

Condensed Interim Consolidated Financial Statements of Canada Pension Plan Investment Board

SEPTEMBER 30, 2021



Condensed Interim Consolidated Balance Sheet

(Unaudited)

		As at		As at
(CAD millions)	S	eptember 30, 2021		March 31, 2021
Assets				
	\$	655,219	\$	595,952
Investments (note 2)	Ş		Ş	
Pending trades receivable		2,613		2,663
Premises and equipment		456		459
Other assets		293		311
Total assets		658,581		599,385
Liabilities				
Investment liabilities (note 2)		113,903		98,158
Pending trades payable		2,487		3,191
Accounts payable and accrued liabilities		657		849
Total liabilities		117,047		102,198
Net assets	\$	541,534	\$	497,187
Net assets, represented by:				
Share capital	\$	-	\$	-
Accumulated net income from operations		381,187		343,665
Accumulated net transfers from the Canada Pension Plan		160,347		153,522
Net assets	\$	541,534	\$	497,187

Condensed Interim Consolidated Statement of Comprehensive Income

(Unaudited)

	For the thr	ee months	ended s	September 30,	For the six months ended September 30,					
(CAD millions)		2021		2020	2021			2020		
Investment income (note 4) Investment-related expenses (note 5)	\$	20,488 (373)	\$	22,450 (513)	\$	38,876 (600)	\$	46,345 (1,155)		
Net investment income		20,115		21,937		38,276		45,190		
Operating expenses		(368)		(357)		(754)		(685)		
Net income from operations and										
comprehensive income	\$	19,747	\$	21,580	\$	37,522	\$	44,505		

Condensed Interim Consolidated Statement of Changes in Net Assets

(Unaudited)

			Fo	r th	e three months	end	ed		
(CAD millions)	Number of shares outstanding		Share capital		Accumulated net transfers from the Canada Pension Plan		Accumulated net income from operations		Total net assets
As at July 1, 2021	10	Ś		Ś		Ś	361,440	Ś	519,649
Total net income for the period Canada Pension Plan transfers:		Ĭ	-	Ť	-	Ť	19,747	Ť	19,747
Transfers from the Canada Pension Plan			-		12,796		-		12,796
Transfers to the Canada Pension Plan			-		(10,658)		-		(10,658)
As at September 30, 2021	10	\$	-	\$	160,347	\$	381,187	\$	541,534

		F	or 1	the six months e	nde	d	
(CAD millions)	Number of shares outstanding	Share capital		Accumulated net transfers from the Canada Pension Plan		Accumulated net income from operations	Total net assets
As at April 1, 2020	10	\$ -	\$	149,867	\$	259,721	\$ 409,588
Total net income for the period		-		-		44,505	44,505
Canada Pension Plan transfers:							
Transfers from the Canada Pension Plan		-		23,199		-	23,199
Transfers to the Canada Pension Plan		-		(20,613)		-	(20,613)
As at September 30, 2020	10	\$ -	\$	152,453	\$	304,226	\$ 456,679
As at April 1, 2021	10	\$ -	\$	153,522	\$	343,665	\$ 497,187
Total net income for the period		-		-		37,522	37,522
Canada Pension Plan transfers:							
Transfers from the Canada Pension Plan		-		27,588		-	27,588
Transfers to the Canada Pension Plan		-		(20,763)		-	(20,763)
As at September 30, 2021	10	\$ -	\$	160,347	\$	381,187	\$ 541,534

Condensed Interim Consolidated Statement of Cash Flows

(Unaudited)

	For the six months	ended Sep	tember 30,
(CAD millions)	2021		2020 ³
Cash flows from operating activities			
Net income from operations	\$ 37,522	\$	44,505
Adjustments for non-cash items:			
Amortization of premises and equipment	27		26
(Gains) on debt financing liabilities (note 11)	(210)		(1,019)
Effect of exchange rate changes on cash and cash equivalents	33		(471)
Adjustments for net changes in operating assets and liabilities:			
(Increase) in investments	(59,163)		(24,781)
Decrease in pending trades receivable	50		5,385
Decrease (increase) in other assets	3		(13)
Increase (decrease) in investment liabilities	10,496		(25,287)
(Decrease) in pending trades payable	(704)		(3,489)
(Decrease) in accounts payable and accrued liabilities	(192)		(185)
Net cash flows (used in) operating activities	(12,138)		(5,329)
Cash flows from financing activities			
Transfers from the Canada Pension Plan	27,588		23,199
Transfers to the Canada Pension Plan	(20,763)		(20,613
Proceeds from debt financing liabilities (note 11)	8,315		8,101
Repayment of debt financing liabilities (note 11)	(2,856)		(6 <i>,</i> 859
Net cash flows provided by financing activities	12,284		3,828
Cash flows from investing activities			
Acquisitions of premises and equipment	(24)		(8
Net cash flows (used in) investing activities	(24)		(8
Net increase (decrease) in cash and cash equivalents	122		(1,509)
Cash and cash equivalents at the beginning of the period	13,969		23,123
Cash and cash equivalents at the end of the period	14,091		21,614
Cash and cash equivalents at the end of the period are comprised of:			
Cash and cash equivalents held for operating purposes ¹	210		179
Cash and cash equivalents held for investment purposes ²	13,881		21,435
Total	\$ 14,091	\$	21,614

¹ Presented as a component of other assets on the Condensed Interim Consolidated Balance Sheet.

² Presented as a component of investments on the Condensed Interim Consolidated Balance Sheet.

³ Certain comparatives have been reclassified to conform to the current period's presentation.

Condensed Interim Consolidated Schedule of Investment Portfolio

(Unaudited)

The schedule below provides information on investments and investment liabilities held by Canada Pension Plan Investment Board and its investment holding subsidiaries on a combined basis.

	As at	As at
(CAD millions)	September 30, 2021	March 31, 2021 ²
Cash and cash equivalents	\$ 15,911	
Equities		· · · · · · · · · · · · · · · · · · ·
Public equities	189,991	175,083
Private equities	150,028	139,444
Total equities	340,019	314,527
Fixed income		
Bonds	113,917	98,560
Other debt	31,733	28,879
Money market securities	297	143
Total fixed income	145,947	127,582
Absolute return strategies	31,651	29,008
Real assets		
Infrastructure	43,014	39,954
Real estate	40,025	38,078
Sustainable energies	19,490	19,145
Total real assets	102,529	97,177
Investment receivables		
Securities purchased under reverse repurchase agreements and		
cash collateral pledged on securities borrowed	13,502	7,127
Derivative assets	4,213	3,636
Other	2,959	2,764
Total investment receivables	20,674	13,527
Total investments ¹	\$ 656,731	\$ 596,353
Investment liabilities		
Debt financing liabilities	(41,698) (36,449)
Securities sold under repurchase agreements and cash collateral		
received on securities lent	(39,869	
Securities sold short	(26,562) (22,275)
Derivative liabilities	(1,918	• • • •
Short-term secured debt	(1,228) (1,234)
Other	(2,647) (2,052)
Total investment liabilities ¹	(113,922	
Pending trades receivable ¹	3,003	3,077
Pending trades payable ¹	(4,370	
Net investments	\$ 541,442	\$ 497,266

¹ Consists of all the financial assets and liabilities held by both Canada Pension Plan Investment Board and its investment holding subsidiaries. In contrast, the Condensed Interim Consolidated Balance Sheet presents all financial assets and liabilities held by investment holding subsidiaries as investments. This results in a difference of \$1,512 million (March 31, 2021 - \$401 million), \$19 million (March 31, 2021 - \$401 million) and \$1,883 million (March 31, 2021 - \$409 million) as compared to investments, investment liabilities, pending trades receivable and pending trades payable, respectively, as presented in the Condensed Interim Consolidated Balance Sheet. Refer to note 1.2, 2.1 and 2.2 for further details.

² Certain comparatives have been reclassified to conform to the current period's presentation.

(Unaudited)

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General information

Canada Pension Plan Investment Board (CPP Investments) was established in December 1997 pursuant to the *Canada Pension Plan Investment Board Act* (CPPIB Act). CPP Investments is responsible for assisting the Canada Pension Plan (CPP) in meeting its obligations to contributors and beneficiaries under the legislation *Canada Pension Plan* (CPP Act).

In December 2016, Royal Assent was given to Bill C-26 titled *An Act to Amend the Canada Pension Plan, the Canada Pension Plan Investment Board Act* and the *Income Tax Act*. The CPP Act now defines two separate parts of the CPP. The "base CPP" refers to the benefits and contributions established before 2019. The "additional CPP" refers to the additional benefits and additional contributions that began on January 1, 2019. All references to "CPP" mean base CPP and additional CPP together.

The Condensed Interim Consolidated Financial Statements (Interim Financial Statements) provide information on the net assets managed by CPP Investments and do not include the liabilities and other assets of the CPP.

The Interim Financial Statements for the three and six months ended September 30, 2021 were approved by the Board of Directors and authorized for issue on November 9, 2021.

1. Summary of significant accounting policies

1.1 Basis of presentation

The Interim Financial Statements have been prepared in compliance with International Accounting Standard (IAS) 34, *Interim Financial Reporting* and do not include all of the information and disclosures required in the Annual Consolidated Financial Statements. The Interim Financial Statements should be read in conjunction with CPP Investments' 2021 Annual Consolidated Financial Statements included on pages 139 to 185 of CPP Investments' 2021 Annual Report. The Interim Financial Statements follow the same accounting policies and methods as the most recent Annual Consolidated Financial Statements.

1.2 Subsidiaries

CPP Investments qualifies as an investment entity and reports the results of its operations in accordance with International Financial Reporting Standard (IFRS) 10, *Consolidated Financial Statements*. As a consequence, the Interim Financial Statements represent the results of operations of CPP Investments and its wholly owned subsidiaries that were created to provide investment-related services to support its operations. Operating subsidiaries of this nature include those that provide investment advisory services or subsidiaries that were created to CPP Investments.

Subsidiaries that are managed by CPP Investments to hold investments are referred to herein as investment holding subsidiaries. Such subsidiaries are not consolidated in these Interim Financial Statements but instead are measured and reported at fair value through profit and loss in accordance with IFRS 9, *Financial Instruments*. Fair value for unconsolidated investment holding subsidiaries is based on the fair value of the underlying investments, investment liabilities and pending trades held by the investment holding subsidiary together with its accumulated net income from operations less dividends paid.

1.3 Current year adoption in accounting policies

Effective April 1, 2021, CPP Investments adopted Phase 2 amendments to IFRS 9 *Financial Instruments*, IAS 39 *Financial Instruments: Recognition and Measurement*, IFRS 7 *Financial Instruments: Disclosures*, IFRS 4 *Insurance Contracts*, and IFRS 16 *Leases* (Amendments). The amendments address issues affecting financial reporting as a result of changing the interest rate benchmark from the Interbank Offered Rates (IBORs) to alternative reference rates (ARRs) and provide specific financial statement disclosure requirements to outline the effect of the reform.

The transition from IBORs to ARRs will impact financial instruments referencing London Interbank Offered Rates (LIBOR) with a maturity date beyond June 30, 2023 for certain United States dollar LIBORs and December 31, 2021 for remaining LIBORs. The transition presents a number of risks, including updating systems and processes, amending contracts or existing fallback clauses, communicating with counterparties on IBOR reform. In order to manage those risks, CPP Investments has established an organization-wide program that includes stakeholders from both investment departments and core services to manage and coordinate all aspects of the transition.

The following table presents CPP Investments' LIBOR exposures to financial instruments subject to LIBOR reform that have yet to transition to ARRs with a maturity date beyond December 31, 2021 for non-United States dollar LIBORs and June 30, 2023 for United States dollar LIBORs.

(CAD millions)	As at September 30, 2021									
	Notional/Fair Value ¹									
	United States dollar LIBOR	British pound sterling LIBOR								
	Maturing after June 30, 2023	Maturing after December 31, 2021								
Non-derivatives ²	\$ 9,011	\$ 832								
Derivatives	\$ 35,818	\$ -								

¹ Represents fair value of non-derivative financial instruments and notional amounts of derivatives.

² Non-derivative financial instruments are comprised of Other debt.

2. Fair value measurement

This note categorizes the fair value of investments and investment liabilities within the three levels of the fair value hierarchy. For investment valuations that require significant judgment, the note further provides the roll-forward of these investments during the period and the range of valuation techniques and inputs used.

2.1 Fair value hierarchy of investments and investment liabilities held directly by CPP Investments

	As at September 30, 2021								
(CAD millions)	Level 1		Level 2		Level 3		Total		
Investments									
Cash and cash equivalents	\$ 	\$	13,881	\$	-	\$	13,881		
Equities									
Public equities ¹	169,312		4,080		44		173,436		
Private equities			334		8,790		9,124		
Total equities	169,312		4,414		8,834		182,560		
Fixed income									
Bonds	61,044		48,482		-		109,526		
Other debt			979		2,996		3,975		
Money market securities			297		-		297		
Total fixed income	61,044		49,758		2,996		113,798		
Absolute return strategies	-		16,552		890		17,442		
Real assets									
Infrastructure			-		9,790		9,790		
Real estate	-		-		9,671		9,671		
Sustainable energies			-		2,979		2,979		
Total real assets	-		-		22,440		22,440		
Investment receivables									
Securities purchased under reverse									
repurchase agreements and cash collateral									
pledged on securities borrowed			13,502		-		13,502		
Derivative assets	10		4,129		-		4,139		
Other ²			2,458		-		2,458		
Total investment receivables	10		20,089		-		20,099		
Investments in investment holding									
subsidiaries (note 2.2)	-		-		284,999		284,999		
Total investments	\$ 230,366	\$	104,694	\$	320,159	\$	655,219		
Investment liabilities									
Debt financing liabilities	(41,698)		-		-		(41,698		
Securities sold under repurchase									
agreements and cash collateral received									
on securities lent			(39,869)		-		(39,869		
Securities sold short	(26,534)		(28)		-		(26,562		
Derivative liabilities	(68)		(1,850)		-		(1,918		
Short-term secured debt	-		(1,228)		-		(1,228		
Other ²	-		(2,628)		-		(2,628		
Total investment liabilities	(68,300)		(45,603)		-		(113,903		
Pending trades receivable ³	-		2,613		-		2,613		
Pending trades payable ³	-		(2,487)		-		(2,487		
Net investments	\$ 162,066	\$	59,217	\$	320,159	\$	541,442		

(Unaudited)

	As at March 31, 2021 ⁴									
(CAD millions)		Level 1		Level 2		Level 3		Total		
Investments										
Cash and cash equivalents	\$	-	\$	13,744	\$	-	\$	13,744		
Equities										
Public equities ¹		154,995		3,889		45		158,929		
Private equities		-		172		8,598		8,770		
Total equities		154,995		4,061		8,643		167,699		
Fixed income										
Bonds		54,941		39,824		-		94,765		
Other debt		-		1,049		2,709		3,758		
Money market securities		-		143		-		143		
Total fixed income		54,941		41,016		2,709		98,666		
Absolute return strategies		-		15,734		1,012		16,746		
Real assets										
Infrastructure		-		-		8,037		8,037		
Real estate		-		-		9,556		9,556		
Sustainable energies		-		-		2,887		2,887		
Total real assets		-		-		20,480		20,480		
Investment receivables										
Securities purchased under reverse										
repurchase agreements and cash collateral										
pledged on securities borrowed		-		7,127		-		7,127		
Derivative assets		-		3,515		-		3,515		
Other ²		-		2,269		-		2,269		
Total investment receivables		-		12,911		-		12,911		
Investments in investment holding										
subsidiaries (note 2.2)		-		-		265,706		265,706		
Total investments	\$	209,936	\$	87,466	\$	298,550	\$	595,952		
Investment liabilities										
Debt financing liabilities		(36,449)		-		-		(36,449		
Securities sold under repurchase										
agreements and cash collateral received										
on securities lent		-		(33,150)		-		(33 <i>,</i> 150		
Securities sold short		(22,275)		-		-		(22,275		
Derivative liabilities		(45)		(2 <i>,</i> 957)		-		(3,002		
Short-term secured debt		-		(1,234)		-		(1,234		
Other ²		-		(2,048)		-		(2,048		
Total investment liabilities		(58,769)		(39,389)		-		(98 <i>,</i> 158		
Pending trades receivable ³		-		2,663		-		2,663		
Pending trades payable ³		-		(3,191)		-		(3,191		
Net investments	\$	151,167	\$	47,549	\$	298,550	\$	497,266		

¹ Includes investments in funds.

² Included in other investment receivables and other investment liabilities is cash pledged as collateral of \$237 million (March 31, 2021 - \$1,142 million) and cash held as collateral of \$2,508 million (March 31, 2021 - \$1,955 million) on over-the-counter derivative transactions, respectively.
³ Pending trades receivable and payable are measured at amortized cost, which approximates fair value.

⁴ Certain comparatives have been reclassified to conform to the current period's presentation.

2.2 Supplemental information on fair value hierarchy relating to investment holding subsidiaries

The following table presents the fair value hierarchy of the underlying investments and investment liabilities held by investment holding subsidiaries. For further details on the nature and purpose of investment holding subsidiaries, refer to note 1.2.

	As at September 30, 2021							
(CAD millions)	Level 1		Level 2		Level 3	Total		
Investments								
Cash and cash equivalents	\$ 	\$	2,030	\$		\$ 2,030		
Equities								
Public equities ¹	10,317		6,196		42	16,555		
Private equities	-		3,994		136,910	140,904		
Total equities	10,317		10,190		136,952	157,459		
Fixed income								
Bonds	-		4,391		-	4,391		
Other debt	-		5,850		21,908	27,758		
Money market securities	-		-			-		
Total fixed income	-		10,241		21,908	32,149		
Absolute return strategies	-		12,404		1,805	14,209		
Real assets								
Infrastructure	-		-		33,224	33,224		
Real estate	-		-		30,354	30,354		
Sustainable energies	-		-		16,511	16,511		
Total real assets	-		-		80,089	80,089		
Investment receivables								
Derivative assets	-		74		-	74		
Other	-		501			501		
Total investment receivables	-		575		-	575		
Total investments held by investment holding								
subsidiaries	\$ 10,317	\$	35,440	\$	240,754	\$ 286,511		
Investment liabilities								
Other	-		(19)		-	(19)		
Total investment liabilities held by investment								
holding subsidiaries	-		(19)		-	(19)		
Pending trades receivable ²	-		390		-	390		
Pending trades payable ²	-		(1,883)		-	(1,883)		
Investments in investment holding subsidiaries	\$ 10,317	\$	33,928	\$	240,754	\$ 284,999		

(Unaudited)

		As at	March 31, 20)21 ³		
(CAD millions)	Level 1		Level 2		Level 3	Total
Investments						
Cash and cash equivalents	\$ -	\$	788	\$	-	\$ 788
Equities						
Public equities ¹	8,629		7,485		40	16,154
Private equities	-		7,385		123,289	130,674
Total equities	8,629		14,870		123,329	146,828
Fixed income						
Bonds	-		3,795		-	3,795
Other debt	-		4,342		20,779	25,121
Money market securities	-		-		-	-
Total fixed income	-		8,137		20,779	28,916
Absolute return strategies	-		10,576		1,686	12,262
Real assets						
Infrastructure	-		-		31,917	31,917
Real estate	-		-		28,522	28,522
Sustainable energies	-		-		16,258	16,258
Total real assets	-		-		76,697	76,697
Investment receivables						
Derivative assets	-		121		-	121
Other	-		495		-	495
Total investment receivables	-		616		-	616
Total investments held by investment holding						
subsidiaries	\$ 8,629	\$	34,987	\$	222,491	\$ 266,107
Investment liabilities						
Derivative liabilities	-		(2)		-	(2)
Other	-		(4)		-	(4)
Total investment liabilities held by investment						
holding subsidiaries	 -		(6)		-	 (6)
Pending trades receivable ²	-		414		-	414
Pending trades payable ²	 -		(809)		-	 (809)
Investments in investment holding subsidiaries	\$ 8,629	\$	34,586	\$	222,491	\$ 265,706

¹ Includes investments in funds.

² Pending trades receivable and payable are measured at amortized cost, which approximates fair value.

³ Certain comparatives have been reclassified to conform to the current period's presentation.

2.3 Transfers between Level 1 and Level 2

Transfers between levels in the fair value hierarchy are deemed to have occurred at the end of the reporting period. During the six months ended September 30, 2021, transfers from Level 1 to Level 2 included \$760 million of investments held directly by CPP Investments (during the year ended March 31, 2021 - \$103 million). During the six months ended September 30, 2021, transfers from Level 2 to Level 1 included \$654 million of investments held directly by CPP Investments (during the year ended March 31, 2021 - \$104 million). Transfers between Level 1 and Level 2 depend on the availability of quoted market prices in active markets and valuation techniques using inputs other than quoted prices that are observable.

(Unaudited)

2.4 Level 3 reconciliation

The following presents the reconciliations for investments included in Level 3 of the fair value hierarchy:

		For the	six months	ended Sept	ember 30, 2	2021		
								Change in unrealized gains (losses)
		Gain (loss)						on investments
	Fair value	included in			Transfers	Transfers		
	as at				into		September 30,	
(CAD millions)	April 1, 2021	income	Purchases	Sales ¹	Level 3	Level 3	2021	2021 ²
Investments								
Equities								
Public equities	\$ 45	\$ (1)	\$ -	\$ -	\$ -	\$ -	\$ 44	\$ (1)
Private equities	8,598	1,586	219	(1,664)	164	(113)	8,790	951
Total equities	8,643	1,585	219	(1,664)	164	(113)	8,834	950
Fixed income								
Other debt	2,709	148	833	(763)	180	(111)	2,996	79
Absolute return								
strategies	1,012	21		(143)	-	-	890	(9)
Real assets								
Infrastructure	8,037	399	2,030	(676)	-	-	9,790	(74)
Real estate	9,556	287	293	(465)	-	-	9,671	239
Sustainable								
energies	2,887	93		(1)	-	-	2,979	93
Total real assets	20,480	779	2,323	(1,142)		-	22,440	258
Investments in investment holding								
subsidiaries ³	265,706	23,425	(3,849)	(283)	-	-	284,999	23,425
Total	\$ 298,550	\$ 25,958	\$ (474)	\$ (3,995)	\$ 344	\$ (224)	\$ 320,159	\$ 24,703

			For	the year	enc	led March	3	1,2021 ⁴						
		Fair value ind	ain (loss) cluded in vestment	·			٦	Transfers into	Tra	ansfers out of		Fair value as at		Change ir unrealized gains (losses investments still held at
(CAD millions)	Ap	ril 1, 2020	income P	urchases		Sales ¹		Level 3	L	evel 3	Marc	h 31, 2021	Mare	ch 31, 2021 ²
Investments														· · · ·
Equities														
Public equities	\$	33 \$	13 \$	-	\$	(1)	\$	-	\$	-	\$	45	\$	14
Private equities		5,702	3,154	494		(903)		151		-		8,598		3,187
Total equities		5,735	3,167	494		(904)		151		-		8,643		3,201
Fixed income														
Other debt		2,552	243	1,967		(1,902)		-		(151)		2,709		(41
Absolute return														
strategies		1,534	(78)	237		(776)		95		-		1,012		(140
Real assets Infrastructure		7,622	867	25		(477)		-		-		8,037		867
Real estate		14,469	(2,526)	357		(2,744)		-		-		9,556		(2,392
Sustainable														
energies		2,884	433	95		(526)		1		-		2,887		425
Total real assets		24,975	(1,226)	477		(3,747)		1		-		20,480		(1,100
Investments in investment holding														
subsidiaries ³		220,229	43,500	2,841		(864)		-		-		265,706		43,500
Total	\$	255,025 \$	45,606 \$	6,016	\$	(8,193)	Ś	247	\$	(151)	Ś	298,550	\$	45,420

¹ Includes return of capital.

² Included in investment income and includes or excludes the investments transferred into and out of Level 3, respectively.

³ Purchases relating to investment holding subsidiaries represent capital contributions or net loan funding provided to these subsidiaries. Sales relating to investment holding subsidiaries represent return of capital from these subsidiaries.

⁴ Certain comparatives have been reclassified to conform to the current period's presentation.

Transfers into and out of Level 3 were primarily due to changes in the availability of market observable inputs used to determine fair value. Transfers into and out of Level 3 are deemed to have occurred at the end of the reporting period.

2.5 Level 3 – Significant unobservable inputs

The table below presents the fair value of investments directly held by CPP Investments, valuation techniques used to determine their fair values, and the ranges and weighted averages of unobservable inputs.

Investment holding subsidiaries are also classified as Level 3 in the fair value hierarchy. The fair value is largely driven by Level 3 investments, for which the valuation techniques, ranges and weighted averages of unobservable inputs are included below. However, certain investments held by the investment holding subsidiaries are based on quoted prices in active markets (Level 1) or valued using observable inputs (Level 2). These amount to \$10,317 million (March 31, 2021 - \$8,629 million) and \$33,928 million (March 31, 2021 - \$34,586 million), respectively. Refer to note 2.2 for further details on Level 1 and Level 2 investments relating to investment holding subsidiaries. As each investment holding subsidiary is largely composed of Level 3 investments, the entire subsidiary is classified as Level 3.

(Unaudited)

			As at September 3	0, 2021		
	Fair value o	f investments	Primary valuation	Significant	Range of	Weighted
	hel	ld by:	techniques used ¹	unobservable inputs	input values ²	average ²
		Investment				
	СРР	holding				
(CAD millions)	Investments	subsidiaries				
Cash and cash equivalents	\$-	\$ 2,030	Cost with accrued interest	-	-	-
Public equities						
Direct	-	10,324	Quoted market price	-	-	-
Fund investments	44	6,231	Net asset value provided	-	-	-
			by investment manager			
Private equities						
Direct	8,718	51,060	Earnings multiples of	EBITDA multiple	8.8X-22.7X	17.1X
			comparable companies			
			Discounted cash flow	Discount rate	6.5%-12.0%	11.3%
	11	17,395	Net asset value provided	-	-	-
			by investment manager			
Fund investments	61	72,449	Net asset value provided	-	-	-
			by investment manager			
Bonds	-	4,391	Quoted market prices or	-	-	-
			discounted cash flows			
			using observable inputs			
Other debt						
Direct private debt	101	20,910	Discounted cash flow	Discount rate	3.4%-29.7%	7.5%
	-	1,565	Net asset value provided	-	-	-
			by investment manager			
Asset-backed securities	2,683	845	Comparable pricing	Price 8	32.1%-105.0%	98.9%
Fund investments	212	4,438	Net asset value provided	-	-	-
			by investment manager			
Absolute return strategies						
Fund investments	890	14,209	Net asset value provided	-	-	-
			by investment manager			
Infrastructure						
Direct	9,790	33,189	Discounted cash flow	Discount rate	7.0%-14.1%	8.3%
Fund investments		35	Net asset value provided	-		-
			by investment manager			
Real estate						
Direct	8,083	5,420	Discounted cash flow	Discount rate	5.0%-14.3%	6.5%
				Terminal	3.8%-11.5%	5.4%
				capitalization rate		
	1,521	22,168	Net asset value provided	-	-	-
			by investment partner			
Fund investments	67	2,766	Net asset value provided	-	-	-
			by investment manager			
Sustainable energies	2.072				7 404 22 244	10.001
Direct	2,979	16,511	Discounted cash flow	Discount rate	7.1%-32.9%	10.3%
Investment receivables			0.11.1.1.1			
Derivative assets		74	Option model			-
Other		501	Cost with accrued interest	-	-	-
Investment liabilities		10.01				
Other	-		Cost with accrued interest		-	-
Pending trades net	-	(1,493)	Amortized cost	-	-	-
receivable/(payable)						
Total	\$ 35,160	\$ 284,999				

(Unaudited)

			As at March 31	, 2021 ³		
	Fair value o	finvestments	Primary valuation	Significant	Range of input	Weighted
	he	ld by:	techniques used ¹	unobservable inputs	values ²	average ²
		Investment				
	СРР	holding				
(CAD millions)	Investments	subsidiaries				
Cash and cash equivalents	\$-	\$ 788	Cost with accrued interest	-	-	-
Public equities						
Direct	-	9,635	Quoted market price	-	-	-
Fund investments	45	6,519	Net asset value provided	-	-	-
			by investment manager			
Private equities						
Direct	8,437	55,514	Earnings multiples of	EBITDA multiple	9.0X-64.3X	25.5X
			comparable companies			
			Discounted cash flow	Discount rate	8.0%-16.3%	11.5%
	14	14,166	Net asset value provided	-	-	-
			by investment manager			
Fund investments	147	60,994	Net asset value provided	-	-	-
			by investment manager			
Bonds	-	3,795	Quoted market prices or	-	-	-
			discounted cash flows			
			using observable inputs			
Other debt						
Direct private debt	137	18,744	Discounted cash flow	Discount rate	3.7%-30.0%	7.6%
	-	1,420	Net asset value provided	-	-	-
			by investment manager			
Asset-backed securities	2,550	693	Comparable pricing	Price	81.4%-109.2%	99.3%
Fund investments	22	4,264	Net asset value provided	-	-	-
			by investment manager			
Absolute return strategies						
Fund investments	1,012	12,262	Net asset value provided	-	-	-
			by investment manager			
Infrastructure	0.007	24.004		.	7 201 4 4 4 01	0.00/
Direct	8,037	31,891	Discounted cash flow	Discount rate	7.2%-14.1%	8.3%
Fund investments	-	26	Net asset value provided	-	-	-
De al astata			by investment manager			
Real estate	0.200	5 500	Discounted cash flow	Discount acts	F 20/ 14 20/	C 70/
Direct	8,286	5,500	Discounted cash now	Discount rate	5.3%-14.3%	6.7%
				Terminal	3.8%-11.0%	5.5%
	1,205	20,461	Net asset value provided	capitalization rate	_	_
	1,205	20,401	by investment partner			
Fund investments	65	2,561	Net asset value provided		_	_
i unu investments	05	2,501	by investment manager	-	_	_
Sustainable energies			Sy mestiment manager			
Direct	2,887	16,258	Discounted cash flow	Discount rate	7.1%-32.9%	10.4%
Investment receivables	2,007	10,200	Discounced cash now	Discountrate	,.1,0 32.370	10.470
Derivative assets	-	121	Option model	-	-	-
Other	-		Cost with accrued interest	-	-	-
Investment liabilities						
Derivative liabilities	-	(2) Discounted cash flow	-	-	-
Other	-	•) Cost with accrued interest	-	-	-
Pending trades net	-	(395		-	-	-
receivable/(payable)		•				
Total	\$ 32,844	\$ 265,706				

¹ May include certain recently acquired investments held at cost, which approximates fair value.

² The range of input values represents the highest and lowest inputs used to value the investments in a particular asset class. The weighted average of the input values is calculated based on the relative fair values of the investments within the asset class. The diversity of investments reported within each asset class, such as the geographic location and industry sector of the investments, may result in certain ranges of inputs being wide and unevenly distributed across the range.

³ Certain comparatives have been reclassified to conform to the current period's presentation.

2.6 Sensitivity analysis of valuations using unobservable inputs

Significant changes in any of the above unobservable inputs would result in a significantly higher or lower fair value measurement. The interrelationship of significant unobservable inputs and fair value measurement for the most significant key inputs identified in the table above is as follows:

- An increase (decrease) in the EBITDA multiple will result in a higher (lower) fair value.
- An increase (decrease) in the discount rate and terminal capitalization rate will result in a lower (higher) fair value.

The fair values of the investments classified within Level 3 of the fair value hierarchy in note 2.1 and 2.2 are based on accepted industry valuation methods that may include the use of estimates made by Management, appraisers or both where significant judgment is required. The use of valuation methods based on reasonable alternative assumptions could have a significant impact on the resulting fair values. With all other variables held constant, the use of reasonable alternative assumptions would result in a decrease of \$8,200 million (March 31, 2021 - \$9,000 million) or an increase of \$8,600 million (March 31, 2021 - \$9,500 million) in net assets. This sensitivity analysis is subject to the exercise of judgment and excludes investments where fair values are provided by investment managers as the underlying assumptions used are not available to CPP Investments.

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3. Derivatives

The fair value of derivative contracts held by CPP Investments and its investment holding subsidiaries is as follows:

	As at Septe	mber 30, 2021	As at M	arch 31, 2021	
	Positive	Negative	Positive	Negative	
(CAD millions)	fair value	fair value	fair value	fair value	
Equity contracts					
Futures	\$ 9	\$ (16)	\$-	\$-	
Swaps	3,207	(1,388)	2,231	(2,267)	
Options:					
Exchange-traded – purchased	-	-		-	
Exchange-traded – written	-			-	
Over-the-counter – purchased	1	-	1	-	
Over-the-counter – written	-	(64)		(85)	
Warrants	74	-	121	-	
Total equity contracts	3,291	(1,468)	2,353	(2,352)	
Foreign exchange contracts					
Forwards	307	(229)	406	(370)	
Options:					
Over-the-counter – purchased	48	-	50	-	
Over-the-counter – written	-	(39)		(45)	
Total foreign exchange contracts	355	(268)	456	(415)	
Interest rate contracts					
Futures	-	-		-	
Forwards	-			-	
Swaps	418	(15)	763	(53)	
Options:					
Over-the-counter – purchased	98	-	29	-	
Over-the-counter – written	-	(97)		(109)	
Total interest rate contracts	516	(112)	792	(162)	
Credit contracts					
Credit default swaps:					
Over-the-counter – purchased	1	(4)	2	(11)	
Over-the-counter – written	49	(3)	32	(5)	
Options:					
Over-the-counter – purchased	1		1	-	
Over-the-counter – written	-	(11)	-	(14)	
Total credit contracts	51	(18)	35	(30)	
Commodity contracts					
Futures	-	-	-	-	
Options:					
Exchange-traded – purchased	-	-	-	-	
Exchange-traded – written	-	(52)	-	(45)	
Total commodity contracts	-	(52)	-	(45)	
Total ¹	\$ 4,213	\$ (1,918)	\$ 3,636	\$ (3,004)	

¹ Includes \$74 million (March 31, 2021 - \$121 million) relating to warrants and nil (March 31, 2021 - \$2 million) relating to interest rate swaps transacted by investment holding subsidiaries.

4. Investment income

4.1 Investment income by nature

	For	the three Septem	ths ended 30,	Fo	r the six m Septerr	onths ended Iber 30,		
(CAD millions)		2021	2020		2021		2020	
Interest, dividends, and other investment income	\$	3,111	\$ 1,252	\$	5,423	\$	2,675	
Realized gains on private equities and real assets		399	145		1,083		65	
Unrealized gains (losses) on private equities and real assets		1,311	544		1,345		(31)	
Unrealized gains on investment holding subsidiaries (note 4.2)		15,104	11,477		23,425		17,886	
Realized and unrealized gains on public and other investments ¹		563	9,032		7,600		25,750	
Total investment income	\$	20,488	\$ 22,450	\$	38,876	\$	46,345	

¹ Consists of investment income from public equities, fixed income, absolute return strategies, derivatives and other.

4.2 Supplemental information on investment income

The change in unrealized gains generated from investment holding subsidiaries is a composite of the following:

	For	the three Septem	iths ended 30,	Fo	or the six n Septen	
(CAD millions)		2021	2020		2021	2020
Interest, dividends, and other investment income	\$	1,834	\$ 1,087	\$	3,392	\$ 1,892
Realized gains on private equities and real assets		8,375	2,983		11,022	3,927
Unrealized gains on private equities and real assets		6,714	6,840		10,151	7,998
Realized and unrealized gains on public and other investments ²	l	413	1,250		2,259	5,006
Dividends paid to CPP Investments		(1,752)	-		(2,567)	-
Investment-related expenses (note 5.2)		(480)	(683)		(832)	(937)
Total investment income	\$	15,104	\$ 11,477	\$	23,425	\$ 17,886

¹ Consists of investment income from public equities, fixed income, absolute return strategies, derivatives and other.

5. Investment-related expenses

5.1 Investment-related expenses of CPP Investments

Investment-related expenses borne by CPP Investments consist of the following:

	For th	ne three n Septeml		Fo	s ended 0,		
(CAD millions)		2021	2020		2021		2020
Borrowing costs ¹	\$	67	\$ 245	\$	39	\$	548
Investment management fees		198	245		412		518
Transaction costs		108	23		149		89
Total	\$	373	\$ 513	\$	600	\$	1,155

1 Borrowing costs includes the unrealized and realized gains/losses from natural interest rate hedges, in addition to the costs associated with borrowing instruments.

5.2 Supplemental information on investment-related expenses

Investment-related expenses borne by CPP Investments' investment holding subsidiaries consist of the following:

	For t	he three n Septeml	For the six months ended September 30,				
(CAD millions)		2021	2020		2021		2020
Investment management fees	\$	457	\$ 647	\$	784	\$	882
Transaction costs		23	36		48		55
Total	\$	480	\$ 683	\$	832	\$	937

6. Segment information

6.1 Net income from operations by investment segment

The table below illustrates the investment income generated and the associated investment-related expenses and operating expenses incurred by each investment department to support their activities.

	Total	Capital Markets						
	Fund	and Factor	Active	Credit	Private	Real		
(CAD millions)	Management	Investing	Equities	Investments	Equity	Assets	Adjustment ³	Tota
Investment income (loss)	\$ 2,000	\$ 760	\$ (256)	\$ 1,947	\$ 13,780 \$	2,806	\$ (549) \$	20,488
Investment-related expenses ^{1,2}	(150)	(376)	(34)	(22)	(192)	(148)	549	(373)
Net investment income (loss)	1,850	384	(290)	1,925	13,588	2,658	-	20,115
Operating expenses	(51)	(48)	(61)	(47)	(77)	(84)	-	(368)
Net income (loss) from								
operations	\$ 1,799	\$ 336	\$ (351)	\$ 1,878	\$ 13,511 \$	2,574	\$ - \$	19,747

		F	or	the three m	nor	nths ende	d Se	eptember	30	0,2020				
				Capital										
		Total		Markets										
		Fund		and Factor		Active		Credit		Private	Real			
(CAD millions)	Mar	nagement		Investing		Equities	Inv	estments		Equity	Assets	Adj	ustment ³	Total
Investment income (loss)	\$	9,430	\$	1,010	\$	1,034	\$	770	\$	9,647	\$ 1,271	\$	(712)	\$ 22,450
Investment-related														
expenses ^{1, 2}		(284)		(471)		(19)		(17)		(200)	(234)		712	(513)
Net investment income		9,146		539		1,015		753		9,447	1,037		-	21,937
Operating expenses		(55)		(60)		(51)		(42)		(63)	(86)		-	(357)
Net income from									_		 			
operations	\$	9,091	\$	479	\$	964	\$	711	\$	9,384	\$ 951	\$	-	\$ 21,580

¹ Costs of \$136 million (September 30, 2020 - \$274 million) attributable to Total Fund Management represent borrowing costs as described in note 5 of \$67 million (September 30, 2020 - \$245 million), as well as the leverage-generating elements of additional derivative transactions of \$69 million (September 30, 2020 - \$29 million). Together these amounts reflect the financing costs described in note 10.2, which is a measure used by Management to monitor the total costs associated with all sources of leverage to CPP Investments.

² Includes borrowing costs, investment management fees and transaction costs borne by CPP Investments and its investment holding subsidiaries in relation to the respective departments.

³ Consists of costs on the leverage-generating elements of additional derivative transactions, and investment management fees and transaction costs borne by investment holding subsidiaries, all of which are reclassified into investment income.

(Unaudited)

		Fo	r the six mo	onth	ns endec	l Sep	tember 3	0,	2021			
		tal nd	Capital Markets and Factor		Active		Credit		Private	Real		
(CAD millions)	Managem		Investing	E		Inve	estments		Equity		Adjustment ³	Total
Investment income (loss)	\$ 11,1	95 ;	\$ 1,799	\$	(679)	\$	2,833	\$	19,712	\$ 4,966	\$ (950)	\$ 38,876
Investment-related expenses ^{1,2}	(1	32)	(746)		(60)		(42)		(326)	(194)	950	(600)
Net investment income (loss) Operating expenses	11,0 (1	L3)3)	1,053 (101)		(739) (130)		2,791 (92)		19,386 (154)	4,772 (174)	1	38,276 (754)
Net income (loss) from operations	\$ 10,9	LO :	\$ 952	\$	(869)	\$	2,699	\$	19,232	\$ 4,598	\$-	\$ 37,522

			Fo	r the six mont	hsended	Sep	otember 3	0,2020					
				Capital									
		Total		Markets									
		Fund		and Factor	Active		Credit	Privat	e	Real			
(CAD millions)	Ma	nagement		Investing	Equities	Inv	estments	Equit	y	Assets	Adj	ustment ³	Tota
Investment income (loss)	\$	25,507	\$	3,035 \$	2,182	\$	2,445	\$13,046	\$	1,178	\$	(1,048)	\$ 46,345
Investment-related													
expenses ^{1, 2}		(683)		(782)	(31)		(22)	(378)	(307)		1,048	(1,155
Net investment income		24,824		2,253	2,151		2,423	12,668		871		-	45,190
Operating expenses		(98)		(113)	(106)		(81)	(124	.)	(163)		-	(685
Net income from													
operations	\$	24,726	\$	2,140 \$	2,045	\$	2,342	\$12,544	\$	708	\$	-	\$ 44,505

¹ Costs of \$157 million (September 30, 2020 - \$659 million) attributable to Total Fund Management represent borrowing costs as described in note 5 of \$39 million (September 30, 2020 - \$548 million), as well as the leverage-generating elements of additional derivative transactions of \$118 million (September 30, 2020 - \$111 million). Together these amounts reflect the financing costs described in note 10.2, which is a measure used by Management to monitor the total costs associated with all sources of leverage to CPP Investments.

² Includes borrowing costs, investment management fees and transaction costs borne by CPP Investments and its investment holding subsidiaries in relation to the respective departments.

³ Consists of costs on the leverage-generating elements of additional derivative transactions, and investment management fees and transaction costs borne by investment holding subsidiaries, all of which are reclassified into investment income.

6.2 Net assets (liabilities) by investment segment

				Net	assets (lia	bilit	ties)				
(CAD millions)	Ma	Total Fund	 Capital Markets d Factor Investing		Active Equities	In	Credit vestments	Private Equity	R	eal Assets	Total
As at:	-		0					1. 17			
September 30, 2021	\$	245,443	\$ 2,524	\$	(252)	\$	48,535	\$ 134,088	\$	111,196	\$ 541,534
March 31, 2021		222,260	2,218		(569)		43,761	125,140		104,377	497,187

¹ Net assets attributable to Total Fund Management include net corporate assets of \$92 million (March 31, 2021 – net corporate liabilities of \$79 million).

6.3 Geographic information

Net investments are presented in the table below based on the region to which they have primary economic exposure:

	Net investments ¹													
Europe (excluding														
(CAD millions)	Canada			U.S.		Asia		U.K.)		U.K.		Other		Total
As at:														
September 30, 2021	\$	86,567	\$	190,814	\$	130,450	\$	63,216	\$	26,539	\$	43,856	\$	541,442
March 31, 2021		78,283		183,551		119,292		53,614		23,623		38,903		497,266

Includes debt financing liabilities of \$3,669 million, \$19,400 million, \$11,861 million, \$5,199 million and \$1,569 million (March 31, 2021 -\$3,604 million, \$16,108 million, \$12,071 million, \$4,272 million, and \$394 million), based on the currencies of the issuances, in Canada, the U.S., Europe (excluding the U.K.), the U.K., and other, respectively.

7. Risk management

CPP Investments manages and mitigates investment risks in accordance with the Integrated Risk Policy (Policy), which became effective on April 1, 2021 and incorporates key elements of the previous Integrated Risk Framework and Investment Risk Management Policy. This Policy establishes accountability of the Board of Directors, the various committees, including the Risk Committee, and the investment departments to manage investment-related risks. The Policy is approved by the Board of Directors at least once every fiscal year, and contains risk limits and risk management provisions that govern investment decisions in accordance with the mandate of CPP Investments.

7.1 Total fund risk

A suite of risk measures is used within CPP Investments to monitor and assess the risk profile of the base CPP Investment Portfolio and the additional CPP Investment Portfolio (collectively the Investment Portfolios). Regular risk reports are provided to Senior Management and the Board of Directors to support the governance of the various dimensions of investment risk to which the Investment Portfolios are exposed. The new Policy, which is effective April 1, 2021, includes the addition of new limits around portfolio composition, and the removal of certain limits at a Board level to reduce redundancy. The target level of market risk of the base CPP Investment Portfolio has not changed, while that of the additional CPP Investment Portfolio has an increased equity/debt risk equivalence ratio of 55%/45%.

(Unaudited)

Plan adjustment risk is a central concept in CPP Investments' portfolio design and risk governance activities. It is defined as the probability of a material adjustment to the Minimum Contribution Rate applicable to CPP contributors, based solely on investment return performance over various time horizons. It is an overarching measure that is impacted by market, credit, liquidity and leverage risk.

Other key investment risk governance measures include:

- Market risk: The equity/debt risk equivalence ratio, which is the proportion of equity (versus debt) in a simple two-asset reference portfolio that would give the same market and credit risk as that of the applicable Investment Portfolio.
- Potential investment losses: The reported loss of the Investment Portfolios over a one- year horizon is not expected to exceed the established limit of fund value for that horizon 19 times out of 20. The potential loss of the Investment Portfolios over a five-year horizon is also measured and monitored by Management. Both are based on the value-at-risk measure at a 95 percent confidence level. Effective April 1, 2021, the one-year potential loss risk limit is now expressed as a percentage of the Investment Portfolios rather than an absolute dollar value.
- Active risk: The potential underperformance arising from differences between the compositions of each Investment Portfolio and an internally developed comparator portfolio. This is a new measure that was introduced as part of the Policy that became effective April 1, 2021.
- Liquidity and leverage risk measures, which are further described in note 10.

The monitoring of adherence to investment risk limits is conducted independent of the investment departments by the Risk group using both industry standards and internally developed risk models. The tables below provide a summary of the key investment risk governance measures of the Investment Portfolios.

			s	eptember 30,	As a 2021		March 31,		s at 21 ⁴
	Lir	nit		base	e CPF)	base CPP		
Plan adjustment risk ¹	n/a			30	%	6	23		%
Market risk Potential investment loss:	80 - 90	%		84	%	6	85		%
One-year horizon ²	20	%		18	%	6	18		%
Five-year horizon ^{1, 2}	n/a			20	%	6	20		%
Active risk ³	450 bps			378	bp	5	n/a		

					As at	t		As at		
			Se	ptember 30,	2021		March 31,	20214		
	Liı	nit		additiona	I CPF)	additional CPP			
Plan adjustment risk ¹	n/a			25	%	5	25	%		
Market risk	50 - 60	%		55	%	5	54	%		
Potential investment loss:										
One-year horizon ²	14	%		13	%	5	12	%		
Five-year horizon ^{1, 2}	n/a			15	%	5	15	%		
Active risk ³	450 bps			351	bp	5	n/a			

¹ Measure is no longer a Board limit in the Integrated Risk Policy, effective April 1, 2021, but continues to be a key consideration in determining the risk targets and limits.

² Percentage of investment value.

³ Represented in basis points (bps).

⁴ Certain comparatives have been recast to conform to the current period's presentation.

(Unaudited)

8. Market risk

Market risk is the risk that the fair value of an investment or investment liability will fluctuate because of changes in market prices and rates. Market risk includes equity risk, interest rate risk, credit spread risk and currency risk.

8.1 Equity risk

Equity risk is the risk that the fair value of an investment or investment liability will fluctuate because of changes in equity prices, which is a significant source of risk of the Investment Portfolios.

8.2 Interest rate risk

Interest rate risk is the risk that the fair value of an investment or investment liability will fluctuate because of changes in market interest rates. The Investment Portfolios are exposed to interest rate risk primarily through holdings of fixed income securities, certain investment liabilities and interest rate derivatives.

8.3 Credit spread risk

Credit spread risk is the difference in yield on certain securities compared to a comparable risk-free security (i.e., government issued) with the same maturity date. Credit spread risk is the risk that the fair value of these securities will fluctuate because of changes in credit spread. With all other variables held constant, an increase in credit spread rates would result in a decrease in assets or an increase in liabilities.

8.4 Currency risk

The Investment Portfolios are exposed to currency risk through holdings of investments or investment liabilities in various foreign currencies. Fluctuations in the relative value of foreign currencies against the Canadian dollar can result in a positive or negative effect on the fair value or future cash flows of these investments and investment liabilities.

8.4.1 Currency risk exposures

The net currency exposures after allocating foreign currency derivatives, in Canadian dollars, are as follows:

(CAD millions)	As at Septer	nber 30, 2021		A	s at March 31,	2021	
		Net % of			Net	% of	
Currency	ехро	sure total ¹			exposure	total ¹	
United States dollar	\$ 303	254 56	%	\$	280,198	56	%
Euro	38	409 7			31,580	6	
Chinese renminbi	25	.072 5			23,391	5	
British pound sterling	16	.938 3			16,238	3	
Australian dollar	14	870 3			13,829	3	
Hong Kong dollar	12,	497 2			14,596	3	
Indian rupee	11,	.182 2			10,340	2	
Japanese yen	8	289 1			6,407	1	
Brazilian real	6	.501 1			5,439	1	
Mexican peso	4	766 1			4,325	1	
Swiss Franc	3	.361 1			3,546	1	
Chilean peso	2	577 1			2,860	1	
Other	11	705 2			12,294	2	
Total foreign exposure	459	.421 85			425,043	85	
Canadian dollar	82	.021 15			72,223	15	
Total	\$ 541	.442 100	%	\$	497,266	100	%

¹ May not reflect actual percentage of total due to rounding.

9. Credit risk

Credit risk represents the potential permanent loss of investment value due to direct or indirect counterparty exposure to a defaulted entity and/or financial losses due to deterioration of an entity's credit quality. The Investment Portfolios' credit risk arises primarily through its investments in non-investment grade entities. The carrying amounts of these investments as presented in the Consolidated Schedule of Investment Portfolio represent the maximum direct credit risk exposure at the Balance Sheet date.

9.1 Credit value-at-risk

In addition to incorporating credit risk within the potential investment loss measures as described in note 7.1, a standalone measure for losses due to defaults and credit rating migration is also monitored. A Monte Carlo simulation that incorporates likelihood of default, credit rating migration and recovery in the event of default for underlying investments is adopted to quantify this dimension of risk. Credit value-at-risk, at a 95% confidence level, implies there is a 5% chance that the underlying investments in the Investment Portfolios will lose more than the amounts shown below, expressed as a percentage of each Investment Portfolio, in any given year due to default and credit migration risk.

	As at	September 30, 2021	As	As at March 31, 2021 ¹					
	base CPP	additional CPP	base CPP	additional CPP					
Credit value-at-risk	3.6 %	2.4 %	3.4 %	2.2 %					

¹ Certain comparatives have been recast to conform to the current period's presentation.

10. Liquidity and leverage risk

10.1 Liquidity risk

Liquidity risk is the risk of failing to obtain the necessary funds to meet CPP Investments' payment obligations as they become due, to fund investment programs, or to rebalance its portfolios in periods of stress, without incurring unacceptable losses. The liquidity coverage ratio measures the amount of available liquid securities relative to CPP Investments' investment obligations and obligations to transfer funds to CPP over various time horizons including any 10-day period.

	Limit	As at September 30, 2021	As at March 31, 2021
Liquidity coverage ratio	1.0x	3.2x	6.2x

Liquidity risk is impacted by the use of various forms of leverage which CPP Investments uses to manage certain other risks and enhance fund returns. The use of leverage is governed directly through leverage measures as outlined in note 10.2.

CPP Investments also maintains unsecured credit facilities to meet potential liquidity requirements. There were no credit facilities drawn as at September 30, 2021 and March 31, 2021.

(CAD millions)	As at Septe	ember 30, 2021	As at March 31, 2021			
Unsecured credit facilities held	\$	3,000	\$	3,000		

(Unaudited)

10.2 Leverage risk

Leverage risk is the risk that excessive on- and off-balance sheet financial obligations heighten market and liquidity risks during periods of stress. Leverage risk is monitored against two metrics which together capture different aspects of leverage across the Investment Portfolios:

- Total financing liabilities is a notional-based measure of recourse leverage which represents the net amount of on-balance sheet and off-balance sheet financing used by CPP Investments to increase investment exposure.
- Risk weighted liabilities is determined using risk-weighted notionals of recourse liabilities which represent the risk of the underlying leverage products, including derivatives, used by CPP Investments.

The table below presents the key leverage risk metrics of the Investment Portfolios.

	As at September 30, 2021	As at March 31, 2021
Total financing liabilities	17.9 %	17.8 %
Risk weighted liabilities	11.1 %	10.5 %

For the three and six months ended September 30, 2021, the associated financing costs on total financing liabilities were \$136 million and \$157 million, respectively (three and six months ended September 30, 2020 - \$274 million and \$659 million, respectively). These financing costs are higher than the borrowing costs disclosed in note 5.1 due to the inclusion of certain elements of derivative transactions which are utilized to provide additional sources of leverage to CPP Investments.

In addition, CPP Investments seeks to maintain its issuer credit rating of "AAA" and maintains leverage ratios that are consistent with this rating.

10.3 Terms to maturity

10.3.1 Terms to maturity of non-derivative investments held directly by CPP Investments

			Terms	to maturity				
		Α	s at Septem	nber 30, 2021	L		As at March	31, 2021
	Within	1 to 5	6 to 10	Over 10		Average effective		Average effective
(CAD millions)	1 year	years	years	years	Total ²	yield	Total ²	yield
Non-marketable bonds								
Canadian provincial								
government	\$ 1,121	\$ 5,074	\$ 1,189	\$ 12,519	\$ 19,9 03	2.5 %	\$ 20,561	2.6 %
Marketable bonds								
Government of Canada	-	2,875	1,575	1,120	5,570	1.6	6,337	1.1
Canadian provincial								
government	362	1,641	2,373	3,300	7,676	2.4	7,370	2.5
Canadian government								
corporations		1,839	563	328	2,730	1.7	2,584	1.6
Foreign government	636	21,816	12,443	21,470	56,365	2.0	45,736	2.1
Corporate bonds	487	6,234	5,816	4,745	17,282	2.5	12,177	2.6
Other debt								
Private debt ¹	101	-			101	-	137	-
Asset-backed securities	-	59	805	1,819	2,683	1.7	2,550	1.8
Securities purchased under reverse repurchase								
agreements	12,466	-	-	-	12,466	-	6,062	0.2
Cash collateral pledged on								
securities borrowed	1,036	-		-	1,036	n/a	1,065	n/a
Total	\$ 16,209	\$ 39,538	\$ 24,764	\$ 45,301	\$ 125,812	n/a	\$ 104,579	n/a

¹ Includes direct investments that are preferred shares classified as debt. Excludes fund investments.

² Represents fair value.

10.3.2 Terms to maturity of non-derivative investments held by investment holding subsidiaries

The following table presents supplemental information relating to the terms to maturity of investments held by investment holding subsidiaries.

				Terms t	o n	naturity						
			As	at Septe	mb	er 30, 202	1			Α	s at March	n 31, 2021
(CAD millions)	Within 1 year	1 to 5 years		6 to 10 years		Over 10 years		Total ²	Average effective yield		Total ²	Average effective yield
Marketable bonds	I year	years		years		years		Total	yielu		Total	yiciu
Corporate bonds Other debt	\$ 91	\$ 1,027	\$	3,255	\$	18	\$	4,391	4.9 %	\$	3,795	4.8 %
Private debt ¹	938	8,775		9,726		95		19,534	5.6		17,182	6.1
Asset-backed securities		61		259		525		845	3.2		693	3.4
Total	\$ 1,029	\$ 9,863	\$	13,240	\$	638	\$	24,770	n/a	\$	21,670	n/a

¹ Includes direct investments that are preferred shares classified as debt. Excludes fund investments.

² Represents fair value.

10.3.3 Terms to maturity of non-derivative investment liabilities held directly by CPP Investments

			Ter	ms to ma	turity					
			As at S	eptembe	r 30, 2021			ļ	As at Marcl	h 31, 2021
(CAD millions)	Within 1 year		6 to 10 vears	Over 10 vears	Total ³	Fair Value	Weighted average interest rate		Fair value	Weighted average interest rate
Securities sold under	I year	years	years	years	Total	Value	Tate	Total	value	Tate
repurchase agreements Cash collateral	\$ 37,004	\$ -	\$-\$	-	\$ 37,004 \$	37,004	- %	\$ 30,502	\$30,489	0.1 %
received on securities lent	2,865	-	-		2,865	2,865	n/a	2,661	2,661	n/a
Securities sold short ^{1,2} Debt financing	26,562	-	-	-	26,562	26,562	n/a	22,275	22,275	n/a
liabilities Term debt	4,744	18,690	12,621	4,861	40,916	41,698	0.8	35,623	36,449	0.8
Short-term secured debt	1,228	-	-	-	1,228	1,228	0.2	1,234	1,234	0.2
Total	\$ 72,403	\$18,690	\$12,621 \$	4,861	\$108,575 \$	109,357	n/a	\$ 92,295	\$ 93,108	n/a

¹ Considered repayable within one year based on the earliest period in which the counterparty could request payment under certain conditions.

² Includes equities sold short for which the average interest rate is not applicable.

³ Represents contractual amounts.

11. Reconciliation of debt financing liabilities

The following table provides a reconciliation of debt financing liabilities arising from financing activities:

		For the	six	months en	ded	September 3	0, 202	21		
		As at					No	n-cash Changes		As at
(CAD millions)	Ар	ril 1, 2021		Proceeds	R	epayments		in fair value ¹	Sep	tember 30, 2021
Debt financing liabilities	\$	36,449	\$	8,315	\$	(2,856)	\$	(210)	\$	41,698

		For the	e six n	nonthsen	ded S	eptember 30), 202	0		
		As at					No	n-cash Changes		As at
(CAD millions)	Ар	ril 1, 2020	P	roceeds	Re	payments		in fair value ¹	Septe	ember 30, 2020
Debt financing liabilities	\$	38,395	\$	8,101	\$	(6,859)	\$	(1,019)	\$	38,618

¹ Includes foreign exchange gains of \$46 million (September 30, 2020 - \$1,422 million).

12. Collateral

12.1 Collateral held and pledged directly by CPP Investments

The net fair value of collateral held and pledged directly by CPP Investments was as follows:

		As at	As at
(CAD millions)	Septe	mber 30, 2021	March 31, 2021
Third-party assets held as collateral on ¹ :			
Reverse repurchase agreements	\$	12,387	\$ 6,056
Derivative transactions		2,514	2,049
Securities lent ^{2,4}		6,365	3,292
Own and third-party assets pledged as collateral on:			
Repurchase agreements		(36,942)	(30,457)
Securities borrowed ^{3,4}		(29,758)	(25,027)
Short-term secured debt ⁵		(1,435)	(1,502)
Derivative transactions		(4,600)	(3 <i>,</i> 545)
Total	\$	(51,469)	\$ (49,134)

¹ The fair value of the collateral that may be sold or repledged as at September 30, 2021 was \$15,875 million (March 31, 2021 - \$6,781 million). The fair value of collateral sold or repledged as at September 30, 2021 was \$3,517 million (March 31, 2021 - \$3,148 million).

² The fair value of securities lent as at September 30, 2021 was \$6,116 million (March 31, 2021 - \$3,252 million).

³ The fair value of securities borrowed as at September 30, 2021 was \$23,695 million (March 31, 2021 - \$20,670 million) of which \$23,569 million (March 31, 2021 - \$20,091 million) was used for short selling activity.

⁴ Cash collateral payable on the balance sheet of \$2,865 million (March 31, 2021 - \$2,661 million) consists of collateral receivable of nil and collateral payable of \$2,865 million that qualify for netting (March 31, 2021 - nil and \$2,661 million, respectively).

⁵ Represents securities pledged as collateral on short-term cash borrowings from prime brokers.

12.2 Supplemental information on collateral relating to investment holding subsidiaries

The net fair value of collateral held and pledged directly by investment holding subsidiaries was as follows:

		As at	As at
(CAD millions)	Sept	ember 30, 2021	March 31, 2021
Own and third-party assets pledged as collateral on:			
Securities borrowed ^{1,2}	\$	(6,478) \$	(4,752)
Derivative transactions ²		(669)	(347)
Loans ³		(20,058)	(17,357)
Total	\$	(27,205) \$	(22,456)

¹ The fair value of securities borrowed as at September 30, 2021 was \$4,058 million (March 31, 2021 - \$2,976 million) of which \$4,058 million (March 31, 2021 - \$2,976 million) was used for short selling activity.

² The cash collateral at the prime brokers may be used for securities borrowed and derivatives transacted by broker.

³ The loans liability is included in the fair value of investment holding subsidiaries.

13. Commitments

CPP Investments and its investment holding subsidiaries have entered into commitments related to the funding of investments. These commitments are generally payable on demand based on the funding needs of the investment subject to the terms and conditions of each agreement. As at September 30, 2021, the unfunded commitments for CPP Investments and its investment holding subsidiaries totalled \$1,286 million (March 31, 2021 - \$1,057 million) and \$52,153 million (March 31, 2021 - \$44,244 million), respectively.

14. Guarantees

As part of certain investment transactions, CPP Investments and its investment holding subsidiaries agreed to guarantee, as at September 30, 2021, up to \$245 million (March 31, 2021 - \$505 million) and \$6,763 million (March 31, 2021 - \$6,128 million), respectively, to other counterparties in the event certain investee entities default under the terms of loan and other related agreements.

15. Base CPP and additional CPP

The following note discloses the net assets, net investments and net income of CPP Investments' base CPP account and additional CPP account.

15.1 Changes in net assets

The accumulated transfers from/to the CPP and its two parts, the base CPP and additional CPP, as well as their accumulated net income since inception, are as follows:

					For the	three mon	ths e	nded		
	Accumulat	ed	net transfers	s fro	om CPP					
(CAD millions)	base CPP		additional CPP		Total	base CPI		additional CPP	Total	Total net assets
As at July 1, 2021	\$ 150,765	\$	7,444	\$	158,209	\$ 360,791	\$	649	\$ 361,440	\$ 519,649
Total net income for the period	-					19,554		193	19,747	19,747
Transfers from CPP	11,445		1,351		12,796		-	-		12,796
Transfers to CPP	(10,658)		-		(10,658)		-	-	-	(10,658)
As at										
September 30, 2021	\$ 151,552	\$	8,795	\$	160,347	\$ 380,345	\$	842	\$ 381,187	\$ 541,534

					For th	he s	six months	end	led			
	Accumulat	ed	net transfer	s fro	om CPP		1	Αссι	umulated ne	t ind	come	
	base		additional				base		additional			Total net
(CAD millions)	СРР		СРР		Total		СРР		СРР		Total	assets
As at April 1, 2020	\$ 147,544	\$	2,323	\$	149,867	\$	259,706	\$	15	\$	259,721	\$ 409,588
Total net income for												
the period	-		-		-		44,245		260		44,505	44,505
Transfers from CPP	21,673		1,526		23,199		-		-		-	23,199
Transfers to CPP	(20,613)		-		(20,613)		-		-		-	(20,613)
As at												
September 30, 2020	\$ 148,604	\$	3,849	\$	152,453	\$	303,951	\$	275	\$	304,226	\$ 456,679
As at April 1, 2021	\$ 147,665	\$	5,857	\$	153,522	\$	343,242	\$	423	\$	343,665	\$ 497,187
Total net income for												
the period			-		-		37,103		419		37,522	37,522
Transfers from CPP	24,650		2,938		27,588				-		-	27,588
Transfers to CPP	(20,763)				(20,763)				-		-	(20,763)
As at												
September 30, 2021	\$ 151,552	\$	8,795	\$	160,347	\$	380,345	\$	842	\$	381,187	\$ 541,534

15.2 Net assets of base CPP and additional CPP

The net assets of CPP Investments' base CPP and additional CPP accounts are as follows:

	As a	t Se	eptember 3	0, 2	021		As	s at	March 31, 2	021	L
	base	;	additional				base		additional		
(CAD millions)	СРР		СРР		Total		CPP		СРР		Total
Cash and cash equivalents held											
for investment purposes	\$ 13,794	\$	87	\$	13,881	\$	13,650	\$	94	\$	13,744
Net investments other than											
cash and cash equivalents	518,017		9,544		527,561		477,344		6,178		483,522
Net investments	531,811		9,631		541,442		490,994		6,272		497,266
Premises and equipment	444		12		456		448		11		459
Other assets ¹	289		4		293		307		4		311
Accounts payable and accrued											
liabilities	(647)		(10)		(657)		(842)		(7)		(849)
Net assets	\$ 531,897	\$	9,637	\$	541,534	\$	490,907	\$	6,280	\$	497,187

¹ Includes cash held for operating purposes.

15.3 Schedule of investment portfolio for base CPP and additional CPP

The table below provides details of the investments and investment liabilities for CPP Investments' base CPP and additional CPP accounts:

		As at Se	otember 30, 2	021	
	base		additional		
(CAD millions)	СРР		СРР		Total ¹
Cash and cash equivalents	\$ 15,801	\$	110	\$	15,911
Equities					
Public equities	187,750		2,241		189,991
Private equities	148,258		1,770		150,028
Total equities	336,008		4,011		340,019
Fixed income					
Bonds	109,265		4,652		113,917
Other debt	31,359		374		31,733
Money market securities	294		3		297
Total fixed income	140,918		5,029		145,947
Absolute return strategies	31,278		373		31,651
Real assets					
Infrastructure	42,507		507		43,014
Real estate	39,553		472		40,025
Sustainable energies	19,260		230		19,490
Total real assets	101,320		1,209		102,529
Investment receivables					
Securities purchased under reverse repurchase agreements					
and cash collateral pledged on securities borrowed	13,343		159		13,502
Derivative assets	4,163		50		4,213
Other	2,904		55		2,959
Total investment receivables	20,410		264		20,674
Total investments	\$ 645,735	\$	10,996	\$	656,731
Investment liabilities					
Debt financing liabilities	(41,206)		(492)		(41,698
Securities sold under repurchase agreements and cash					
collateral received on securities lent	(39,399)		(470)		(39,869
Securities sold short	(26,249)		(313)		(26,562
Derivative liabilities	(1,895)		(23)		(1,918
Short-term secured debt	(1,214)		(14)		(1,228
Other	(2,616)	1	(31)		(2,647
Total investment liabilities	(112,579)		(1,343)		(113,922
Pending trades receivable	2,974		29		3,003
Pending trades payable	(4,319)		(51)		(4,370
Net investments	\$ 531,811	\$	9,631	\$	541,442

(Unaudited)

		As at			
	base		additional		
(CAD millions)	CPP		СРР		Total ^{1,2}
Cash and cash equivalents	\$ 14,432	\$	100	\$	14,532
Equities					
Public equities	173,682		1,401		175,083
Private equities	138,328		1,116		139,444
Total equities	312,010		2,517		314,527
Fixed income					
Bonds	95,474		3,086		98,560
Other debt	28,649		230		28,879
Money market securities	142		1		143
Total fixed income	124,265		3,317		127,582
Absolute return strategies	28,776		232		29,008
Real assets					
Infrastructure	39,634		320		39,954
Real estate	37,774		304		38,078
Sustainable energies	18,992		153		19,145
Total real assets	96,400		777		97,177
Investment receivables					
Securities purchased under reverse repurchase agreements					
and cash collateral pledged on securities borrowed	7,070		57		7,127
Derivative assets	3,607		29		3,636
Other	2,729		35		2,764
Total investment receivables	13,406		121		13,527
Total investments	\$ 589,289	\$	7,064	\$	596,353
Investment liabilities					
Debt financing liabilities	(36,157)		(292)		(36,449)
Securities sold under repurchase agreements and cash					
collateral received on securities lent	(32 <i>,</i> 885)		(265)		(33,150)
Securities sold short	(22,097)		(178)		(22,275)
Derivative liabilities	(2,980)		(24)		(3,004
Short-term secured debt	(1,224)		(10)		(1,234
Other	(2,036)		(16)		(2,052)
Total investment liabilities	(97,379)		(785)		(98,164
Pending trades receivable	3,052		25		3,077
Pending trades payable	(3,968)		(32)		(4,000)
Net investments	\$ 490,994	\$	6,272	\$	497,266

¹ Presented using the same basis as the Condensed Interim Consolidated Schedule of Investment Portfolio, which is different from that of the Condensed Interim Consolidated Balance Sheet. Refer to the Consolidated Schedule of Investment Portfolio for further details.

² Certain comparatives have been reclassified to conform to the current period's presentation.

15.4 Net income of base CPP and additional CPP

Details of net income of CPP Investments' base CPP and additional CPP accounts are as follows:

		For	the	three months of	ended	Septembe	er 30),	
				2021					2020
	base	additional				base		additional	
(CAD millions)	СРР	СРР		Total		CPP		СРР	Total
Investment income	\$ 20,286	\$ 202	\$	20,488	\$	22,334	\$	116	\$ 22,450
Investment-related expenses	(369)	(4)	(373)		(510)		(3)	(513)
Net investment income	19,917	198		20,115		21,824		113	21,937
Operating expenses	(363)	(5)	(368)		(355)		(2)	(357)
Net income	\$ 19,554	\$ 193	\$	19,747	\$	21,469	\$	111	\$ 21,580

		Fo	r the	e six months en	ded S	eptember	30,		
				2021					2020
	base	additional				base		additional	
(CAD millions)	СРР	СРР		Total		CPP		CPP	Total
Investment income	\$ 38,442	\$ 434	\$	38,876	\$	46,075	\$	270	\$ 46,345
Investment-related expenses	(594)	(6)		(600)		(1,149)		(6)	(1,155)
Net investment income	37,848	428		38,276		44,926		264	45,190
Operating expenses	(745)	(9)		(754)		(681)		(4)	(685)
Net income	\$ 37,103	\$ 419	\$	37,522	\$	44,245	\$	260	\$ 44,505