2022

To
H. E. Rui Augusto Gomes
Minister of Finance
Democratic Republic of Timor-Leste

Subject: Managing the Petroleum Fund for the benefit of both current and future generations

Dear Minister,

Thank you Excellency for attending the Board's workshop in June. We appreciated the update on Timor-Leste's economic outlook and the overview of the government's supplementary budget for 2022, which increased expenditure to \$3,185 million and withdrawals to \$2,553 million.

The budget will largely be financed from the Petroleum Fund. Under the Petroleum Fund's governing law, the IAB is required to advise the Minister of Finance on the investment policy and management of the Fund after taking into account the overall objective of the Petroleum Fund to benefit both current and future generations.

The Board noted that the Government has set out its rationale as to why the withdrawals in excess of the ESI in the 2022 Budget and supplementary budget are in the long-term interest of Timor-Leste, which is required by the Petroleum Fund Law. The government through the Ministry of Finance also need to ensure that the Petroleum Fund is being managed to benefit both current and future generations as required by Article 11.4 and the Preamble of the Petroleum Fund Law. Future generations will benefit from preserving savings in the Fund to finance future withdrawals, which is the rationale for the three per cent ESI guideline – the level of withdrawals that is consistent with an equitable level of consumption across generations. Future generations also benefit when withdrawals finance productive expenditure, such as investments in infrastructure, health and education, which enable future economic activity.

The updated outlook displays a material change in the level of expenditure in about ten years when the Petroleum Fund is believed to be depleted. If planned expenditure is simply funding economic activity and consumption up to that point in time, the level of economic activity will contract in unison with the reduction in expenditure. Such a reduction in economic activity may result in considerable costs (both economic and social) and possibly leave future generations worse off than those currently benefiting from the drawdown of the fund. Such a development would part with the intention of the Petroleum Fund as stated in the Petroleum Fund law.

The sustainability of the Petroleum Fund and fiscal policy is not a new concern. The IAB first formally advised the Ministry of Finance on the challenges in 2016. The immediacy of this issue has been obscured somewhat in the last three years when the Fund's balance grew as a result of much higher-than-expected investment returns and petroleum revenue. However, this year represents a critical juncture in two senses. Firstly, the Fund (as with other similar funds around the world) has incurred significant mark-to-market losses on its investments in both equities and bonds because global central banks have sharply tightened policy in response to persistently high inflation. Secondly, Bayu-Undan is expected to cease production this year.

Segmentation of the Petroleum Fund into a low-risk liquidity portfolio and a growth portfolio was designed to provide some protection against adverse market events, as well as reconnect the Fund's investment strategy with the government's fiscal policy. The liquidity portfolio has been relatively stable in value this year and will be used to finance withdrawals. The liquidity portfolio was intended to cover \$3,311 million of withdrawals from 2022 to 2024 but, following the supplementary budget, \$2,553 million is now projected to be withdrawn in 2022 alone. This means that the Fund will be forced to sell a significant sum of equities and bonds in the growth portfolio in 2023, potentially at a low price if markets fail to recover from the current levels. For segmentation to work more effectively, the government needs to commit to the projections of withdrawals.

We acknowledge that developing a sustainable fiscal path requires careful longer-term planning and difficult choices between competing needs. Failure to develop such a path and exhausting the Petroleum Fund - the source of Timor-Leste's foreign currency - could result in the economic dislocation that we are witnessing elsewhere in the Asia Pacific.

The Board appreciates that Your Excellency understands these pressing challenges. We trust that our advice is helpful in reminding policy makers to carefully balance the needs of both current and future generations.

If the Board can be of any further assistance, please contact us.

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Yours sincerely,

Olgario de Castro

Chairman

Annex XIII. TLPF implementation of the Santiago Principles

TIMOR-LESTE PETROLEUM FUND

IMPLEMENTATION OF THE GENERALLY ACCEPTED PRINCIPLES AND PRACTICES "SANTIAGO PRINCIPLES"

Timor-Leste Petroleum Fund has been an active member of the International Forum for Sovereign Wealth Funds (IFSWF) since 2009. The cornerstone of the IFSWF is the "Santiago Principles", 24 Generally Accepted Principles and Practices for sovereign wealth funds. The Santiago Principles are designed to promote good governance, accountability, transparency and prudent investment practices whilst encouraging a more open dialogue and deeper understanding of sovereign wealth fund activities.

All members of the IFSWF voluntarily endorse the Santiago Principles and seek to implement them in their governance and investment practices. The IFSWF's members regularly undertake a self-assessment of their adherence to the Santiago Principles. Timor-Leste Petroleum Fund has decided to conduct an annual review of the Santiago Principles' implementation, which is published in the Petroleum Fund Annual Report and on the IFSWF's website. The Ministry of Finance, which is responsible for the overall management of the Petroleum Fund, has completed the twelfth self-assessment of the Fund's adherence to the Santiago Principles and its results are presented in the table below. Key sources are identified for each principle. Reference is made throughout the document to the following formative documents, which are available on the Ministry of Finance's website: https://www.mof.gov.tl/pagedetails/petroleum-fund-of-timor-leste

The Petroleum Fund Law: Petroleum Fund Law No. 9/2005, of 3rd of August as amended by the Law No. 12/2011, of 28th of September.

The Petroleum Fund Operational Management Agreement (OMA) signed on 25 June 2009 between the Ministry of Finance and Timor-Leste's Central Bank ("BCTL" - Banco Central de Timor-Leste), the appointed operational manager of the Petroleum Fund.

The Petroleum Fund Law has been supplemented by amendments to the Petroleum Activities Law No. 13/2005, of 2nd of September, 2nd amendment by the Law No. 6/2019 of 4th of December.

The BCTL's website also provides a general overview of the Petroleum Fund and publishes the Petroleum Fund Monthly and Quarterly Reports with audited financial statements.

https://www.bancocentral.tl/en/go/about-petroleum-fund

 $\underline{https://www.bancocentral.tl/en/go/publications-key-report-petroleum-fund-report}$

Information on the Petroleum Fund's Investment Advisory Board (IAB) and its advice are published in Petroleum Fund Annual Reports that are available on both the Ministry of Finance and BCTL websites:

https://www.mof.gov.tl/pagedetails/petroleum-fund-of-timor-leste

https://www.mof.gov.tl/publicationdetails/relatorio-anual-fundu-petroliferu-ba-tinan-2021

https://www.bancocentral.tl/en/go/investment-advisory-board3

Principle	Implementation
I. Legal framewo	ork, objectives, and coordination with macroeconomic policies
1. The legal framework for the SWF should be sound and sup its effective operation and the achievement of its stated objective(s).	requirement set by Article 139 of the Constitution of the Republic that mandates a fair and equitable use of the natural resources in accordance with national interests and the establishment of a mandatory financial reserve from the exploitation of these resources.
1.1. The legal framework for t SWF should ensure legal soundness of the SWF and its transactions.	established the legal framework for the Petroleum Fund. This was supplemented by recent amendments made to the Petroleum Activities Law.
1.2. The key features of the SWF's legal basis and structur as well as the legal relationshi	
between the SWF and other st bodies, should be publicly disclosed.	 The Petroleum Fund Law: provides mechanisms that assist Timor-Leste to sustainably manage its
disclosed.	 petroleum revenues, details the parameters for operating and managing the Petroleum Fund, defines the asset allocation guidelines and risk limits, governs the collection and management of the receipts,
	 regulates transfers to the State Budget, defines the roles and responsibilities of the entities involved in the management of the Fund, and provides for accountability and oversight of these activities.
	The Petroleum Fund Law requires the Ministry of Finance to enter into an agreement with the Operational Manager. The Operational Management Agreement (OMA) was signed between the Ministry of Finance and BCTL, the Operational Manager, on 12 October 2005 with the subsequent amendments to account for key changes made to the Fund's investment strategies. The agreement specifies key functions and competencies of the Ministry of Finance, the government's entity that is responsible for the overall management of the Fund and the BCTL, which is responsible for the operational management of the Fund.
	Sources: Petroleum Fund Law https://mj.gov.tl/jornal/public/docs/2002_2005/leis_parlamento_nacional/9_2005.pdf
	https://mj.gov.tl/jornal/public/docs/2011/serie_1/serie1_no36.pdf
	http://timor-leste.gov.tl/wp-content/uploads/2010/03/Law_2005_9_petroleum_fund_lawpdf
	Petroleum Activities Law https://mj.gov.tl/jornal/public/docs/2002_2005/leis_parlamento_nacional/13_2005.pdf
	https://mj.gov.tl/jornal/public/docs/2019/serie_1/SERIE_I_NO_2_A.pdf
	Operational Management Agreement
2. The policy purpose of the S should be clearly defined and publicly disclosed.	WF The Petroleum Fund accumulates petroleum revenues from the extraction of natural resources. The preamble of the Petroleum Fund Law decrees that the purpose of establishing the Fund is to contribute to a prudent management of the petroleum resources for the benefit of both current and future generations. The Petroleum Fund is a tool that contributes to sound fiscal policy, where appropriate consideration and weight is given to the long-term interest of Timor-Leste's citizens. The Petroleum Fund finances the Government's expenditure and acts as a saving vehicle for future generations

Detailed information on the purpose of creating the Petroleum Fund is provided by the Ministry of Finance in the Fund's Annual Reports and regular public consultations.

Sources: Petroleum Fund Law https://mj.gov.tl/jornal/public/docs/2002_2005/leis_parlamento_nacional/9_2005.pdf

https://mj.gov.tl/jornal/public/docs/2011/serie_1/serie1_no36.pdf

Principle	Implementation
	http://timor-leste.gov.tl/wp-
	content/uploads/2010/03/Law 2005 9 petroleum fund law .pdf
	Petroleum Fund Annual Reports
	https://www.mof.gov.tl/publicationdetails/relatorio-anual-fundu-petroliferu-ba-tinan- 2021
	https://www.bancocentral.tl/en/go/publications-key-report-petroleum-fund-report
3. Where the SWF's activities have significant direct domestic macroeconomic implications, those activities should be closely coordinated with the domestic fiscal and monetary authorities, so as to ensure consistency with the overall macroeconomic policies.	The Petroleum Fund is integrated into the State Budget. Transfers are made from the Petroleum Fund to the State Budget to finance the Government's budget deficit. Transfers are guided by the Estimated Sustainable Income (ESI), the amount that can be transferred from the Petroleum Fund. The rationale for adopting the ESI is to smooth the spending of temporarily high petroleum income, shield against the volatility of petroleum inflows, and safeguard the sustainable use of public finances. The Petroleum Fund's assets are invested primarily overseas in financial market instruments. Following amendments to the Petroleum Activities Law in 2019, the Fund can be also invested in petroleum operations in the national territory or abroad, subject to a 5% exposure limit.
	The Ministry of Finance is responsible for the overall management of the Petroleum Fund and also coordinates the preparation, discussion and execution of the Government's budget.
	Sources: Petroleum Fund Law https://mj.gov.tl/jornal/public/docs/2002_2005/leis_parlamento_nacional/9_2005.pdf
	https://mj.gov.tl/jornal/public/docs/2011/serie_1/serie1_no36.pdf
	http://timor-leste.gov.tl/wp-content/uploads/2010/03/Law_2005_9_petroleum_fund_lawpdf
	Petroleum Activities Law https://mj.gov.tl/jornal/public/docs/2002_2005/leis_parlamento_nacional/13_2005.pdf
	https://mj.gov.tl/jornal/public/docs/2019/serie 1/SERIE I NO 2 A.pdf
	Ministry of Finance Budget Books https://www.mof.gov.tl/pagedetails/budget-and-spending-documents
4. There should be clear and	The Petroleum Fund Law clearly defines the methods of funding and withdrawals.
publicly disclosed policies, rules, procedures, or arrangements in relation to the SWF's general approach to funding, withdrawal, and spending operations.	All petroleum revenues initially enter the Fund before any transfers are made to the State Budget. The Petroleum Fund Law defines what constitutes Petroleum Fund receipts and sets out the mechanisms for handling these receipts. The returns on the Petroleum Fund's investments also contribute to the accumulation of the Fund's capital.
 4.1. The source of SWF funding should be publicly disclosed. 4.2. The general approach to withdrawals from the SWF and spending on behalf of the Government should be publicly disclosed. 	The Petroleum Fund Law also sets out the requirements for withdrawals. The only permissible transfers out of the Petroleum Fund is to the State Budget, which requires Parliament's approval. The State Budget identifies the contribution made by the Fund to the Government's expenditure. Withdrawals are guided by the ESI rule (see GAPP 3). The National Parliament may approve an excess transfer above the ESI where justification is provided that it is in the long-term interest of Timor-Leste.
disclosed.	Detailed information on petroleum receipts and transfers made to finance the Government's budget are publicly disclosed in the Petroleum Fund Annual Reports, Budget Reports prepared by the Ministry of Finance and the Petroleum Fund quarterly and monthly reports from the BCTL.
	A complete list of all entities making payments to the Petroleum Fund is compiled and certified by an external auditor and published annually both in the Petroleum Fund Annual Report (Annex XI – Compilation Report of Petroleum Receipts) and Timor-Leste's EITI (Extractive Industries Transparency Initiative) reports. Timor-Leste was accepted as an EITI compliant country on 1 July 2010.
	Sources: Petroleum Fund Law

Principle	Implementation
	https://mj.gov.tl/jornal/public/docs/2002_2005/leis_parlamento_nacional/9_2005.pdf
	https://mj.gov.tl/jornal/public/docs/2011/serie 1/serie1 no36.pdf
	http://timor-leste.gov.tl/wp-content/uploads/2010/03/Law 2005 9 petroleum fund law .pdf
	Petroleum Fund Annual and Quarterly Reports https://www.mof.gov.tl/publicationdetails/relatorio-anual-fundu-petroliferu-ba-tinan- 2021 https://www.bancocentral.tl/en/go/publications-key-report-petroleum-fund-report
	Ministry of Finance Budget Books https://www.mof.gov.tl/pagedetails/budget-and-spending-documents
	TL-EITI reports and website - www.eiti.gov.tl
	https://eiti.org/documents/timor-leste-2020-eiti-report
5. The relevant statistical data pertaining to the SWF should be reported on a timely basis to the owner, or as otherwise required,	Transparency is a fundamental principle of the Petroleum Fund Law. The Law sets out the requirements for all entities involved in the management of the Fund to provide and publish the reports pertaining to the activities of the Fund.
for inclusion where appropriate in macroeconomic data sets.	The Ministry of Finance prepares and publishes the Petroleum Fund Annual Report along with the Petroleum Fund financial statements. The Law requires an international accredited auditor to issue and publish an annual audit report on the Fund's financial statements. The Ministry of Finance also prepares the State Budget for the National Parliament. The Budget reports the Estimated Sustainable Income (ESI), withdrawals in excess of the ESI, and other matters relevant to the Petroleum Fund.
	The BCTL, on a quarterly basis, provides reports to the Ministry of Finance on the Fund's performance and also publishes a monthly report on the Fund's performance on its own website.
	All information is publicly available on the MOF and BCTL websites.
	Sources: Petroleum Fund Law https://mj.gov.tl/jornal/public/docs/2002_2005/leis_parlamento_nacional/9_2005.pdf
	https://mj.gov.tl/jornal/public/docs/2011/serie_1/serie1_no36.pdf
	http://timor-leste.gov.tl/wp-content/uploads/2010/03/Law_2005_9_petroleum_fund_lawpdf
	Petroleum Fund Annual, Quarterly and Monthly Reports
	https://www.mof.gov.tl/publicationdetails/relatorio-anual-fundu-petroliferu-ba-tinan- 2021
	https://www.bancocentral.tl/en/go/publications-key-report-petroleum-fund-report
	Ministry of Finance Budget Books. https://www.mof.gov.tl/pagedetails/budget-and-spending-documents
II. Institutional Frame	work and Governance Structure
6 The governance framework for	The National Parliament of Timor-Leste established the Petroleum Fund Law which

6. The governance framework for the SWF should be sound and establish a clear and effective division of roles and responsibilities in order to facilitate accountability and operational independence in the management of the SWF to pursue its objectives. The National Parliament of Timor-Leste established the Petroleum Fund Law, which defines the roles and responsibilities of the entities involved in the management of the Fund.

The Minister of Finance is responsible for the overall management of the Petroleum Fund on behalf of the Government. The Ministry of Finance sets the investment policy, enters into a management agreement with the Operational Manager, and monitors the Fund's performance. The Investment Advisory Board (IAB) provides independent advice to the Minister of Finance on the Fund's investment policy and management, including the investment mandates for the Fund.

Principle	Implementation
	The BCTL, as Operational Manager, is responsible for the Fund's operations, including implementing the investment mandates set by the Ministry of Finance. The BCTL manages some of the portfolio internally and also contracts with external managers to manage and invest the Fund's assets and monitors their performance.
	Sources: Petroleum Fund Law, Operational Management Agreement. https://mj.gov.tl/jornal/public/docs/2002 2005/leis parlamento nacional/9 2005.pdf
	https://mj.gov.tl/jornal/public/docs/2011/serie_1/serie1_no36.pdf
	http://timor-leste.gov.tl/wp-content/uploads/2010/03/Law_2005_9_petroleum_fund_lawpdf
7. The owner should set the objectives of the SWF, appoint the members of its governing body(ies) in accordance with clearly defined procedures, and exercise oversight over the SWF's operations.	The National Parliament, representing the people of Timor-Leste, sets the objectives of the Fund as outlined in the Petroleum Fund Law (see GAPP 1). The Law defines the broad asset allocation and risk limits. The Petroleum Fund Consultative Council (PFCC), a statutory body with broad representation, is appointed to advise the Parliament on matters relating to the performance and operation of and appropriations from the Petroleum Fund.
operations.	The Ministry of Finance is responsible for the overall management of the Fund, which includes determining the investment policy in accordance with the provisions in the Law. The Ministry of Finance is required to present to the National Parliament the Fund's investment policy and any changes to its principal asset allocation that will materially impact on the overall level of risk. The Ministry of Finance sets the investment mandates, which reflect the acceptable level of risk, and also exercises oversight of the overall management of the Fund.
	The Minister of Finance receives independent advice from the Investment Advisory Board (IAB) on the investment strategy and management of the Fund. The Prime Minister appoints members of the IAB on the advice of the Ministry of Finance.
	The Timor-Leste Central Bank (BCTL) is the Operational Manager of the Fund. The BCTL's specific responsibilities are set out in an Operational Management Agreement with the Minister of Finance. This includes reporting requirements that allow the Ministry of Finance to exercise its oversight role.
	Sources: Petroleum Fund Law, Operational Management Agreement. https://mj.gov.tl/jornal/public/docs/2002_2005/leis_parlamento_nacional/9_2005.pdf
	https://mj.gov.tl/jornal/public/docs/2011/serie_1/serie1_no36.pdf
	http://timor-leste.gov.tl/wp-content/uploads/2010/03/Law 2005 9 petroleum fund law .pdf
8. The governing body (ies) should act in the best interests of the SWF, and have a clear mandate and adequate authority and competency to carry out its	The National Parliament through the Petroleum Fund law sets the objective of the Fund, the broad asset allocation guidelines and the risk limits. It is assisted by the Petroleum Fund Consultative Council (PFCC). The Petroleum Fund Consultative Council (PFCC) seek to safeguard the proper management of the Petroleum Fund.
functions.	The Ministry of Finance has the authority to determine the strategy and policies to achieve the Petroleum Fund's objectives. The Minister of Finance is supported by the Petroleum Fund Policy and Management Office (PFPMO) at the Ministry of Finance.
	In carrying out his/her functions, the Minister of Finance is required to seek advice from the IAB. The Law requires that at least three of the IAB members have significant knowledge and experience in financial investment management.
	Further to the discussion in Principle 7, the Minister of Finance is accountable to the Parliament and is required to provide relevant reporting annually and whenever required.
	The BCTL, through the Operational Management Agreement, has been delegated the responsibility for operational management of the Fund. The agreement seeks to ensure that the BCTL acts in the best interests of the Fund and sets out the operational manager's responsibilities.
	Sources: Petroleum Fund Law, Operational Management Agreement

Principle	Implementation
· r	https://mj.gov.tl/jornal/public/docs/2002_2005/leis_parlamento_nacional/9_2005.pdf
	https://mj.gov.tl/jornal/public/docs/2011/serie 1/serie1 no36.pdf
	http://timor-leste.gov.tl/wp-content/uploads/2010/03/Law 2005 9 petroleum fund law .pdf
	Petroleum Fund Annual Reports
	https://www.mof.gov.tl/publicationdetails/relatorio-anual-fundu-petroliferu-ba-tinan- 2021
	https://www.bancocentral.tl/en/go/publications-key-report-petroleum-fund-report
9. The operational management of the SWF should implement the SWF's strategies in an independent manner and in accordance with clearly defined responsibilities.	The Petroleum Fund Law defines the roles and responsibilities of the Operational Manager, the BCTL. The BCTL's specific responsibilities are clearly set out in the Operational Management Agreement (OMA) with the Minister of Finance. The BCTL is delegated with authority to make decisions relating to the operational management of the Fund as set out in the OMA. The Operational Manager is able to deduct reasonable management expenses, in accordance with the OMA.
	Sources: Petroleum Fund Law, Operational Management Agreement. https://mj.gov.tl/jornal/public/docs/2002_2005/leis_parlamento_nacional/9_2005.pdf
	https://mj.gov.tl/jornal/public/docs/2011/serie_1/serie1_no36.pdf
	http://timor-leste.gov.tl/wp-content/uploads/2010/03/Law 2005 9 petroleum fund law .pdf
10. The accountability framework for the SWF's operations should	Accountability arrangements are detailed in the Petroleum Fund Law and the Operational Management Agreement.
be clearly defined in the relevant legislation, charter, other constitutive documents, or management agreement.	The Ministry of Finance, on behalf of the Government, is accountable to the National Parliament and the general public. It reports to the Parliament on the performance of the Fund on an annual basis and is required to publish all advice received from the IAB in the Petroleum Fund Annual Report (Annex XII), or earlier upon request.
	The Operational Manager, the BCTL, is appointed by the Minister of Finance and is accountable to the Minister of Finance for operational management of the Petroleum Fund. The BCTL may appoint external investment managers subject to the Minister's consent. The BCTL reports to the Minister on the Fund's performance on a quarterly basis. These reports are published and available on the Central Bank's website.
	Sources: Petroleum Fund Law, Operational Management Agreement https://mj.gov.tl/jornal/public/docs/2002_2005/leis_parlamento_nacional/9_2005.pdf
	https://mj.gov.tl/jornal/public/docs/2011/serie_1/serie1_no36.pdf
	http://timor-leste.gov.tl/wp-content/uploads/2010/03/Law_2005_9_petroleum_fund_lawpdf
	Petroleum Fund Annual and Quarterly Reports
	https://www.mof.gov.tl/publicationdetails/relatorio-anual-fundu-petroliferu-ba-tinan- 2021
	https://www.bancocentral.tl/en/go/publications-key-report-petroleum-fund-report
11. An annual report and accompanying financial statements on the SWF's operations and performance should be prepared in a timely fashion and in accordance with recognized international or national accounting standards in a	The Petroleum Fund Law requires the Government to prepare and submit to the Parliament an annual report of the Fund's operations and performance for the fiscal year, including financial statements prepared according to International Financial Reporting Standards (IFRS) and audited by an internationally recognized auditor, at the same time as the Government's annual financial accounts of that year. The Law identifies the minimum information that need to be disclosed in the Petroleum Fund Annual Report.
consistent manner.	The Petroleum Fund Law provides that the Director of Treasury of the Ministry of Finance is responsible for maintaining the Petroleum Fund accounts and records, and

Principle	Implementation
	preparing financial statements, in accordance with the IFRS. Accounting and preparation of the financial statements is delegated to the BCTL as the Fund's Operational Manager.
	Sources: Petroleum Fund Law, Operational Management Agreement https://mj.gov.tl/jornal/public/docs/2002 2005/leis parlamento nacional/9 2005.pdf
	https://mj.gov.tl/jornal/public/docs/2011/serie_1/serie1_no36.pdf
	http://timor-leste.gov.tl/wp-content/uploads/2010/03/Law_2005_9_petroleum_fund_lawpdf
	Petroleum Fund Annual Reports and Financial Statements https://www.mof.gov.tl/publicationdetails/relatorio-anual-fundu-petroliferu-ba-tinan- 2021
	https://www.bancocentral.tl/en/go/publications-key-report-petroleum-fund-report
12. The SWF's operations and financial statements should be audited annually in accordance with recognized international or national auditing standards in a	The Petroleum Fund Law requires the Fund's annual financial statements to be audited by an internationally recognized accounting firm. The international auditor is appointed by the Ministry of Finance and is subject to strict qualification criteria and a transparent selection process. The audited financial statements are submitted to the Parliament together with the Petroleum Fund Annual Report.
consistent manner.	The Petroleum Fund Law also requires the accounts, records and other documents relating to the Petroleum Fund to be internally audited every six months. This is undertaken by the BCTL's Internal Audit, which is independent from the investment management area.
	Sources: Petroleum Fund Law, Operational Management Agreement https://mj.gov.tl/jornal/public/docs/2002_2005/leis_parlamento_nacional/9_2005.pdf
	https://mj.gov.tl/jornal/public/docs/2011/serie_1/serie1_no36.pdf
	http://timor-leste.gov.tl/wp-content/uploads/2010/03/Law_2005_9_petroleum_fund_lawpdf
	Petroleum Fund Annual Reports and Financial Statements
	https://www.mof.gov.tl/publicationdetails/relatorio-anual-fundu-petroliferu-ba-tinan- 2021
	https://www.bancocentral.tl/en/go/publications-key-report-petroleum-fund-report
13. Professional and ethical standards should be clearly defined and made known to the	Each of the institutions involved in the management of the Petroleum Fund has its own professional and ethical standards to ensure the soundness and integrity of the Fund's operations.
members of the SWF's governing body(ies), management, and staff.	The professional and ethical standards for the Ministry of Finance's staff are defined by the Public Service Law no. 8/2004, 16 th of June, as amended by Law no.5/2009, 15 th of July.
	All the staff of the Operational Manager are bound by the BCTL's Code of Conduct.
	The Petroleum Fund Law also requires members of the IAB, before taking office, to declare in writing that their appointment has no conflict with any personal or family interests. The IAB has established its own Standard of Conduct in its Operational Regulations, which includes disclosures of potential conflict of interest. The Operational Regulations are published on the Ministry of Finance website.
	Sources: Petroleum Fund Law, BCTL, MoF and Ministry of Justice websites. Petroleum Fund Law https://mj.gov.tl/jornal/public/docs/2002_2005/leis_parlamento_nacional/9_2005.pdf
	https://mj.gov.tl/jornal/public/docs/2011/serie_1/serie1_no36.pdf
	http://timor-leste.gov.tl/wp-content/uploads/2010/03/Law_2005_9_petroleum_fund_lawpdf

Principle	Implementation
	Civil Service Act https://mj.gov.tl/jornal/public/docs/2002 2005/leis parlamento nacional/8 2004.pdf
	https://mj.gov.tl/jornal/public/docs/2009/serie_1/serie1_no25.pdf
	BCTL's Code of Conduct https://www.bancocentral.tl/en/go/code-of-conduct
	IAB Rules and Procedures https://www.bancocentral.tl/en/go/rules
14. Dealing with third parties for the purpose of the SWF's operational management should be based on economic and financial grounds, and follow clear rules and procedures.	The BCTL's dealings with third parties as operational manager are based purely on economic and financial grounds and follow a clear established procedure.
	The Operational Management Agreement provides that the BCTL is responsible for the tendering and selection of external investment managers. The selection is based on the parameters for the investment mandate set by the Ministry of Finance. The Petroleum Fund Law also specifies the minimum requirements for the engagement of external managers. The Minister of Finance must be satisfied that each external investment manager has sufficient equity, guarantees and insurance; a sound record of operational and financial performance; and has business references and a reputation of the highest standard. The IAB advises the Minister on whether the BCTL's recommended managers are consistent with the objectives of the mandate.
	The BCTL is also responsible for tendering for other services, including the Petroleum Fund's custodian and procurement for the IAB. The BCTL's selection procedure is rigorous, fair and transparent and in compliance with the substantive provisions of Timor-Leste's laws.
	Sources: Petroleum Fund Law, Operational Management Agreement https://mj.gov.tl/jornal/public/docs/2002_2005/leis_parlamento_nacional/9_2005.pdf
	https://mj.gov.tl/jornal/public/docs/2011/serie_1/serie1_no36.pdf
	http://timor-leste.gov.tl/wp-content/uploads/2010/03/Law_2005_9_petroleum_fund_lawpdf
15. SWF operations and activities in host countries should be conducted in compliance with all applicable regulatory and disclosure requirements of the countries in which they operate.	The Petroleum Fund Law requires the management of the Petroleum Fund to be conducted in compliance with all applicable regulatory and disclosure requirements of the countries in which the investments are made.
	Source: Petroleum Fund Law https://mj.gov.tl/jornal/public/docs/2002_2005/leis_parlamento_nacional/9_2005.pdf
	https://mj.gov.tl/jornal/public/docs/2011/serie_1/serie1_no36.pdf
	http://timor-leste.gov.tl/wp-content/uploads/2010/03/Law 2005 9 petroleum fund law .pdf
	Petroleum Fund Annual Reports and Financial Statements.
	https://www.mof.gov.tl/publicationdetails/relatorio-anual-fundu-petroliferu-ba-tinan- 2021
	https://www.bancocentral.tl/en/go/publications-key-report-petroleum-fund-report
16. The governance framework and objectives, as well as the manner in which the SWF's management is operationally independent from the owner, should be publicly disclosed.	The Petroleum Fund's governance framework and objectives are established by the Parliament in the Petroleum Fund Law. The Operational Management Agreement provides details of the division of responsibilities between the Ministry of Finance and the BCTL, along with accountability arrangements.
	The Minister of Finance is required to seek the advice from the IAB, an independent Board staffed by investment experts, before making any decision relating to the Fund's investment strategy and management.
	Information on the governance framework and objectives is detailed in the Petroleum Fund Law and published in the Petroleum Fund Annual Report.

Principle	Implementation	
	Sources: Petroleum Fund Law, Operational Management Agreement https://mj.gov.tl/jornal/public/docs/2002 2005/leis parlamento nacional/9 2005.pdf https://mj.gov.tl/jornal/public/docs/2011/serie_1/serie1_no36.pdf http://timor-leste.gov.tl/wp-content/uploads/2010/03/Law 2005 9 petroleum fund law .pdf	
	Petroleum Fund Annual Reports	
	https://www.mof.gov.tl/publicationdetails/relatorio-anual-fundu-petroliferu-ba-tinan- 2021	
	https://www.bancocentral.tl/en/go/publications-key-report-petroleum-fund-report	
17. Relevant financial information regarding the SWF should be publicly disclosed to demonstrate its economic and financial orientation, so as to contribute to stability in international financial markets and enhance trust in recipient countries.	Information regarding the Petroleum Fund's asset allocation, its investment mandates and benchmarks and investment performance are published in the BCTL's quarterly performance reports and the Petroleum Fund's Annual Report and audited financial statements. A full list of the Petroleum Fund's holdings is provided in the Petroleum Fund financial statements, which are annexed to the Petroleum Fund Annual Report (Annex II – Audited Financial Statements). The reports are available on the Ministry of Finance and BCTL's websites.	
	Sources: Petroleum Fund Law, Operational Management Agreement Annex 1 https://mj.gov.tl/jornal/public/docs/2002_2005/leis_parlamento_nacional/9_2005.pdf	
	https://mj.gov.tl/jornal/public/docs/2011/serie_1/serie1_no36.pdf	
	http://timor-leste.gov.tl/wp-content/uploads/2010/03/Law_2005_9_petroleum_fund_lawpdf	
	Petroleum Fund Annual and Quarterly Reports, Petroleum Fund Financial Statements	
	https://www.mof.gov.tl/publicationdetails/relatorio-anual-fundu-petroliferu-ba-tinan- 2021	
	https://www.bancocentral.tl/en/go/publications-key-report-petroleum-fund-report	
III. Investment and Risk Management Framework		
18. The SWF's investment policy	The Fund's investment policy is directed by the provisions in the Petroleum Fund	

- 18. The SWF's investment policy should be clear and consistent with its defined objectives, risk tolerance, and investment strategy, as set by the owner or the governing body(ies), and be based on sound portfolio management principles.
- 18.1. The investment policy should guide the SWF's financial risk exposures and the possible use of leverage.
- 18.2. The investment policy should address the extent to which internal and/or external investment managers are used, the range of their activities and authority, and the process by which they are selected and their performance monitored.
- 18.3. A description of the investment policy of the SWF should be publicly disclosed.

The Fund's investment policy is directed by the provisions in the Petroleum Fund Law that define the asset allocation guidelines, eligible investments, concentration limits and investment principles, which include diversification and maximizing the risk-adjusted financial return.

The Ministry of Finance, on behalf of the Government, determines the investment policy, which is designed to meet the investment objectives of the Fund after taking into account the risk preference of the Timor-Leste people and any constraints under which the Fund operates. The IAB advises the Minister of Finance on the investment strategy. The advice of the IAB is guided by its publicly disclosed Investment Beliefs and Principles.

The investment policy is described in the Petroleum Fund Annual Report. Annex 1 of the Operational Management Agreement specifies the Fund's strategic asset allocation and benchmark portfolio, the parameters for each of the investment mandates and where derivatives are permissible.

The Minister of Finance, with advice from the IAB, determines whether a mandate will be internally or externally managed. The Ministry of Finance monitors the internally managed mandates. The selection process for external investment managers is undertaken by the BCTL as operational manager and is based on professional and commercial criteria. The external managers are given clearly defined mandates, including expected performance, risk and fees. Their performance is monitored by the BCTI

Sources: Petroleum Fund Law, Operational Management Agreement https://mj.gov.tl/jornal/public/docs/2002 2005/leis parlamento nacional/9 2005.pdf

https://mj.gov.tl/jornal/public/docs/2011/serie 1/serie1 no36.pdf

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Principle	Implementation
21. SWFs view shareholder ownership rights as a fundamental element of their equity investments' value. If an SWF chooses to exercise its ownership rights, it should do so in a manner that is consistent with its investment policy and protects the financial value of its investments. The SWF should publicly disclose its general approach to voting securities of listed entities, including the key factors guiding its exercise of ownership rights. 22. The SWF should have a	The BCTL, as operational manager, exercises the Petroleum Fund's shareholder ownership rights by engaging the Institutional Shareholder Services (ISS) proxy voting service. The Petroleum Fund Law requires the Ministry of Finance and the Operational
framework that identifies, assesses, and manages the risks of its operations. 22.1. The risk management framework should include reliable information and timely reporting systems, which should enable the adequate monitoring and management of relevant risks within acceptable parameters and levels, control and incentive mechanisms, codes of conduct, business continuity planning, and an independent audit function. 22.2. The general approach to the SWF's risk management framework should be publicly disclosed.	Manager to develop and maintain policies, systems and procedures to ensure that the risks associated with the implementation of the investment strategy are identified, monitored and managed. The BCTL has developed an operational risk management framework for the Petroleum Fund. This includes a risk register that identifies the section which owns the risk and the associated internal controls. The BCTL's Internal Audit area, which is independent from its investment management area, monitors and ensures that procedures are being followed and there is an effective framework in place. All the staff of the BCTL are bound by its Code of Conduct. The financial risk in the Petroleum Fund's strategy is embedded in the Fund's investment policy that is set by the Ministry of Finance, specifically the parameters for the global mandate and the investment mandates included in Annex 1 of the Operational Management Agreement. The appropriate level of financial risk is assessed during regular asset allocation reviews. The Ministry of Finance is required to present the investment policy to the Parliament on an annual basis as part of the Petroleum Fund Annual Report or prior to making any changes to the Fund's principal asset allocation. The BCTL manages the global mandate, which is comprised of individual mandates with specific allocations. There is periodic rebalancing of the Growth Portfolio and transfers from the Growth Portfolio to the Liquidity Portfolio. The BCTL also monitors the compliance of the external managers with their risk targets. The BCTL reports on compliance to the Ministry of Finance including its risk exposure through the BCTL's quarterly performance reports. The Ministry of Finance reports to the Parliament on an annual basis through the Petroleum Fund Annual Reports. Sources: Petroleum Fund Law, Operational Management Agreement https://mj.gov.tl/jornal/public/docs/2002_2005/leis parlamento_nacional/9_2005.pdf https://www.mof.gov.tl/publicationdetails/relatorio-anual-fundu-petroliferu-ba-tinan-2021 ht
23. The assets and investment performance (absolute and relative to benchmarks, if any) of the SWF should be measured and reported to the owner according to clearly defined principles or standards.	The Petroleum Fund Law requires the Operational Manager, the BCTL, to report to the Ministry of Finance on a quarterly basis the performance and activities of the Petroleum Fund relative to the benchmarks. Performance reporting is prepared by the Fund's custodian, JP Morgan, in compliance with the Global Investment Performance Standards (GIPS) methodology. The quarterly report is published within 40 days after the end of every quarter. Both BCTL

Principle	Implementation
	and MOF take further initiative to have a face-to-face press conference with relevant stakeholders to coincide with the release of the Petroleum Fund quarterly report.
	Sources: Petroleum Fund Law https://mj.gov.tl/jornal/public/docs/2002_2005/leis_parlamento_nacional/9_2005.pdf
	https://mj.gov.tl/jornal/public/docs/2011/serie 1/serie1 no36.pdf
	http://timor-leste.gov.tl/wp-content/uploads/2010/03/Law_2005_9_petroleum_fund_lawpdf
	Petroleum Fund Quarterly Reports
	https://www.mof.gov.tl/publicationdetails/relatorio-anual-fundu-petroliferu-ba-tinan- 2021
	https://www.bancocentral.tl/en/go/publications-key-report-petroleum-fund-report
	https://www.mof.gov.tl/eventdetails/petroleum-fund-performance-in-the-first-quarter- 2023
24. A process of regular review of the implementation of the GAPP should be engaged in by or on behalf of the SWF.	The Ministry of Finance intends to review the Petroleum Fund's implementation of the Santiago Principles annually and publish the results of the self-assessment in the Petroleum Fund Annual Report. This is the twelfth review. The Petroleum Fund conducted its first review in 2010.
	Source: Petroleum Fund Annual Reports
	https://www.mof.gov.tl/publicationdetails/relatorio-anual-fundu-petroliferu-ba-tinan- 2021
	https://www.bancocentral.tl/en/go/publications-key-report-petroleum-fund-report



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