Alberta Heritage Savings Trust Fund

2020-21 Second Quarter September 30, 2020





7.7%6-Month Rate of Return

\$17.2 billion
Fair Value of Net Assets at
Quarter End

\$552 million 2020-21 Net Income from Operations

Investment Highlights

- Over the quarter, the overall net asset value of the Fund was stable at \$17.2 million. This marks an increase in value of \$843 million since the beginning of the fiscal year.
- The Fund returned 2.6% over the quarter, and 7.7% over the last six months.
- The Heritage Fund is managed to generate value over the long-term. A long-term, patient approach to managing the Fund has given it resilience to weather the storm that COVID-19 has imposed on asset values since February 2020.
- World markets have made a remarkable recovery over the last six months; this is reflected in the rebound in asset values.

Asset Allocation

- The President of Treasury Board and Minister of Finance is responsible for setting the long-term target asset mix for the Heritage Fund, which is 50% Equities, 30% Inflation Sensitive and Alternatives, and 20% Fixed Income.
- As the investment manager, the role of the Alberta Investment Management Corporation (AIMCo), is to implement the investment policy by tactically allocating to the above asset classes in a way that maximizes longterm investment income and returns for the portfolio, while taking on a prudent level of risk.

Performance and Portfolio Composition

- At the end of the quarter, the Fund's fixed income allocation was 20.3%, unchanged since last quarter. Over six months, however, the allocation to fixed income grew by 0.8%.
- Fiscal year-to-date fixed income has returned 7.3%, making it the second best performing asset class. Over the quarter, it returned 1.5%. A rapid decrease in yield due to Federal Bank responses to the pandemic has resulted in abnormally large returns for the asset class.

- The Heritage Fund was composed of 47.8% equities at the end of the quarter, 2.2% underweight relative to the long-term target. The allocation to equities has increased 3.0% from 44.8% at fiscal year-end.
- Equities have been the largest contributor of value to the Fund this fiscal year. Over the quarter, equities added 6.4%, and since the beginning of the fiscal year the asset class has added 17.7%. Liquid equity assets, such as those held in the Canadian and Global pools, have been producing strong returns due to global markets rebounding from March 2020 lows.
- Private equity, considered a relatively illiquid investment, has struggled through the COVID-19 pandemic, resulting in a loss of 6.4% fiscal year to date.
- Inflation sensitive and alternative assets made up 31.2% of the portfolio at quarter end, down 3.7% from 34.9% at fiscal year-end.
- Historically, this has been a very strong performing asset class. Over five years, it has returned 7.0%. COVID-19 has presented challenges that are unique to illiquid investments due to the many global lockdowns that have been imposed throughout the pandemic. Fiscal year to date, the asset class has detracted 4.7% from the value of the Fund and the valuation process for these assets remains difficult.

Investment Income

• The Fund earned gross income of \$613 million over the last six months, the majority of which was earned over the most recent quarter. After expenses of \$61 million, net income was \$552 million. To inflation-proof the Fund as required by the Alberta Heritage Savings Trust Fund Act, \$82 million of net income will be retained in the Fund. The General Revenue Fund will receive \$470 million.

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INVESTMENT RETURNS AS AT SEPTEMBER 30, 2020

	3 Month	FYTD	5 Year	10 Year	Since Inception
Alberta Heritage Savings Trust Fund	2.6%	7.7%	6.8%	8.8%	7.0%
Policy Benchmark	2.1%	8.8%	7.4%	8.6%	6.9%
Value Added	0.5%	-1.1%	-0.6%	0.2%	0.1%
CPI + 450 bps, rolling	-	-	6.0%	6.1%	-

ASSET ALLOCATION AS AT SEPTEMBER 30, 2020

	Value in millions	Percentage
Money Market and Fixed Income	\$3,624	20.3%
Cash and Equivalents	\$85	0.5%
Fixed Income	\$3,539	19.8%
Inflations Sensitive and Alternatives	\$5,575	31.2%
Real Estate	\$3,413	19.1%
Private Infrastructure	\$1,745	9.8%
Renewable Resources	\$416	2.3%
Equities	\$8,526	47.8%
Canadian Public Equity	\$1,440	8.1%
Foreign Equity	\$5,738	32.1%
Private Equity	\$1,348	7.6%
Strategic Opportunities	\$130	0.7%
Total	\$17,855	100.0%

ASSET CLASS RETURNS AS AT SEPTEMBER 30, 2020

	3 Month	FYTD	5 Year	10 Year
Money Market and Fixed Income	1.5%	7.3%	5.0%	5.6%
Cash and Equivalents	0.1%	0.4%	1.3%	1.3%
Fixed Income	1.6%	7.5%	5.1%	5.7%
Inflations Sensitive and Alternatives	-2.2%	-4.7%	7.0%	8.8%
Real Estate	-3.3%	-5.3%	5.0%	9.0%
Private Infrastructure	1.8%	-2.2%	10.5%	7.8%
Renewable Resources	-8.9%	-8.9%	10.8%	11.2%
Equities	6.4%	17.7%	7.1%	10.0%
Canadian Public Equity	5.7%	25.2%	4.9%	5.6%
Foreign Equity	7.1%	23.3%	8.9%	11.6%
Private Equity	4.3%	-6.4%	2.0%	6.6%
Strategic Opportunities	0.0%	5.5%	7.8%	16.1%
Total	2.6%	7.7%	6.8%	8.8%

Alberta Heritage Savings Trust Fund

Interim Financial Statements (unaudited) September 30, 2020

Statement of Financial Position

As at September 30, 2020 *(unaudited)* (in millions)

Fina	ncial	assets

Investments (Note 3)

Liabilities

Due to the General Revenue Fund

Net financial assets

Net financial assets (Note 5)

Accumulated operating surplus
Accumulated remeasurement gains

September 30, 2020			March 31, 2020
\$	17,855	\$	16,702
	684		374
\$	17,171	\$	16,328
\$	16,325	\$	16,243
Ψ	846	Ψ	85
\$	17,171	\$	16,328

Statement of Change in Net Financial Assets

Six Months Ended September 30, 2020 (unaudited) (in millions)

Net surplus retained in the Fund
Net remeasurement (losses) gains
(Decrease) increase in net financial assets
Net financial assets, beginning of period
Net financial assets, end of period

Three Months Ended September 30,			Six Months Ended September 30,				
	2020	2019		2020		2019	
\$	78	\$	72	\$	82	\$	136
	(130)		(160)		761		(380)
	(52)		(88)		843		(244)
	17,223		18,090		16,328		18,246
\$	17,171	\$	18,002	\$	17,171	\$	18,002

The accompanying notes are part of these financial statements.

Statement of Operations and Accumulated Surplus

Six Months Ended September 30, 2020 (unaudited) (in millions)

Investment income (Note 6)
Investment expenses (Note 7)

Net income from operations

Transfers to the General Revenue Fund (Note 5b)

Net surplus retained in the Fund (Note 5b)

Accumulated operating surplus, beginning of period

Accumulated operating surplus, end of period

Septem	September 30,				
2020	2019		2020		2019
\$ 577	\$ 503	\$	613	\$	1,017
(29)	(40)		(61)		(74)
548	463		552		943
(470)	(391)		(470)		(807)
78	72		82		136
16,247	16,020		16,243		15,956
\$ 16,325	\$ 16,092	\$	16,325	\$	16,092

Statement of Remeasurement Gains and Losses

Six Months Ended September 30, 2020 (unaudited)

(in millions)

Unrealized (losses) gains on investments
Less: Amounts reclassified to the Statement of
Operations - realized (gains) losses on investments
Net remeasurement (losses) gains
Accumulated remeasurement gains,
beginning of period
Accumulated remeasurement gains,
end of period

 Three Months Ended September 30,			Six Months Ended September 30,		
2020	2019		2020		2019
\$ (113)	\$ (83)	\$	754	\$	(115)
(17)	(77)		7		(265)
(130)	(160)		761		(380)
976	2,070		85		2,290
\$ 846	\$ 1,910	\$	846	\$	1,910

The accompanying notes are part of these financial statements.

Statement of Cash Flows

Six Months Ended September 30, 2020 (unaudited)

(in millions)

,		nths Ended nber 30,	Six Months Ended September 30,			
	2020	2019	2020	2019		
Operating transactions						
Net income from operations	\$ 548	\$ 463	\$ 552	\$ 943		
Non-cash items included in net income	(17)	(77)	7	(265)		
	531	386	559	678		
Decrease in accounts receivable	-	-	-	10		
Decrease in accounts payable	-	-	-	(14)		
Cash provided by operating transactions	531	386	559	674		
Investing transactions						
Proceeds from disposals, repayments						
and redemptions of investments	503	517	1,037	1,417		
Purchase of investments	(873)	(888)	(1,419)	(2,085)		
Cash applied to investing transactions	(370)	(371)	(382)	(668)		
Transfers						
Transfers to the General Revenue Fund	(470)	(391)	(470)	(807)		
Increase in amounts due to the						
General Revenue Fund	310	391	310	807		
Cash applied to transfers	(160)	-	(160)	_		
Increase in cash	1	15	17	6		
Cash at beginning of period	84	97	68	106		
Cash at end of period	\$ 85	\$ 112	\$ 85	\$ 112		
Consisting of Deposits in the Consolidated						
Cash Investment Trust Fund (CCITF) *	\$ 85	\$ 112	\$ 85	\$ 112		

The accompanying notes are part of these financial statements.

^{*} The CCITF is a highly-liquid, short term money market pooled fund consisting primarily (100%) of securities with maturities of less than one year.

Notes to the Financial Statements

September 30, 2020 (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.

The Fund's cut-off policy for valuation of investments, investment income and investment performance is based on valuations confirmed by AIMCo on the fourth business day following the period end. Differences in valuation estimates provided to Treasury Board and Finance after the period end cut-off date are reviewed by management. Differences considered immaterial by management are included in investments and remeasurement gains or losses in the following period.

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.

b) INVESTMENT INCOME

- 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

- 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.

As a result of the COVID-19 outbreak, declared a global pandemic on March 11, 2020, global financial markets and world economies have experienced significant volatility. Given the extent of the crisis, and varying levels of response and recovery of countries across the globe, additional uncertainty remains and will continue to exist with regards to fair value measurement of the Fund's investments.

f) TRANSFERS TO THE GENERAL REVENUE FUND (GRF)

Transfers to the GRF are recorded on an accrual basis. In accordance with Section 8 of the Act, all of the net income of the Fund is transferred to the GRF except for any amount retained in the Fund to maintain its value against inflation (see Note 5 (b)).

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. The pools have a market based unit value that is used to allocate income to participants of the pool and to value purchases and sales of the pool units. 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	2020	2020
Interest-bearing securities				
Deposits in CCITF Bonds, mortgages and	\$ 85	\$ -	\$ 85	\$ 68
private debt	2,222	1,317	3,539	3,187
	2,307	1,317	3,624	3,255
Equities		·	·	
Canadian	1,440	-	1,440	1,225
Global developed	4,736	316	5,052	4,198
Emerging markets	686	-	686	576
Private	-	1,348	1,348	1,478
	6,862	1,664	8,526	7,477
Inflation sensitive				
Real estate	-	3,413	3,413	3,509
Infrastructure	-	1,746	1,746	1,879
Renewable resources	-	416	416	445
	-	5,575	5,575	5,833
Strategic, tactical and		·		
currency investments *	12	118	130	137
Total Fair Value of				
Investments	\$ 9,181	\$ 8,674	\$ 17,855	\$ 16,702

^{*} 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 marketobservable inputs other than quoted market prices. This level includes pool units that hold public equities, debt securities and derivative contracts totalling \$9,181 (March 31, 2020: \$7,822).
- **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 \$8,674 (March 31, 2020: \$8,880).

Reconciliation of Level 3 Investments

Balance, beginning of period			
balance, beginning or period			
Unrealized losses			
Purchases of Level 3 pooled fund units			
Sale of Level 3 pooled fund units			
Balance, end of period			

	ember 30, 2020		March 31, 2020
(six months)			(one year)
\$	8,880	\$	9,839
	(424)		(370)
	623		1,444
	(405)		(2,033)
\$	8,674	\$	8,880

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 periodend 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 4f). 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 discounted cash flows using current market yields and current forward exchange rates. 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.

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 Ministry of Treasury Board and 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, target ranges on each asset class, diversification within each asset class, quality constraints on fixed income instruments and restrictions on amounts exposed to countries designated as emerging markets. 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:

	Target Policy	Actual Asset Mix						
Asset Class	Asset Mix	September 3	30, 2020		March 3	1, 2020		
Interest-bearing securities	15 - 45%	\$ 3,624	20.3%	\$	3,255	19.5%		
Equities	35 - 70%	8,526	47.8%		7,477	44.8%		
Inflation sensitive	15 - 40%	5,575	31.2%		5,833	34.9%		
Strategic, tactical and	(a)							
currency investments	(4)	130	0.7%		137	0.8%		
		\$ 17,855	100.0%	\$	16,702	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 indirectly exposed to credit risk associated with the underlying debt securities held in the pools managed by AIMCo. Counterparty credit risk is the risk of loss arising from the failure of a counterparty to fully honour its financial obligations. 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. Credit risk can also lead to losses when issuers and debtors are downgraded by credit rating agencies usually leading to a fall in the fair value of the counterparty's obligations. Credit risk exposure for financial instruments is measured by the positive fair value of the contractual obligations with counterparties. The fair value of all investments reported in Note 3 is directly or indirectly impacted by credit risk to some degree. The majority of investments in debt securities have credit ratings considered to be investment grade. Unrated debt securities consist primarily of mortgages and private debt placements.

The table below summarizes the Fund's investment in debt securities by credit rating at September 30, 2020:

Credit rating	September 30, 2020	March 31, 2020
Investment Grade (AAA to BBB-)	64.5%	70.2%
Speculative Grade (BB+ or lower)	2.7%	0.7%
Unrated	32.8%	29.1%
	100.0%	100.0%

ii) Counterparty default 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 4f). 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, 2020, the Fund's share of securities loaned under this program is \$349 (March 31, 2020: \$241) and collateral held totals \$370 (March 31, 2020: \$258). Securities borrowers are required to provide the collateral to assure the performance of redelivery obligations. Collateral may take the form of cash, other investments or a bank-issued letter of credit. 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 39% (March 31, 2020: 35%) of the Fund's investments, or \$6,882 (March 31, 2020: \$5,900), are denominated in currencies other than the Canadian dollar, with the largest foreign currency exposure being to the US dollar, 20% (March 31, 2020: 18%) and the Euro, 5% (March 31, 2020: 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 3.9% of total investments (March 31, 2020: 3.5%).

The following table summarizes the Fund's exposure to foreign currency investments held in the pools at September 30, 2020:

	September 30, 2020			March 31, 2020			2020	
Currency ^(a)	Fai	r Value	Se	nsitivity	Fai	ir Value	Ser	nsitivity
U.S. dollar	\$	3,596	\$	(360)	\$	3,020	\$	(302)
Euro		913		(91)		843		(84)
British pound sterling		620		(62)		498		(50)
Japanese yen		413		(41)		393		(40)
Hong Kong dollar		191		(19)		173		(17)
Other foreign currency		1,149		(115)		973		(97)
Total foreign currency investments	\$	6,882	\$	(688)	\$	5,900	\$	(590)

⁽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

The Fund is exposed to interest rate risk associated with the underlying interest-bearing securities held in the pools managed by AIMCo. Interest rate risk relates to the possibility that the fair value of investments will change due to future fluctuations in market interest rates. In general, investment returns from bonds and mortgages are sensitive to changes in the level of interest rates, 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 1.3% of total investments (March 31, 2020: 0.9%).

Fund's Indirect Share

d) Price risk

Price risk relates to the possibility that pool units will change in fair value due to future fluctuations in market prices of equities held in the pools caused by factors specific to an individual equity investment or other factors affecting all equities traded in the market. The Fund is exposed to price risk associated with the underlying equity investments held in the pools managed by AIMCo. If equity market indices (S&P/TSX, S&P500, S&P1500 and MSCI ACWI and their sectors) declined by 10%, and all other variables are held constant, the potential loss in fair value to the Fund would be approximately 6.2% of total investments (March 31, 2020: 6.2%). Changes in fair value of investments are recognized in the statement of remeasurement gains and losses.

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 transfers payable to the General Revenue Fund and payables related to purchase of pool units.

f) 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.

		i una sinanect snare			
	Number of	Sep	tember 30,	N	March 31,
By counterparty	counterparties		2020		2020
Contracts in net favourable position (current					
credit exposure)	102	\$	141	\$	1,773
Contracts in net unfavourable position	16		(149)		(2,571)
Net fair value of derivative contracts	118	\$	(8)	\$	(798)

- 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 \$141 (March 31, 2020: \$1,773) were to default at once.
- ii) Cash settlements: Receivables or payables with counterparties are usually settled in cash every three months.
- 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			Share
	Septe	mber 30,	M	arch 31,
Types of derivatives used in pools	2	020		2020
Equity-based derivatives	\$	25	\$	(559)
Foreign currency derivatives		(24)		(180)
Interest rate derivatives		(11)		(59)
Credit risk derivatives		2		
Net fair value of derivative contracts	\$	(8)	\$	(798)

- i) Equity-based derivatives include equity swaps, volatility swaps and variance 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. Volatility swaps are contracts where cash flows are based on the difference between implied volatility and realized volatility of a specified equity index, a basket of stocks, or a single stock applied to a notional amount. Variance swaps are contracts where cash flows are based on the difference between the variance of a specified equity index, a basket of stocks or a single stock and a fixed amount specified in the contract. 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, 2020, deposits in futures contracts margin accounts totaled \$44 (March 31, 2020: \$315).
 Cash and non-cash collateral for derivative contracts pledged and received, respectively, totaled \$203 (March 31, 2020: \$702) and \$nil (March 31, 2020: \$nil).

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, 2020 March 31				
Accumulated net income	\$	45,372	\$	44,820	
Transfers to the Fund					
Resource Revenue (1976-1987)		12,049		12,049	
Access to the Future ^(a)		1,000		1,000	
Voted Payments		2,918		2,918	
		15,967		15,967	
Transfers (from) the Fund					
Section 8 transfers ^(b)					
Income		(45,577)		(45,025)	
Amount Retained in the Fund		4,304		4,222	
		(41,273)		(40,803)	
Capital Expenditures (1976-1995) (c)		(3,486)		(3,486)	
Other Statutory Transfers ^(d)		(255)		(255)	
		(45,014)		(44,544)	
Accumulated surplus from operations		16,325		16,243	
Accumulated remeasurement gains		846		85	
Carrying value of net financial assets	\$	17,171	\$	16,328	

- (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 the period, the Fund earned net income of \$552, of which \$82 was retained in the Fund and \$470 is payable to the GRF. Section 8 of the Act states that the net income of the Heritage Fund, less any amount retained in the Fund, in accordance with section 11 of the Act, shall be transferred to the GRF in a manner determined by the President of Treasury Board and Minister of Finance. The amount to be retained in the Fund for inflation proofing is determined by multiplying the accumulated operating surplus of the Fund from the prior fiscal year end by the estimated percentage increase in the Alberta Consumer Price Index (Alberta CPI) for the year. 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.
- (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.

NOTE 6 INVESTMENT INCOME (in millions)

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

	Three Mor Septem	iths Ended iber 30,	Six Months Ended September 30,			
	2020 2019		2020	2019		
Interest-bearing securities	\$ 82	\$ 50	\$ 160	\$ 82		
Equities						
Canadian	103	45	40	92		
Global	269	130	257	276		
Private	56	90	80	106		
	428	265	377	474		
Inflation sensitive						
Real estate	20	104	35	343		
Infrastructure	30	44	26	68		
Renewable resources	(6)	33	(7)	39		
	44	181	54	450		
Strategic, tactical and						
currency investments	23	7	22	11_		
	\$ 577	\$ 503	\$ 613	\$ 1,017		

The investment income includes realized gains and losses from disposal of pool units totalling (\$7) (September 30, 2019: \$265) and from directly held foreign exchange contracts totalling \$1 (September 30, 2019: \$nil). Income distributions from the pools total \$619 (September 30, 2019: \$752).

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.

NOTE 7 INVESTMENT EXPENSES (in millions)

Amount charged by AIMCo for: (a)
Investment costs
Performance based fees
Total investment expenses
(Decrease) increase in expenses
(Decrease) increase in average investments under management
Increase (decrease) in value of investments attributed to AIMCo
Investment expense as a percent of dollar invested

	Three Months Ended Six Months Ended September 30, September 30,					
	2020	2019		2020 201		2019
\$	20	\$ 21	\$	41	\$	41
·	9	19	·	20	·	33
\$	29	\$ 40	\$	61	\$	74
	(27.5%)	17.6%		(17.6%)		10.4%
	(4.7%)	4.0%		(6.4%)		3.7%
	0.5%	0.3%		(1.1%)		0.2%
	0.2%	0.2%		0.4%		0.4%

⁽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, 2019: \$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.

Time-weighted rates of return, at fair value (a)
Net return on investments (b)
Policy benchmark return (b)
Value added (lost) by AIMCo (c)

	nths Ended mber 30,	Six Months Ended September 30,		Aver Annualize	•
2020	2019	2020	2019	5 years ^(d)	10 years
2.6%	1.6%	7.7%	3.1%	6.8%	8.8%
2.1%	1.3%	8.8%	2.9%	7.4%	8.6%
0.5%	0.3%	(1.1%)	0.2%	(0.6%)	0.2%

- (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. Any change in estimated returns, resulting from new information received after the cut-off date for preparation of the Fund's financial statements, will be reflected in the next reporting period.
- (c) In the SIP&G, the Ministry of Treasury Board and Finance expects that the investments held by the Fund will return approximately 100 basis points, or 1% per annum, above the policy benchmark.
- (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 and value added by investment manager of 1.0%. The annualized five-year rolling average CPI (plus 4.5%) is 6.0%, bringing the five-year annualized Portfolio Return Expectation to 7.0%.

NOTE 9 COMPARATIVE FIGURES

Comparative figures have been reclassified to be consistent with the current period 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.

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