Alberta Heritage Savings Trust Fund

2023–24 Second Quarter
September 30, 2023

NOVEMBER 2023

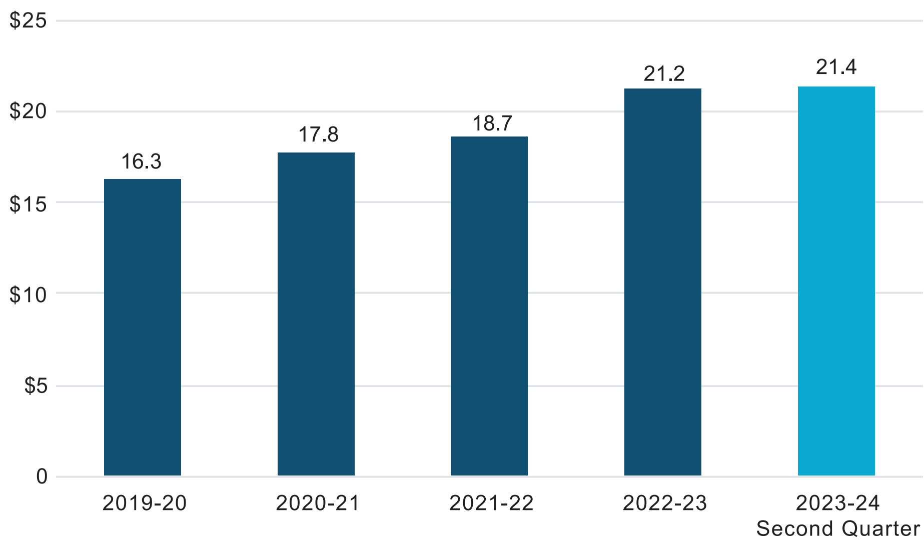
2023-24 Second Quarter Highlights
as of September 30, 2023

$21.4 Billion
assets at quarter end

5.9%
5-year return

0.9%
fiscal year to date return

ASSETS ($ BILLION)



VALUE ADDED BY MANAGER

second quarter
-0.3%
below benchmark return of -0.8%

fiscal year to date
0.0%
at benchmark return of 0.9%

past five years
0.5%
above benchmark return of 5.4%

ASSET CLASS RETURNS - FISCAL YEAR TO DATE

fixed income
-2.0%
second quarter -2.1%

inflation sensitive and alternatives
0.2%
second quarter -1.5%

equities
2.5%
second quarter -0.6%

-1.1%
second quarter return

3.1%
annualized 5-year growth

6.9%
5-year real return target (inflation + 4.5%)

$308 Million
second quarter net income

$1.05 Billion
fiscal year to date net income

12-MONTH ROLLING RETURNS AS AT SEPTEMBER 30, 2023

	2023	2022	2021	2020	2019
Alberta Heritage Savings Trust Fund	8.1%	-0.9%	16.5%	-0.9%	7.9%
Policy Benchmark	7.5%	-3.6%	10.1%	7.2%	6.6%
Value (Lost) Added	0.6%	2.8%	6.3%	-8.1%	1.4%
CPI + 4.5 per cent, five year rolling	7.9%	7.7%	6.6%	6.0%	6.2%

ASSET ALLOCATION AND INVESTMENT PERFORMANCE AS AT SEPTEMBER 30, 2023

	Market Value	% of Portfolio	3 Month	6 Month	1 Year	5 Year	10 Year
Alberta Heritage Savings Trust Fund	$21,420	100.0%	-1.1%	0.9%	8.1%	5.9%	8.1%
Policy Benchmark			-0.8%	0.9%	7.5%	5.4%	7.3%
Value Added			-0.3%	0.0%	0.6%	0.5%	0.8%
CPI + 4.5 per cent, five year rolling						6.9%	
Money markets and Fixed Income	$4,672	21.8%	-1.5%	-1.2%	3.1%	2.1%	3.2%
Cash and Equivalents	$865	4.0%	1.3%	2.4%	4.5%	1.8%	1.5%
Fixed Income	$3,807	17.8%	-2.1%	-2.0%	2.4%	1.9%	3.2%
Inflation Sensitive and Alternatives	$7,072	33.0%	-1.5%	0.2%	2.7%	5.0%	7.1%
Real Estate	$3,900	18.2%	-1.4%	-1.4%	-1.4%	2.4%	5.6%
Private Infrastructure	$2,556	11.9%	-1.6%	3.3%	6.0%	7.8%	8.6%
Renewable Resources	$616	2.9%	-1.7%	-1.7%	17.1%	14.5%	13.3%
Equity	$9,606	44.9%	-0.6%	2.5%	14.8%	7.9%	10.4%
Canadian Public Equity	$1,597	7.5%	-2.3%	-1.3%	8.8%	6.3%	7.3%
Foreign Equity	$6,092	28.4%	-0.8%	2.6%	19.7%	7.1%	10.8%
Private Equity	$1,917	9.0%	1.6%	5.8%	5.2%	12.6%	10.8%
Overlays	$70	0.3%	6.9%	2.6%	-8.3%	-0.8%	7.0%

INCOME RECONCILIATION ($ BILLION)

March 31, 2023 book value **$18.98** + year to date investment income **$1.05** = September 30, 2023 book value **$20.03** + asset value change **$1.39** = September 30, 2023 market value **$21.42**

Alberta Heritage Savings Trust Fund

Interim Financial Statements (unaudited)
September, 2023

Statement of Financial Position

As at September 30, 2023
(unaudited)
(in millions)

		September 30, 2023		March 31, 2023
Financial assets				
Investments (Note 3)	$	21,420	$	20,474
Due from the General Revenue Fund		-		753
Net financial assets	$	21,420	$	21,227
Net financial assets (Note 5)				
Accumulated operating surplus	$	20,027	$	18,980
Accumulated remeasurement gains		1,393		2,247
	$	21,420	$	21,227

Statement of Change in Net Financial Assets

Six Months Ended September 30, 2023
(unaudited)
(in millions)

	Three Months Ended September 30,				Six Months Ended September 30,			
		2023		2022		2023		2022
Net surplus (deficit) retained in the Fund	$	308	$	62	$	1,047	$	(2)
Net remeasurement losses		(538)		(81)		(854)		(842)
(Decrease) Increase in net financial assets		**(230)**		**(19)**		**193**		**(844)**
Net financial assets, beginning of period		21,650		17,890		21,227		18,715
Net financial assets, end of period	$	21,420	$	17,871	$	21,420	$	17,871

The accompanying notes are part of these financial statements.

Statement of Operations and Accumulated Surplus

Six Months Ended September 30, 2023

(unaudited)

(in millions)

	Three Months Ended September 30,		Six Months Ended September 30,	
	2023	2022	2023	2022
Investment income (Note 6)	$ 344	$ 76	$ 1,122	$ 46
Investment expenses (Note 7)	(36)	(14)	(75)	(48)
Net income (loss) from operations	308	62	1,047	(2)
Transfers to the General Revenue Fund (Note 5b)	-	-	-	-
Net surplus (deficit) retained in the Fund (Note 5)	**308**	**62**	**1,047**	**(2)**
Accumulated operating surplus, beginning of period	19,719	17,030	18,980	17,094
Accumulated operating surplus, end of period	$ 20,027	$ 17,092	$ 20,027	$ 17,092

Statement of Remeasurement Gains and Losses

Six Months Ended September 30, 2023

(unaudited)

(in millions)

	Three Months Ended September 30,		Six Months Ended September 30,	
	2023	2022	2023	2022
Unrealized losses on investments	$ (538)	$ (85)	$ (837)	$ (842)
Less: Amounts reclassified to the Statement of Operations - realized (gains) losses on investments	-	4	(17)	-
Net remeasurement losses	**(538)**	**(81)**	**(854)**	**(842)**
Accumulated remeasurement gains, beginning of period	1,931	860	2,247	1,621
Accumulated remeasurement gains, end of period	$ 1,393	$ 779	$ 1,393	$ 779

The accompanying notes are part of these financial statements.

Statement of Cash Flows

Six Months Ended September 30, 2023

(unaudited)

(in millions)

	Three Months Ended September 30, 2023	Three Months Ended September 30, 2022	Six Months Ended September 30, 2023	Six Months Ended September 30, 2022
Operating transactions				
Net income (loss) from operations	$ 308	$ 62	$ 1,047	$ (2)
Non-cash items included/(excluded) in net income	-	4	(17)	-
	308	66	1,030	(2)
Increase in accounts receivable	-	(4)	-	(4)
Increase in accounts payable	-	4	-	4
Transfers from the General Revenue Fund (Note 5e)	-	-	753	-
Cash provided by (applied to) operating transactions	308	66	1,783	(2)
Investing transactions				
Proceeds from disposals, repayments and redemptions of investments	273	509	538	864
Purchase of investments	(585)	(580)	(1,569)	(859)
Cash (applied to) provided by investing transactions	(312)	(71)	(1,031)	5
(Decrease) increase in cash	(4)	(5)	752	3
Cash at beginning of period	869	103	113	95
Cash at end of period	$ 865	$ 98	$ 865	$ 98
Consisting of deposits and short-term securities	$ 865	$ 98	$ 865	$ 98

The accompanying notes are part of these financial statements.

Notes to the Financial Statements

September 30, 2023
(unaudited)

NOTE 1 AUTHORITY AND MISSION

The Alberta Heritage Savings Trust Fund (the Fund) operates under the authority of the *Alberta Heritage Savings Trust Fund Act,* Chapter A-23, Revised Statutes of Alberta 2000 (the Act), as amended.

The preamble to the Act describes the mission of the Fund as follows:

"*To provide prudent stewardship of the savings from Alberta's non-renewable resources by providing the greatest financial returns on those savings for current and future generations of Albertans.*"

NOTE 2 SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES AND REPORTING PRACTICES

The financial statements are prepared in accordance with Canadian public sector accounting standards. The net financial asset model is presented in the financial statements. Net financial assets are measured as the difference between the Fund's financial assets and liabilities as described in the statement of financial position.

The accounting policies of significance to the Fund are as follows:

a) VALUATION OF INVESTMENTS

Investments are recorded at fair value. As disclosed in Note 3, the Fund's investments consist primarily of direct ownership in units of pooled investment funds ("the pools"). The pools are established by Ministerial Order 04/2016, being the Establishment and Maintenance of Pooled Funds, pursuant to the *Financial Administration Act* of Alberta, Chapter F-12, Section 45, and the *Alberta Investment Management Corporation Act* of Alberta, Chapter A-26.5, Section 15 and 20. Participants in pools include government and non-government funds and plans.

Contracts to buy and sell financial instruments in the pools are between Alberta Investment Management Corporation (AIMCo), a Crown corporation within the Ministry of Treasury Board and Finance, and the third party to the contracts. Participants in the pools are not party to the contracts and have no control over the management of the pool and the selection of securities in the pool. AIMCo controls the creation of the pools and the management and administration of the pools including security selection. Accordingly, the Fund does not report the financial instruments of the pools on its statement of financial position.

The Fund becomes exposed to the financial risks and rewards associated with the underlying financial instruments in a pool when it purchases units issued by the pools and divests its exposure to those financial risks and rewards when it sells its pool units. The Fund reports its share of the financial risks in Note 4.

The fair value of pool units held directly by the Fund is derived from the fair value of the underlying financial instruments held by the pools as determined by AIMCo (see Note 3b). Investments in pool units are recorded in the Fund's accounts. The underlying financial instruments are recorded in the accounts of the pools. The pools have a market-based unit value that is used to distribute income to the pool participants and to value purchases and sales of the pool units. The pools include various financial instruments such as bonds, equities, real estate, derivatives, investment receivables and payables and cash.

Investments in units of the pools are managed and evaluated on a fair value basis. As such, all investments are designated and recorded in the financial statements at fair value.

Investments in pool units are recorded in the Fund's accounts on a trade date basis. All purchases and sales of the pool units are in Canadian dollars.

Fair value is the amount of consideration agreed upon in an arm's length transaction between knowledgeable, willing parties who are under no compulsion to act.

Impairment in the value of investments is assessed on a periodic basis. If an impairment deemed other-than-temporary is identified, the cost of the investment is written down to its realizable value. Any impairment losses are included in income on the statement of operations and accumulated surplus. A write-down of a portfolio investment to reflect a loss in value is not reversed for a subsequent increase in value.

b) INVESTMENT INCOME

i) Income distributions from the pools are recorded in the Fund's accounts and included in investment income on the statement of operations and accumulated surplus (see Note 6). Income distributions are based on the Fund's pro-rata share of total units issued by the pools.

ii) Realized gains and losses on disposal of pool units are recorded in the Fund's accounts and included in income on the statement of operations and accumulated surplus. Realized gains and losses on disposal of pool units are determined on an average cost basis.

iii) Investment income is recorded on an accrual basis. Investment income is accrued when there is reasonable assurance as to its measurement and collectability.

c) INVESTMENT EXPENSES

i) Investment expenses include all amounts incurred by the Fund to earn investment income (see Note 7). Investment expenses are recorded on an accrual basis. Transaction costs are expensed as they are incurred.

ii) Other expenses related to the direct administration of the Fund are charged to the Fund on an accrual basis.

d) REMEASUREMENT GAINS AND LOSSES

Accumulated remeasurement gains and losses primarily represent the excess or shortfall of the fair value of the pool units at period-end over the cost of the pool units. Changes in accumulated remeasurement gains and losses are recognized in the statement of remeasurement gains and losses. Changes in accumulated remeasurement gains and losses during the period include unrealized increases and decreases in fair value of the pool units and realized gains and losses on sale of the pool units. When the pool units are sold (derecognized), any accumulated unrealized gain or loss associated with the investment becomes realized and is included in net income on the statement of operations and accumulated surplus.

e) MEASUREMENT UNCERTAINTY

Measurement uncertainty exists in the fair values reported for certain investments such as private equities, infrastructure, private debt and loans, private real estate, hedge funds, renewable resources, and other investments where no readily available market prices exist. The fair values of these investments are based on estimates. Estimated fair values may not reflect amounts that could be recognized upon immediate sale, or amounts that ultimately may be recognized. Accordingly, the estimated fair values may differ significantly from the value that would have been used had readily available market prices existed for these investments (see Note 3).

f) TRANSFERS TO THE GENERAL REVENUE FUND (GRF)

In 2022-23, Section 8 of the Act was amended, eliminating the requirement for annual net income to be transferred out of the Fund to the GRF. Transfer of income from the Fund, less amounts retained for inflation proofing (see Note 5 (b)), will require approval from Treasury Board. Such transfers, should they be approved, must be completed by the end of the next fiscal year end.

NOTE 3 INVESTMENTS (in millions)

The carrying amounts of the Fund's investments are recorded on a fair value basis. The Fund's investments are managed at the asset class level for purposes of evaluating the Fund's risk exposure and investment performance against approved benchmarks based on fair value. AIMCo invests the Fund's assets in accordance with the Statement of Investment Policies and Goals (SIP&G) approved by the President of Treasury Board and Minister of Finance. The fair value of the pool units is based on the Fund's share of the net asset value of the pooled fund. AIMCo is delegated authority to independently purchase and sell securities in the pools and Fund, and units of the pools, within the ranges approved for each asset class (see Note 4).

	Fair Value Hierarchy [a]		September 30,	March 31,
Asset class	Level 2	Level 3	**2023**	**2023**
Interest-bearing securities				
Deposits and short-term securities	$ 865	$ -	$ 865	$ 113
Bonds, mortgages and private debt	1,964	1,843	3,807	3,884
	2,829	1,843	4,672	3,997
Equities				
Canadian	1,597	-	1,597	1,619
Global developed	5,245	214	5,459	5,337
Emerging markets	633	-	633	671
Private	-	1,917	1,917	1,818
	7,475	2,131	9,606	9,445
Inflation sensitive				
Real estate	-	3,900	3,900	3,920
Infrastructure	-	2,556	2,556	2,375
Renewable resources	-	616	616	666
	-	7,072	7,072	6,961
Strategic, tactical and currency investments *	5	65	70	71
Total Fair Value of Investments	$ 10,309	$ 11,111	$ 21,420	$ 20,474

* This asset class is not listed separately in the SIP&G as it relates to strategic investments and currency overlays made on an opportunistic and discretionary basis (see Note 4).

a) **Fair Value Hierarchy**: The quality and reliability of information used to estimate the fair value of investments is classified according to the following fair value hierarchy with level 1 being the highest quality and reliability.

- ***Level 1*** - fair value is based on quoted prices in an active market. Although the pools may ultimately hold publicly traded listed equity investments, the pool units themselves are not listed in an active market and therefore cannot be classified as Level 1 for fair value hierarchy purposes. Pool units classified by the Fund as Level 2 may contain investments that might otherwise be classified as Level 1.

- ***Level 2*** - fair value is estimated using valuation techniques that make use of market-observable inputs other than quoted market prices. This level includes pool units that hold public equities, debt securities and derivative contracts totalling $10,309 (March 31, 2023: $9,633).

- ***Level 3*** - fair value is estimated using inputs based on non-observable market data. This level includes pool units that hold private mortgages, hedge funds, private equities and all inflation sensitive investments totalling $11,111 (March 31, 2023: $10,841).

Reconciliation of Level 3 Investments

	September 30, 2023 *(six months)*	March 31, 2023 *(one year)*
Balance, beginning of period	$ 10,841	$ 9,651
Realized losses	25	63
Unrealized gains	2	392
Purchases of Level 3 pooled fund units	521	1,220
Sale of Level 3 pooled fund units	(278)	(485)
Balance, end of period	$ 11,111	$ 10,841

b) Valuation of Financial Instruments recorded by AIMCo in the Pools

The methods used by AIMCo to determine the fair value of investments recorded in the pools are explained in the following paragraphs**:**

- ***Interest-bearing securities***: Public interest-bearing securities are valued at the period-end closing sale price or the average of the latest bid and ask prices quoted by an independent securities valuation company. Private mortgages are valued based on the net present value of future cash flows discounted using appropriate interest rate premiums over similar Government of Canada benchmark bonds trading in the market. Private debt and loans is valued similar to private mortgages.

- ***Equities:*** Public equities are valued at the period-end closing sale price or the average of the latest bid and ask prices quoted by an independent securities valuation company. The fair value of hedge fund investments is estimated by external managers. The fair value of private equities is estimated by managers or general partners of private equity funds, pools and limited partnerships. Valuation methods for private equities may encompass a broad range of approaches. The cost approach is used to value companies without either profits or cash flows. Established private companies are valued using the fair market value approach reflecting conventional valuation methods including discounted cash flows and earnings multiple analysis.

- ***Inflation sensitive investments:*** The estimated fair value of private real estate investments is reported at the most recent appraised value, net of any liabilities against the real property. Real estate properties are appraised annually by qualified external real estate appraisers. Appraisers use a combination of methods to determine fair value including replacement cost, direct comparison, direct capitalization of earnings and discounted cash flows. The fair value of renewable resources investments is appraised annually by independent third party evaluators. Infrastructure investments are valued similar to private equity investments.

- ***Strategic, tactical and currency investments:*** The estimated fair value of infrastructure investments held in emerging market countries are valued similar to private equities. For tactical asset allocations, investments in derivative contracts provides overweight or underweight exposure to global equity and bond markets, including emerging markets. Currency investments consist of directly held currency forward and spot contracts.
- ***Foreign currency:*** Foreign currency transactions in pools are translated into Canadian dollars using average rates of exchange. At period-end, the fair value of investments in other assets and liabilities denominated in a foreign currency are translated at the period-end exchange rates.
- ***Derivative contracts:*** The carrying value of derivative contracts in a favourable and unfavourable position is recorded at fair value and is included in the fair value of the pools (see Note 4g). The estimated fair value of equity and bond index swaps is based on changes in the appropriate market-based index net of accrued floating rate interest. Interest rate swaps and cross-currency interest rate swaps are valued based on discounted cash flows using current market yields and exchange rates. Credit default swaps are valued based on discounted cash flows using current market yields and calculated default probabilities. Forward foreign exchange contracts are valued based on differences between contractual foreign exchange rates and foreign exchange forward rates. Future contracts are valued based on quoted market prices. Options to enter into interest rate swap contracts are valued based on discounted cash flows using current market yields and volatility parameters which measure changes in the underlying swap. Warrants and rights are valued at the period-end closing sale price or the average of the latest bid and ask prices quoted by an independent securities valuation company.

c) Liability Exposure

The Fund is indirectly exposed to liabilities held within the pools, the carrying value of which is a component in the determination of net fair value of investments within the pools. These liabilities are used primarily for general liquidity, risk management and active management purposes and include but are not limited to mortgages, lines of credit, derivative counterparty liabilities and repurchase agreements.

Repurchase agreements are short-term agreements to sell securities held in the fund in order to buy them back at a slightly higher price at a later time. The proceeds from the sale may be used to purchase other fixed income securities. The party selling the repurchase agreement is effectively borrowing, and the other party is lending. The lender is credited the implicit interest in the yield and price difference between the securities sold to be repurchased and the securities acquired from the sale proceeds. The securities sold under repurchase agreements are accounted for as collateralized form of borrowing. The Fund's exposure to repurchase agreement liabilities at September 30, 2023, was approximately $1,034 (March 31, 2023: $1,000). All repurchase agreements are fully collateralized by the borrowers.

NOTE 4 INVESTMENT RISK MANAGEMENT (in millions)

The Fund is exposed to financial risks associated with the underlying securities held in the pools created and managed by AIMCo. These financial risks include credit risk, market risk and liquidity risk. Credit risk relates to the possibility that a loss may occur from the failure of another party to perform according to the terms of a contract. Market risk is comprised of currency risk, interest rate risk and price risk. Liquidity risk is the risk the Fund will not be able to meet its obligations as they fall due.

The investment policies and procedures of the Fund are clearly outlined in the SIP&G approved by the President of Treasury Board and Minister of Finance. The purpose of the SIP&G is to ensure the Fund is invested and managed in a prudent manner in accordance with current, accepted governance practices incorporating an appropriate level of risk. The Ministry of Treasury Board and Finance manages the Fund's return-risk trade-off through asset class diversification, a rebalancing policy with target ranges on each asset class, diversification within each asset class, quality constraints on credit instruments. Forward foreign exchange contracts may be used to manage currency exposure in connection with securities purchased in a foreign currency (see Note 4b).

In order to earn the best possible return at an acceptable level of risk, the President of Treasury Board and Minister of Finance has approved the following target policy asset mix:

			Actual Asset Mix			
Asset Class	**Target Asset Policy Mix**	**Long Term Policy**	**September 30, 2023**		**March 31, 2023**	
Interest-bearing securities	15 - 45%	20%	$ 4,672	21.8%	$ 3,997	19.5%
Equities	35 - 70%	47.5%	9,606	44.9%	9,445	46.2%
Inflation sensitive	15 - 40%	32.5%	7,072	33.0%	6,961	34.0%
Strategic, tactical and currency investments	(a)		70	0.3%	71	0.3%
		100.0%	$21,420	100.0%	$20,474	100.0%

(a) In accordance with the SIP&G, AIMCo may invest up to 2% of the fair value of the Fund's investments in strategic opportunities that are outside of the asset classes listed above. AIMCo may, at its discretion, use currency overlays to an economic exposure limit of 5% of the market value of the Fund.

a) Credit Risk

i) Debt securities

The Fund is exposed to various risks associated with debt securities held in the pools managed by AIMCo. Counterparty default risk is the risk of loss arising from the failure of an issuer to fully honour its financial obligations. Downgrade risk can generate losses when issuers are downgraded by credit rating agencies, leading to a fall in the fair value of the debt obligations. Credit spread risk is the potential for changes in present value of an asset due to an increase in the credit spread of the debt security. Credit spreads may increase due to concerns with the individual issue or with the broader credit market, decreasing the present value of the security. If credit spreads widened by 1%, and all other variables are held constant, the potential loss in fair value to the Fund would be approximately 0.6% of total investments (March 31, 2023: 0.7%).

The credit quality of financial assets is generally assessed by reference to external credit ratings. The credit rating of a debt security may be impacted by the overall credit rating of the counterparty, the seniority of the debt issue, bond covenants, maturity distribution and other factors. The majority of investments in debt securities have credit ratings considered to be investment grade.

NOTE 4 INVESTMENT RISK MANAGEMENT (in millions) CONTINUED

Unrated debt securities consist primarily of mortgages and private debt and loan placements.

The table below summarizes the Fund's investment in debt securities by credit rating at September 30, 2023:

Credit rating	September 30, 2023	March 31, 2023
Investment Grade (AAA to BBB-)	60.8%	62.9%
Speculative Grade (BB+ or lower)	2.8%	2.4%
Unrated	36.4%	34.7%
	100.0%	100.0%

ii) Counterparty credit risk - derivative contracts

The Fund is exposed to counterparty credit risk associated with the derivative contracts held in the pools. The maximum credit risk in respect of derivative financial instruments is the fair value of all contracts with counterparties in a favourable position (see Note 4g). AIMCo is responsible for selecting and monitoring derivative counterparties on behalf of the Fund. AIMCo monitors counterparty risk exposures and actively seeks to mitigate counterparty risk by requiring that counterparties collateralize mark-to-market gains for the Fund. Provisions are in place to allow for termination of the contract should there be a material downgrade in a counterparty's credit rating. The exposure to credit risk on derivatives is reduced by entering into master netting agreements and collateral agreements with counterparties. To the extent that any unfavourable contracts with the counterparty are not settled, they reduce the Fund's net exposure in respect of favourable contracts with the same counterparty.

iii) Security lending risk

To generate additional income, the pools participate in a securities-lending program. Under this program, the custodian may lend investments held in the pools to eligible third parties for short periods. At September 30, 2023, the Fund's share of securities loaned under this program is $431 (March 31, 2023: $201) and collateral held totals $456 (March 31, 2023: $214). Securities borrowers are required to provide the collateral to assure the performance of redelivery obligations. Collateral may take the form of cash, high quality bonds, other investments or bankers' acceptances and bankers' deposit notes. All collateralization, by the borrower, must be in excess of 100% of investments loaned.

b) Foreign currency risk

The Fund is exposed to foreign currency risk associated with the underlying securities held in the pools that are denominated in currencies other than the Canadian dollar. Foreign currency risk is the risk that the fair value or future cash flows of a financial instrument will fluctuate because of changes in foreign exchange rates. The fair value of investments denominated in foreign currencies is translated into Canadian dollars using the reporting date exchange rate. As a result, fluctuations in the relative value of the Canadian dollar against these foreign currencies can result in a positive or negative effect on the fair value of investments. Approximately 35% (March 31, 2023: 37%) of the Fund's investments, or $7,458 (March 31, 2023: $7,501), are denominated in currencies other than the Canadian dollar, with the largest foreign currency exposure being to the US dollar, 20% (March 31, 2023: 20%) and the Euro, 4% (March 31, 2023: 5%).

If the value of the Canadian dollar increased by 10% against all other currencies, and all other variables are held constant, the potential loss in fair value to the Fund would be approximately 3.5% of total investments (March 31, 2023: 3.7%).

The following table summarizes the Fund's exposure to foreign currency investments held in the pools at September 30, 2023:

Currency [a]	September 30, 2023		March 31, 2023	
	Fair Value	Sensitivity	Fair Value	Sensitivity
U.S. dollar	$ 4,368	$ (437)	$ 4,185	$ (419)
Euro	925	$ (92)	1,005	(101)
British pound sterling	712	(71)	713	(71)
Japanese yen	376	(38)	363	(36)
Other foreign currency	1,077	(108)	1,235	(123)
Total foreign currency investments	$ 7,458	$ (746)	$ 7,501	$ (750)

[a] Information on specific currencies is disclosed when the current period fair value is greater than 1% of the Fund's net assets.

c) Interest rate risk

Interest rate risk is the risk that changes in interest rates will adversely affect the fair value of an investment. The Fund is exposed to interest rate risk associated with the underlying interest-bearing securities held in the pools managed by AIMCo. In general, the fair value of bonds and mortgages are sensitive to changes in the level of interest rates, which will impact returns if the securities are sold prior to maturity. A rise in interest rates will typically mean a drop in fair value (and vice versa), with longer term interest bearing securities being more sensitive to interest rate changes than shorter-term bonds. If interest rates increased by 1%, and all other variables are held constant, the potential loss in fair value to the Fund would be approximately 0.8% of total investments (March 31, 2023: 0.9%).

d) Price risk

Price risk is the risk that one or more of the markets where a product invests will decline in value. The value of the product may decline due to changes in general market conditions, economic trends or due to factors that affect a particular company or group of companies. Price risk is influenced by the geopolitical environment, economic conditions and changes in the regulatory environment. Both products and their benchmarks are impacted by price risk.

The Fund is exposed to price risk associated with the underlying equity investments held in the pools managed by AIMCo. Price risk is managed through diversification of asset class allocations and security selection within equity products. If equity market indices declined by 10%, and all other variables are held constant, the potential loss in fair value to the Fund would be approximately 5.0% of total investments (March 31, 2023: 5.3%).

e) Liquidity risk

Liquidity risk is the risk that the Fund will encounter difficulty in meeting obligations associated with its financial liabilities. Liquidity requirements of the Fund are met through income generated from investments, and by investing in units of pools that hold publicly traded liquid assets traded in an active market that are easily sold and converted to cash. Units in pools that hold private investments like real estate, renewable resources, infrastructure and private equities are less easily converted to cash since the underlying securities are illiquid because they take more time to sell. The Fund's main liabilities include payables related to purchase of pool units and those liabilities outlined in Note 3 c).

NOTE 4 INVESTMENT RISK MANAGEMENT (in millions) CONTINUED

Liquidity risk is monitored by AIMCo using a Stressed Liquidity Coverage Ratio (SLCR) measure, which considers the ratio of liquidity supply to liquidity demand in an extreme liquidity scenario (defined as the 3-month period during the Global Financial Crisis immediately following the collapse of Lehman Brothers). A SLCR greater than 100% means that all liquidity demand under the stress scenario can be met, whereas a SLCR less than 100% means that liquidity demands under the stress scenario cannot be met.

f) Total portfolio risk

Investment risk is managed on a total portfolio basis and monitored daily by AIMCo. A 1-in-20 year downside Value-at-Risk (VaR) measure is used for the overall portfolio, supported by an Expected Tail Loss (ETL) measure to capture the risk of more extreme tail losses. In addition, active management risk (i.e. the risk of underpeformance relative to the total portfolio benchmark) is monitored using a 1-in-20 downside Active Value-at-Risk (aVaR) measure. The SIP&G sets out the limits within which these measures should operate.

g) Use of Derivative Financial Instruments in Pooled Investment Funds

The Fund has indirect exposure to derivative financial instruments through its investment in units of the pools. AIMCo uses derivative financial instruments to cost-effectively gain access to equity markets in the pools, manage asset exposure within the pools, enhance pool returns and manage interest rate risk, foreign currency risk and credit risk in the pools.

		Fund's Indirect Share	
By counterparty	Number of counterparties	**September 30, 2023**	**March 31, 2023**
Contracts in net favourable position (current credit exposure)	115	$ 81	$ 87
Contracts in net unfavourable position	16	(148)	(86)
Net fair value of derivative contracts	131	$ (67)	$ 1

i) Current credit exposure: The current credit exposure is limited to the amount of loss that would occur if all counterparties to contracts in a net favourable position totaling $81 (March 31, 2023: $87) were to default at once.

ii) Settlements: Derivative settlements, in the forms of cash or securities, are made in accordance with the respective derivative contracts; Mark-to-market movements on these derivatives result in the regular pledging and receiving of collateral.

iii) Contract notional amounts: The fair value of receivables (receive leg) and payables (pay leg) and the exchange of cash flows with counterparties in pooled funds are based on a rate or price applied to a notional amount specified in the derivative contract. The notional amount itself is not invested, received or exchanged with the counterparty and is not indicative of the credit risk associated with the contract. Notional amounts are not assets or liabilities and do not change the asset mix reported in Note 3. Accordingly, there is no accounting policy for their recognition in the statement of financial position.

	Fund's Indirect Share	
Types of derivatives used in pools	**September 30, 2023**	**March 31, 2023**
Equity-based derivatives	$ (133)	$ 79
Foreign currency derivatives	35	(106)
Interest rate derivatives	29	26
Credit risk derivatives	2	2
Net fair value of derivative contracts	$ (67)	$ 1

i) Equity-based derivatives include equity swaps. Equity swaps are contracts where one counterparty agrees to pay or receive from the other, cash flows based on changes in the value of an equity index, a basket of stocks, or a single stock in exchange for a return based on a fixed or floating interest rate or the return on another instrument. Rights, warrants, futures and options are also included as equity-based derivatives.

ii) Foreign currency derivatives include contractual agreements to exchange specified currencies at an agreed upon exchange rate and on an agreed settlement date in the future.

iii) Interest rate derivatives exchange interest rate cash flows (fixed to floating or floating to fixed) based on a notional amount. Interest rate derivatives primarily include interest rate swaps and cross currency interest rate swaps, futures contracts and options.

iv) Credit risk derivatives include credit default swaps allowing the pools to buy and sell protection on credit risk inherent in a bond. A premium is paid or received, based on a notional amount in exchange for a contingent payment should a defined credit event occur with respect to the underlying security

v) At September 30, 2023, deposits in futures contracts margin accounts totaled $30 (March 31, 2023: $59). Cash and non-cash collateral for derivative contracts pledged and received, respectively, totaled $270 (March 31, 2023: $193) and $nil (March 31, 2023: $nil).

vi) All derivative products are subject to AIMCo's internal governance.

NOTE 5 NET FINANCIAL ASSETS (in millions)

Net financial assets represent the difference between the carrying value of financial assets held by the Fund and its liabilities. The following table shows accumulated net income and transfers to (from) the Fund since the Fund was created on May 19, 1976:

	Cumulative since 1976	
	September 30, 2023	**March 31, 2023**
Accumulated net income	$ 49,059	$ 48,012
Transfers to the Fund		
Resource Revenue (1976-1987)	12,049	12,049
Access to the Future [(a)]	1,000	1,000
Voted Payments [(e)]	3,671	3,671
	16,720	16,720
Amounts retained in (transferred from) the Fund		
Section 8 transfers [(b)]		
Income	(48,131)	(47,084)
Amount Retained in the Fund	6,120	5,073
	(42,011)	(42,011)
Capital Expenditures (1976-1995) [(c)]	(3,486)	(3,486)
Other Statutory Transfers [(d)]	(255)	(255)
	(45,752)	(45,752)
Accumulated surplus from operations	20,027	18,980
Accumulated remeasurement gains	1,393	2,247
Carrying value of net financial assets	$ 21,420	$ 21,227

(a) The Access to the Future Fund was disestablished in December 2019 and eliminated the related notional account within the Fund. The initial $1,000 funded in 2005-06 and 2006-07 will remain in the Fund, no longer allocated for Advanced Education.

(b) During 2022-23, Bill 10 (*Financial Statutes Amendment Act*, *2023*) amended Section 8 of the Act to require Treasury Board approval for any income transfers, after inflation proofing, from the Fund to the GRF beginning in 2021-22. The income transfer amount of $1,247 previously accrued for 2021-22 was recovered on the new legislation taking effect.

Previously Section 8 of the Act stated that the net income of the Heritage Fund, less any amount retained in the Fund, in accordance with section 11 of the Act, must be transferred to the GRF in a manner determined by the President of Treasury Board and Minister of Finance.

The amount for inflation proofing is determined by multiplying the accumulated operating surplus of the Fund from the prior fiscal year end by the percentage increase in the Alberta Consumer Price Index (Alberta CPI) for the year, calculated as the percentage increase in the average monthly Alberta CPI for the two previous fiscal years. In accordance with section 11(2), if the Alberta CPI is a negative number, that negative number shall be treated as if it were zero. The estimated Alberta CPI increase for the year was 3.3% (March 31, 2023: 6.0%).

(c) Capital expenditures include transfers of $300 to the Alberta Heritage Foundation for Medical Research in 1980 and $100 to the Alberta Heritage Scholarship Fund in 1981.

(d) Transfers of $200 to the Alberta Heritage Scholarship Fund, $3 to the Agriculture and Food Innovation Account, and $52 to the Access to the Future Fund were made from the Fund in 2015.

(e) In accordance with Bill 12, *Appropriation (Supplementary Supply) Act 2023,* a contribution of $753 to the Fund was authorized to be paid from the GRF in 2022-23.

NOTE 6 INVESTMENT INCOME (in millions)

The following is a summary of the Fund's investment income (loss) by asset class:

	Three Months Ended September 30, 2023	Three Months Ended September 30, 2022	Six Months Ended September 30, 2023	Six Months Ended September 30, 2022
Interest-bearing securities	$ 10	$ 12	$ 58	$ 18
Equities				
Canadian	7	(3)	44	(7)
Global	223	(48)	875	(203)
Private	34	29	42	114
	264	(22)	961	(96)
Inflation sensitive				
Real estate	26	31	74	54
Infrastructure	6	35	(10)	52
Renewable resources	39	18	46	23
	71	84	110	129
Strategic, tactical and currency investments	(1)	2	(7)	(5)
	$ 344	$ 76	$ 1,122	$ 46

The investment income includes realized gains and losses from disposal of pool units totalling $18 (September 30, 2022: $1) and from directly held foreign exchange contracts totalling ($1) (September 30, 2022: ($1)). Income and loss distributions from the pools total $1,105 (September 30, 2022: $46).

Income earned in pooled investment funds is distributed to the Fund daily based on the Fund's pro rata share of units issued by the pool. Income earned by the pools is determined on an accrual basis and includes interest, dividends, security lending income, realized gains and losses on sale of securities determined on an average cost basis, income and expense on derivative contracts and writedowns of securities held in pools which are indicative of a loss in value that is other than temporary. Because the investments are accounted for on a fair value basis, the recording of other-than-temporary losses through the statement of operations does not affect the performance of the fund.

NOTE 7 INVESTMENT EXPENSES (in millions)

	Three Months Ended September 30, 2023	Three Months Ended September 30, 2022	Six Months Ended September 30, 2023	Six Months Ended September 30, 2022
Amount charged by AIMCo for: [(a)]				
Investment costs	$ 23	$ 23	$ 51	$ 45
Performance based fees	13	(9)	24	3
Total investment expenses	$ 36	$ 14	$ 75	$ 48
Increase (decrease) in expenses	157.1%	(58.8%)	56.3%	(46.7%)
Increase (decrease) in average investments under management	12.6%	(1.5%)	7.2%	2.7%
(Decrease) increase in value of investments attributed to AIMCo	(0.3%)	(0.4%)	0.0%	1.0%
Investment expense as a percent of dollar invested	0.2%	0.1%	0.4%	0.2%

(a) Investment expenses are charged by AIMCo on a cost recovery basis. Please refer to AIMCo's financial statements for a detailed breakdown of the types of expenses incurred by AIMCo. Amounts recovered by AIMCo for investment costs include those costs that are primarily non-performance related including external management fees, external administration costs, employee salaries and incentive benefits and overhead costs. A majority of amounts recovered by AIMCo for performance based fees relate to external managers hired by AIMCo.

Includes $57 thousand (September 30, 2022: $57 thousand) charged to the Fund by Alberta Treasury Board and Finance for investment accounting and reporting services.

NOTE 8 INVESTMENT PERFORMANCE (net of investment expenses)

Estimated investment returns are provided as supplementary information. The determination of the estimated return is based on fair values using quoted market prices and estimates of fair value where no quoted market prices are available. The estimated return includes gains and losses that have not been realized. Estimated benchmark returns are based on published market-based indices and estimates where no published index is available.

	Three Months Ended September 30,		Six Months Ended September 30,		Average Annualized Return	
Time-weighted rates of return, at fair value [a]	**2023**	**2022**	**2023**	**2022**	**5 years** [d]	**10 years**
Net return on investments [b]	(1.1%)	(0.1%)	0.9%	(4.2%)	5.9%	8.1%
Policy benchmark return [b]	(0.8%)	0.3%	0.9%	(5.2%)	5.4%	7.3%
Value added by AIMCo [c]	(0.3%)	(0.4%)	0.0%	1.0%	0.5%	0.8%

(a) The time-weighted rate of return involves the calculation of the return realized by the Fund over a specified period and is a measure of the total proceeds received from an investment dollar initially invested. Total proceeds include cash distributions (interest and dividend payments) and capital gains and losses (realized and unrealized).

(b) Investment returns are provided by AIMCo. The net investment return and policy benchmark return is based on a weighted average of returns for each asset class. Investment returns for assets classified as real estate, private equities, infrastructure, hedge funds and private debt are based on estimates of fair value. For these investments, measurement uncertainty exists because trading activity is infrequent and fair values are derived using valuation techniques which incorporate assumptions that are based on non-observable market data. Reasonably possible alternative assumptions could yield an increase or decrease in the fair value amounts and investment returns reported for these types of investments.

(c) In the SIP&G, the Ministry of Treasury Board and Finance expects that the investments held by the Fund will return 1% above the policy benchmark over a rolling five-year period.

(d) In accordance with the SIP&G, over a five-year period, it is expected that the policy portfolio will earn an average return of 4.5% adjusted for inflation, based on the Canadian Consumer Price Index. At the reporting date, the CPI + 450 annualized, five-year rolling average, was 6.9%.

NOTE 9 COMPARATIVE FIGURES

Comparative figures have been reclassified to be consistent with current presentation.

NOTE 10 FINANCIAL STATEMENTS

Quarterly and annual financial statements are prepared by the Department of Treasury Board and Finance and are approved by the Department's Senior Financial Officer and Deputy Minister. The statements report the activities and financial performance of the Fund for the period and are provided to the Standing Committee on the Alberta Heritage Savings Trust Fund in accordance with section 15 and 16 of the Act. Unaudited interim financial statements for the first three quarters of each fiscal year are made available to the public by the President of Treasury Board and Minister of Finance within two months following each quarter-end. Annual audited financial statements of the Fund are included in the annual report of the Ministry of Treasury Board and Finance.