

Condensed Interim Consolidated
Financial Statements of

Canada Pension Plan Investment Board

September 30, 2017

Canada Pension Plan Investment Board
Condensed Interim Consolidated Balance Sheet
As at September 30, 2017
(Unaudited)

<i>(CAD millions)</i>	As at September 30, 2017	As at March 31, 2017 ¹	As at September 30, 2016 ¹
Assets			
Investments (note 2)	\$ 387,709	\$ 377,700	\$ 374,074
Amounts receivable from pending trades	5,958	3,234	5,219
Premises and equipment	346	348	351
Other assets	153	131	174
Total assets	394,166	381,413	379,818
Liabilities			
Investment liabilities (note 2)	58,216	60,423	70,078
Amounts payable from pending trades	7,342	3,631	8,701
Accounts payable and accrued liabilities	442	682	491
Total liabilities	66,000	64,736	79,270
Net assets	\$ 328,166	\$ 316,677	\$ 300,548
Net assets, represented by:			
Share capital	\$ -	\$ -	\$ -
Accumulated net income from operations	186,933	178,875	163,185
Accumulated net transfers from the Canada Pension Plan	141,233	137,802	137,363
Net assets	\$ 328,166	\$ 316,677	\$ 300,548

¹ Certain comparatives have been updated to be consistent with current period presentation.

The accompanying notes are an integral part of these Condensed Interim Consolidated Financial Statements.

Canada Pension Plan Investment Board

Condensed Interim Consolidated Statement of Comprehensive Income

For the three and six-month periods ended September 30, 2017

(Unaudited)

<i>(CAD millions)</i>	For the three-month period ended		For the six-month period ended	
	September 30, 2017	September 30, 2016	September 30, 2017	September 30, 2016
Investment income	\$ 2,986	\$ 14,361	\$ 9,526	\$ 19,043
Investment management fees	(382)	(331)	(805)	(610)
Transaction costs	(66)	(151)	(173)	(243)
Net investment income (note 6)	\$ 2,538	\$ 13,879	\$ 8,548	\$ 18,190
Personnel costs	158	157	334	306
General operating expenses	72	60	129	115
Professional services	16	11	27	20
Operating expenses	246	228	490	441
Net income from operations and comprehensive income	\$ 2,292	\$ 13,651	\$ 8,058	\$ 17,749

The accompanying notes are an integral part of these Condensed Interim Consolidated Financial Statements.

Canada Pension Plan Investment Board

Condensed Interim Consolidated Statement of Changes in Net Assets

For the three and six-month periods ended September 30, 2017

(Unaudited)

<i>(CAD millions)</i>	For the three-month period ended				
	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, 2016	10	\$ -	\$ 137,731	\$ 149,534	\$ 287,265
Total net income for the period		-	-	13,651	13,651
Canada Pension Plan transfers:					
Transfers from the Canada Pension Plan		-	8,239	-	8,239
Transfers to the Canada Pension Plan		-	(8,607)	-	(8,607)
Balance at September 30, 2016	10	\$ -	\$ 137,363	\$ 163,185	\$ 300,548
As at July 1, 2017	10	\$ -	\$ 141,907	\$ 184,641	\$ 326,548
Total net income for the period		-	-	2,292	2,292
Canada Pension Plan transfers:					
Transfers from the Canada Pension Plan		-	7,394	-	7,394
Transfers to the Canada Pension Plan		-	(8,068)	-	(8,068)
Balance at September 30, 2017	10	\$ -	\$ 141,233	\$ 186,933	\$ 328,166

<i>(CAD millions)</i>	For the six-month period ended				
	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, 2016	10	\$ -	\$ 133,505	\$ 145,436	\$ 278,941
Total net income for the period		-	-	17,749	17,749
Canada Pension Plan transfers:					
Transfers from the Canada Pension Plan		-	20,707	-	20,707
Transfers to the Canada Pension Plan		-	(16,849)	-	(16,849)
Balance at September 30, 2016	10	\$ -	\$ 137,363	\$ 163,185	\$ 300,548
As at April 1, 2017	10	\$ -	\$ 137,802	\$ 178,875	\$ 316,677
Total net income for the period		-	-	8,058	8,058
Canada Pension Plan transfers:					
Transfers from the Canada Pension Plan		-	18,906	-	18,906
Transfers to the Canada Pension Plan		-	(15,475)	-	(15,475)
Balance at September 30, 2017	10	\$ -	\$ 141,233	\$ 186,933	\$ 328,166

The accompanying notes are an integral part of these Condensed Interim Consolidated Financial Statements.

Canada Pension Plan Investment Board

Condensed Interim Consolidated Statement of Cash Flows

For the three and six-month periods ended September 30, 2017

(Unaudited)

<i>(CAD millions)</i>	For the three-month period ended September 30		For the six-month period ended September 30	
	2017	2016	2017	2016
Cash flows from operating activities				
Net income from operations	\$ 2,292	\$ 13,651	\$ 8,058	\$ 17,749
Adjustments for non-cash items:				
Amortization of premises and equipment	6	8	13	15
Effect of exchange rate changes on cash and cash equivalents	(1)	6	3	(5)
Unrealized (gains) losses on debt financing liabilities	(15)	114	(538)	704
Adjustments for net changes in operating assets and liabilities:				
(Increase) in investments	(7,299)	(13,293)	(17,210)	(22,813)
(Increase) in pending trades receivable	(2,760)	(984)	(2,724)	(2,592)
Decrease (Increase) in other assets	2	(2)	1	(5)
Increase (Decrease) in investment-related liabilities	2,035	2,665	(5,736)	4,257
Increase (Decrease) in debt financing liabilities	1,455	1,217	3,955	(434)
Increase (Decrease) in pending trades payable	2,322	(295)	3,812	5,270
Increase (Decrease) in accounts payable and accrued liabilities	63	86	(228)	(173)
Net cash flows provided by (used in) operating activities	(1,900)	3,173	(10,594)	1,973
Cash flows from financing activities				
Transfers from the Canada Pension Plan	7,394	8,239	18,906	20,707
Transfers to the Canada Pension Plan	(8,068)	(8,607)	(15,475)	(16,849)
Net cash flows (used in) provided by financing activities	(674)	(368)	3,431	3,858
Cash flows from investing activities				
Acquisitions of premises and equipment	(2)	(2)	(11)	(9)
Disposals of premises and equipment	-	-	1	-
Net cash flows (used in) investing activities	(2)	(2)	(10)	(9)
Net increase (decrease) Increase in cash and cash equivalents	(2,576)	2,803	(7,173)	5,822
Effect of exchange rate changes on cash and cash equivalents	1	(6)	(3)	5
Cash and cash equivalents at the beginning of the period	11,475	8,624	16,076	5,594
Cash and cash equivalents at the end of the period	8,900	11,421	8,900	11,421
Cash and cash equivalents at the end of the period are comprised of:				
Cash held for operating purposes ¹	93	117	93	117
Cash and cash equivalents held for investment purposes ²	8,807	11,304	8,807	11,304
Total	\$ 8,900	\$ 11,421	\$ 8,900	\$ 11,421

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 and Money market securities on the Condensed Interim Consolidated Schedule of Investment Portfolio.

The accompanying notes are an integral part of these Condensed Interim Consolidated Financial Statements.

Canada Pension Plan Investment Board

Condensed Interim Consolidated Schedule of Investment Portfolio

As at September 30, 2017

(Unaudited)

The schedule below provides information on CPP Investment Board's investment assets and investment liabilities:

<i>(CAD millions)</i>	As at September 30, 2017	As at March 31, 2017 ¹	As at September 30, 2016 ¹
Equities (note 2a)			
Canada			
Public equities	\$ 6,504	\$ 4,576	\$ 4,703
Private equities	3,830	4,048	3,646
	10,334	8,624	8,349
Foreign developed markets			
Public equities	105,261	93,905	78,798
Private equities	55,883	54,992	52,640
	161,144	148,897	131,438
Emerging markets			
Public equities	20,045	19,208	15,355
Private equities	7,105	5,781	5,026
	27,150	24,989	20,381
Total equities	198,628	182,510	160,168
Fixed income (note 2b)			
Bonds	59,195	61,240	69,117
Other debt	20,089	19,764	27,163
Money market securities	9,557	19,408	20,972
Total fixed income	88,841	100,412	117,252
Absolute return strategies (note 2c)	20,090	19,371	17,954
Real assets (note 2d)			
Real estate	39,469	38,732	37,164
Infrastructure	27,249	27,899	21,813
Total real assets	66,718	66,631	58,977
Investment receivables			
Securities purchased under reverse repurchase agreements (note 2e)	8,981	5,207	15,339
Accrued interest	1,777	1,561	1,459
Derivative receivables (note 2f)	2,111	1,718	2,706
Other	563	290	219
Total investment receivables	13,432	8,776	19,723
Total investments	\$ 387,709	\$ 377,700	\$ 374,074
Investment liabilities			
Securities sold under repurchase agreements (note 2e)	(19,198)	(14,749)	(21,614)
Securities sold short (note 2a and 2b)	(13,425)	(24,177)	(30,449)
Debt financing liabilities (note 2g)	(23,300)	(19,873)	(15,844)
Derivative liabilities (note 2f)	(1,614)	(1,401)	(2,005)
Other	(679)	(223)	(166)
Total investment liabilities	(58,216)	(60,423)	(70,078)
Amounts receivable from pending trades	5,958	3,234	5,219
Amounts payable from pending trades	(7,342)	(3,631)	(8,701)
Net investments	\$ 328,109	\$ 316,880	\$ 300,514

¹ Certain comparatives have been updated to be consistent with current period presentation.

The accompanying notes are an integral part of these Condensed Interim Consolidated Financial Statements.

Table of Contents

Note	Description	Page
	Corporate information	7
1	Summary of significant accounting policies	7
2	Fair value determination	8
2(a)	Equities	8
2(b)	Fixed income	8
2(c)	Absolute return strategies	9
2(d)	Real assets	9
2(e)	Securities purchased under reverse repurchase agreements and sold under repurchase agreements	10
2(f)	Derivative contracts	10
2(g)	Debt financing liabilities	10
3	Derivative instruments	11
4	Fair value measurement	12
5	Investment risk management	21
6	Net investment income	28
7	Collateral	29
8	Commitments	29
9	Related party transactions	30
10	Guarantees	30

Corporate information

Canada Pension Plan Investment Board (CPP Investment Board) was established in December 1997 pursuant to the *Canada Pension Plan Investment Board Act* (the Act). CPP Investment Board is a federal Crown corporation, all of the shares of which are owned by Her Majesty the Queen in right of Canada. CPP Investment Board is responsible for assisting the Canada Pension Plan (the CPP) in meeting its obligations to contributors and beneficiaries under the legislation *Canada Pension Plan*. It is responsible for managing amounts that are transferred to it under Section 108.1 of the *Canada Pension Plan* in the best interests of CPP beneficiaries and contributors. CPP Investment Board received its first funds for investing purposes from the CPP in March 1999. CPP Investment Board's assets are to be invested in accordance with the Act, the regulations and the investment policies with a view to achieving a maximum rate of return without undue risk of loss, having regard to the factors that may affect the funding of the CPP and the ability of the CPP to meet its financial obligations on any given business day.

CPP Investment Board is exempt from Part I tax under paragraphs 149(1) (d) and 149(1) (d.2) of the *Income Tax Act (Canada)* on the basis that all of the shares of CPP Investment Board are owned by Her Majesty the Queen in right of Canada or by a corporation whose shares are owned by Her Majesty the Queen in right of Canada, respectively.

The Condensed Interim Consolidated Financial Statements (Consolidated Financial Statements) provide information on the net assets managed by CPP Investment Board and do not include the assets and liabilities of the CPP. CPP Investment Board has a fiscal year end of March 31.

CPP Investment Board's registered office is at One Queen Street East, Toronto, Ontario, Canada.

The Consolidated Financial Statements were approved by the Board of Directors and authorized for issue on November 9, 2017.

1. Summary of significant accounting policies

a) Basis of presentation

These Consolidated Financial Statements have been prepared in compliance with International Accounting Standard 34, *Interim Financial Reporting* (IAS 34) and do not include all of the information and disclosures required in the annual consolidated financial statements. These Consolidated Financial Statements should be read in conjunction with CPP Investment Board's annual Consolidated Financial Statements and the accompanying note disclosures included on pages 97 to 126 in CPP Investment Board's 2017 Annual Report. These Consolidated Financial Statements follow the same accounting policies and methods as the most recent annual Consolidated Financial Statements.

CPP Investment Board qualifies as an investment entity as it meets the following definition of an investment entity outlined in IFRS 10, *Consolidated Financial Statements* (IFRS 10):

- Obtains funds from one or more investors for the purpose of providing those investor(s) with investment management services. In the case of CPP Investment Board, we have one investor (CPP), but we invest the funds for a wide group of investors being the beneficiaries of the CPP.
- Commits to its investor(s) that its business purpose is to invest funds solely for returns from capital appreciation, investment income, or both.
- Measures and evaluates the performance of substantially all of its investments on a fair value basis.

No significant judgments or assumptions were made in determining that CPP Investment Board meets the definition of an investment entity as defined in IFRS 10.

b) Subsidiaries

CPP Investment Board is required to report the results of operations in accordance with IFRS 10. As a consequence, the Consolidated Financial Statements represent the results of operations of CPP Investment Board 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 provide financing to CPP Investment Board.

Subsidiaries that were created to structure and hold investments are investment holding companies and are not consolidated in these Consolidated Financial Statements but instead are measured and reported at fair value. Fair value for unconsolidated investment holding companies is based on the fair value of the underlying investments and investment liabilities held by the investment holding company together with its accumulated net income from operations. The determination of the fair value of the underlying investments and investment liabilities are based on the valuation techniques and related inputs outlined in note 2a to g.

c) Valuation of investments and investment liabilities

Investments and investment liabilities are stated at fair value. Fair value is the price that would be received to sell an asset or paid to transfer a liability in an orderly transaction between market participants at the measurement date.

In an active market, fair value is best evidenced by an independent quoted market price. In the absence of an active market, fair value is determined by valuation techniques that make maximum use of inputs observed from markets. See note 2a to g for more details about the determination of fair value.

2. Fair value determination

CPP Investment Board manages the following types of investments and investment liabilities and determines fair value as follows:

a) Equities

- (i) Public equity investments are made directly or through funds, including hedge funds. Fair value for publicly traded equities, including equity short positions, is based on quoted market prices. Fair value for fund investments is generally based on the net asset value as reported by the external administrators or managers of the funds.
- (ii) Private equity investments are generally made directly or through ownership in limited partnership funds. The fair value for investments held directly is primarily determined using earnings multiples of comparable publicly traded companies or discounted cash flows. Significant inputs for these valuation methods include company specific earnings before interest, taxes, depreciation and amortization (EBITDA), earnings multiples of comparable publicly traded companies, projected cash flows and discount rates using current market yields of instruments with similar characteristics. Recent market transactions, where available, are also used. In the case of investments held through a limited partnership fund, fair value is generally determined based on relevant information reported by the general partner using similar accepted industry valuation methods.

b) Fixed income

- (i) Bonds consist of non-marketable and marketable bonds. Fair value for non-marketable Canadian provincial government bonds is calculated using discounted cash flows based on current market yields of instruments with similar characteristics. In the case of marketable bonds, including bond short positions, fair value is

based on quoted prices or calculated using discounted cash flow based on benchmark yield curves and credit spreads pertaining to the issuer.

- (ii) Other debt consists of investments in direct private debt, asset-backed securities, intellectual property, royalties, distressed mortgage funds, private debt funds and hedge funds.

Fair value for direct investments in private debt and asset-backed securities is based on quoted market prices or broker quotes or recent market transactions, if available. Where the market price is not available, fair value is calculated using discounted cash flows based on significant inputs such as projected cash flows and discount rates using current market yields of instruments with similar characteristics.

In the case of intellectual property investments and royalty investments, fair value is primarily determined using discounted cash flows based on projected cash flows and discount rates using current market yields of instruments with similar characteristics.

Fair value for fund investments is generally based on the net asset value as reported by the external administrators or managers of the funds.

- (iii) Money market securities consist of cash, term deposits, treasury bills, commercial paper and floating rate notes. Fair value is determined using cost, which, together with accrued interest income, approximates fair value due to the short-term or floating rate nature of these securities.

c) Absolute return strategies

Absolute return strategies consist of investments in hedge funds whose objective is to generate positive returns regardless of market conditions, that is, returns with a low correlation to broad market indices. The underlying securities of the funds could include, but are not limited to, equities, fixed income securities and derivatives. Fair value for fund investments is generally based on the net asset value as reported by the external administrators or managers of the funds.

d) Real assets

- (i) CPP Investment Board obtains exposure to real estate through direct investments in privately held real estate and real estate funds. Private real estate investments are managed by investment managers primarily through co-ownership arrangements.

Fair value for private real estate investments is primarily determined using discounted cash flows based on various factors such as net operating income, discount rate and terminal capitalization rate.

Fair value for real estate funds are generally based on the net asset value as reported by the external managers of the funds.

- (ii) Infrastructure investments are generally made directly, but can also occur through limited partnership funds.

Fair value for infrastructure investments is primarily determined using discounted cash flows based on significant inputs including projected cash flows and discount rates.

Fair value for investments held through limited partnership funds are generally based on the net asset value as reported by the external managers of the funds.

Notes to the Condensed Interim Consolidated Financial Statements

For the three and six-month periods ended September 30, 2017

(Unaudited)

e) Securities purchased under reverse repurchase agreements and sold under repurchase agreements

Reverse repurchase and repurchase agreements are carried at the amounts at which the securities were initially acquired or sold, which, together with accrued interest income or expense, approximates fair value due to the short-term nature of these securities.

f) Derivative contracts

Fair value for exchange-traded derivatives, which includes futures, options and warrants, is based on quoted market prices. Fair value for over-the-counter derivatives, which includes swaps, options, forward contracts and warrants, is determined based on valuation techniques such as option pricing models, discounted cash flows and consensus pricing from independent brokers and/or third-party vendors. Inputs used in these valuation techniques can include, but are not limited to, spot prices, price volatilities, currency exchange rates, interest rate curves and credit spreads. In determining fair value, consideration is also given to the credit risk of the counterparty.

g) Debt financing liabilities

Debt financing liabilities consist of commercial paper payable and term debt. Commercial paper payable is recorded at the amount originally issued, which, together with accrued interest expense, approximates fair value due to the short-term nature of these liabilities. Fair value for term debt is based on quoted market prices.

Notes to the Condensed Interim Consolidated Financial Statements

For the three and six-month periods ended September 30, 2017

(Unaudited)

3. Derivative instruments

Fair value of derivative contracts

The fair value of derivative contracts was as follows:

Fair value of derivative contracts

(CAD millions)	As at September 30, 2017		As at March 31, 2017		As at September 30, 2016	
	Positive fair value	Negative fair value	Positive fair value	Negative fair value	Positive fair value	Negative fair value
Equity contracts						
Futures	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Swaps	1,356	(736)	923	(717)	1,099	(456)
Options:						
Exchange-traded – purchased	-	-	-	-	18	-
Exchange-traded – written	-	-	-	-	-	-
Over-the-counter – purchased	-	-	-	-	18	-
Over-the-counter – written	-	(5)	-	-	-	(1)
Warrants	1	-	1	-	1	-
Total equity contracts	1,357	(741)	924	(717)	1,136	(457)
Foreign exchange contracts						
Forwards	475	(419)	357	(286)	350	(400)
Options:						
Over-the-counter – purchased	-	-	-	-	19	-
Over-the-counter – written	-	-	-	-	-	(1)
Total foreign exchange contracts	475	(419)	357	(286)	369	(401)
Interest rate contracts						
Futures	-	-	-	-	-	-
Forwards	-	-	-	-	-	-
Swaps	28	(212)	148	(117)	472	(414)
Total interest rate contracts	28	(212)	148	(117)	472	(414)
Credit contracts						
Purchased credit default swaps	2	(230)	4	(277)	30	(704)
Written credit default swaps	244	(2)	285	(4)	696	(26)
Options:						
Over-the-counter – purchased	-	-	-	-	3	-
Over-the-counter – written	-	-	-	-	-	(2)
Total credit contracts	246	(232)	289	(281)	729	(732)
Commodity contracts						
Futures	-	-	-	-	-	(1)
Options:						
Exchange-traded – purchased	5	-	-	-	-	-
Exchange-traded – written	-	(10)	-	-	-	-
Total commodity contracts	5	(10)	-	-	-	(1)
Total	\$ 2,111	\$ (1,614)	\$ 1,718	\$ (1,401)	\$ 2,706	\$ (2,005)

4. Fair value measurement

Fair value hierarchy

The following shows investments and investment liabilities recognized at fair value, analyzed between those whose fair value is based on:

- Quoted prices in active markets for identical assets or liabilities (Level 1);
- Those involving inputs other than quoted prices included in Level 1 that are observable for the asset or liability, either directly (as prices) or indirectly (derived from prices) (Level 2); and
- Those with inputs for the asset or liability that are not based on observable market data (non-observable inputs) (Level 3).

Canada Pension Plan Investment Board

Notes to the Condensed Interim Consolidated Financial Statements

For the three and six-month periods ended September 30, 2017

(Unaudited)

Fair value hierarchy

(CAD millions)	As at September 30, 2017			
	Level 1	Level 2	Level 3	Total
Investments				
Equities				
Canada				
Public equities	\$ 6,504	\$ -	\$ -	\$ 6,504
Private equities	-	-	3,830	3,830
	6,504	-	3,830	10,334
Foreign developed markets				
Public equities ¹	97,355	7,828	78	105,261
Private equities	-	1,179	54,704	55,883
	97,355	9,007	54,782	161,144
Emerging markets				
Public equities ¹	18,205	1,678	162	20,045
Private equities	-	-	7,105	7,105
	18,205	1,678	7,267	27,150
Total equities	122,064	10,685	65,879	198,628
Fixed income				
Bonds	33,262	25,933	-	59,195
Other debt	-	4,157	15,932	20,089
Money market securities	-	9,557	-	9,557
Total fixed income	33,262	39,647	15,932	88,841
Absolute return strategies¹	-	18,590	1,500	20,090
Real assets				
Real estate	-	-	39,469	39,469
Infrastructure	-	-	27,249	27,249
Total real assets	-	-	66,718	66,718
Investment receivables				
Securities purchased under reverse repurchase agreements	-	8,981	-	8,981
Accrued interest	-	1,777	-	1,777
Derivative receivables	5	2,105	1	2,111
Other	-	563	-	563
Total investment receivables	5	13,426	1	13,432
Total investments	\$ 155,331	\$ 82,348	\$ 150,030	\$ 387,709
Investment liabilities				
Securities sold under repurchase agreements	-	(19,198)	-	(19,198)
Securities sold short	(13,425)	-	-	(13,425)
Debt financing liabilities	(11,400)	(11,900)	-	(23,300)
Derivative liabilities	(10)	(1,604)	-	(1,614)
Other	-	(679)	-	(679)
Total investment liabilities	(24,835)	(33,381)	-	(58,216)
Amounts receivable from pending trades	-	5,958	-	5,958
Amounts payable from pending trades	-	(7,342)	-	(7,342)
Net investments	\$ 130,496	\$ 47,583	\$ 150,030	\$ 328,109

Canada Pension Plan Investment Board

Notes to the Condensed Interim Consolidated Financial Statements

For the three and six-month periods ended September 30, 2017

(Unaudited)

(CAD millions)	As at March 31, 2017 ²			
	Level 1	Level 2	Level 3	Total
Investments				
Equities				
Canada				
Public equities	\$ 4,576	\$ -	\$ -	\$ 4,576
Private equities	-	18	4,030	4,048
	4,576	18	4,030	8,624
Foreign developed markets				
Public equities ¹	87,129	6,700	76	93,905
Private equities	-	1,226	53,766	54,992
	87,129	7,926	53,842	148,897
Emerging markets				
Public equities ¹	17,493	1,562	153	19,208
Private equities	-	-	5,781	5,781
	17,493	1,562	5,934	24,989
Total equities	109,198	9,506	63,806	182,510
Fixed income				
Bonds	36,987	24,253	-	61,240
Other debt ³	-	4,036	15,728	19,764
Money market securities	-	19,408	-	19,408
Total fixed income	36,987	47,697	15,728	100,412
Absolute return strategies¹	-	17,835	1,536	19,371
Real assets				
Real estate	-	-	38,732	38,732
Infrastructure	-	-	27,899	27,899
Total real assets	-	-	66,631	66,631
Investment receivables				
Securities purchased under reverse repurchase agreements	-	5,207	-	5,207
Accrued interest	-	1,561	-	1,561
Derivative receivables	-	1,717	1	1,718
Other	-	290	-	290
Total investment receivables	-	8,775	1	8,776
Total investments	\$ 146,185	\$ 83,813	\$ 147,702	\$ 377,700
Investment liabilities				
Securities sold under repurchase agreements	-	(14,749)	-	(14,749)
Securities sold short	(24,177)	-	-	(24,177)
Debt financing liabilities	(8,772)	(11,101)	-	(19,873)
Derivative liabilities	-	(1,401)	-	(1,401)
Other	-	(223)	-	(223)
Total investment liabilities	(32,949)	(27,474)	-	(60,423)
Amounts receivable from pending trades	-	3,234	-	3,234
Amounts payable from pending trades	-	(3,631)	-	(3,631)
Net investments	\$ 113,236	\$ 55,942	\$ 147,702	\$ 316,880

Canada Pension Plan Investment Board

Notes to the Condensed Interim Consolidated Financial Statements

For the three and six-month periods ended September 30, 2017

(Unaudited)

<i>(CAD millions)</i>	As at September 30, 2016 ²			
	Level 1	Level 2	Level 3	Total
Investments				
Equities				
Canada				
Public equities	\$ 4,703	\$ -	\$ -	\$ 4,703
Private equities	-	-	3,646	3,646
	4,703	-	3,646	8,349
Foreign developed markets				
Public equities ¹	71,487	7,211	100	78,798
Private equities	-	1,245	51,395	52,640
	71,487	8,456	51,495	131,438
Emerging markets				
Public equities ¹	13,563	1,592	200	15,355
Private equities	-	1	5,025	5,026
	13,563	1,593	5,225	20,381
Total equities	89,753	10,049	60,366	160,168
Fixed income				
Bonds	40,602	28,515	-	69,117
Other debt ³	-	4,752	22,411	27,163
Money market securities	-	20,972	-	20,972
Total fixed income	40,602	54,239	22,411	117,252
Absolute return strategies¹	-	16,548	1,406	17,954
Real assets				
Real estate	-	-	37,164	37,164
Infrastructure	-	-	21,813	21,813
Total real assets	-	-	58,977	58,977
Investment receivables				
Securities purchased under reverse repurchase agreements	-	15,339	-	15,339
Accrued interest	-	1,459	-	1,459
Derivative receivables	19	2,686	1	2,706
Other	-	219	-	219
Total investment receivables	19	19,703	1	19,723
Total investments	\$ 130,374	\$ 100,539	\$ 143,161	\$ 377,074
Investment liabilities				
Securities sold under repurchase agreements	-	(21,614)	-	(21,614)
Securities sold short	(30,449)	-	-	(30,449)
Debt financing liabilities	(6,068)	(9,776)	-	(15,844)
Derivative liabilities	(1)	(2,004)	-	(2,005)
Other	-	-	-	-
Total investment liabilities	(36,518)	(33,394)	-	(69,912)
Amounts receivable from pending trades	-	5,219	-	5,219
Amounts payable from pending trades	-	(8,701)	-	(8,701)
Net investments	\$ 93,856	\$ 63,497	\$ 143,161	\$ 300,514

¹ Includes investments in funds.

² Certain comparatives have been updated to be consistent with current period presentation.

³ Amounts have been revised for an immaterial misclassification from level 2 to level 3 totaling \$4.2 billion as at March 31, 2017 and \$3.7 billion as at September 30, 2016.

Canada Pension Plan Investment Board

Notes to the Condensed Interim Consolidated Financial Statements

For the three and six-month periods ended September 30, 2017

(Unaudited)

a) Transfers between Level 1 and Level 2

During the six-month period ended September 30, 2017, there were \$7 million of transfers from Level 1 to Level 2 (September 30, 2016 - \$128 million) and \$16 million of transfers from Level 2 to Level 1 (September 30, 2016 - \$155 million). Transfers between Level 1 and Level 2 depend on the availability of quoted market prices in active markets and valuations using inputs other than quoted prices that are observable. These transfers are deemed to have occurred at the end of period values.

b) Level 3 reconciliation

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

Reconciliation of changes in fair value for Level 3 investments

For the six-month period ended September 30, 2017									
(CAD millions)	Fair value as at April 1, 2017	Gain (loss) included in net investment income (loss) ¹	Purchases	Sales ²	Transfers into level 3 ³	Transfers out of level 3 ³	Fair value as at September 30, 2017	Change in unrealized gains (losses) on investments still held at September 30, 2017 ^{1,4}	
Investments									
Equities									
Canada									
Private equities	\$ 4,030	\$ (121)	\$ 69	\$ (148)	\$ -	\$ -	\$ 3,830	\$ (145)	
	4,030	(121)	69	(148)	-	-	3,830	(145)	
Foreign developed markets									
Public Equities	76	4	-	(2)	-	-	78	4	
Private equities	53,766	1,283	7,392	(6,337)	-	(1,400)	54,704	(260)	
	53,842	1,287	7,392	(6,339)	-	(1,400)	54,782	(256)	
Emerging markets									
Public equities	153	24	-	(15)	-	-	162	24	
Private equities	5,781	172	1,669	(522)	9	(4)	7,105	(111)	
	5,934	196	1,669	(537)	9	(4)	7,267	(87)	
Total equities	63,806	1,362	9,130	(7,024)	9	(1,404)	65,879	(488)	
Fixed income									
Other debt ⁵	15,728	(641)	4,203	(3,358)	-	-	15,932	(779)	
Total fixed income	15,728	(641)	4,203	(3,358)	-	-	15,932	(779)	
Absolute return strategies									
	1,536	(51)	15	-	-	-	1,500	(51)	
Real assets									
Real estate	38,732	(345)	1,976	(894)	-	-	39,469	(626)	
Infrastructure	27,899	(550)	69	(169)	-	-	27,249	(488)	
Total real assets	66,631	(895)	2,045	(1,063)	-	-	66,718	(1,114)	
Investment receivables									
Derivative receivables	1	-	-	-	-	-	1	-	
Total investment receivables	1	-	-	-	-	-	1	-	
Total	\$ 147,702	\$ (225)	\$ 15,393	\$ (11,445)	\$ 9	\$ (1,404)	\$ 150,030	\$ (2,432)	

Canada Pension Plan Investment Board

Notes to the Condensed Interim Consolidated Financial Statements

For the three and six-month periods ended September 30, 2017

(Unaudited)

For the six-month period ended September 30, 2016									
(CAD millions)	Fair value as at April 1, 2016	Gain (loss) included in net investment income (loss) ¹	Purchases	Sales ²	Transfers into level 3 ³	Transfers out of level 3 ³	Fair value as at September 30, 2016	Change in unrealized gains (losses) on investments still held at September 30, 2016 ⁴	
Investments									
Equities									
Canada									
Private equities	\$ 2,687	\$ 133	\$ 887	\$ (61)	\$ -	\$ -	\$ 3,646	\$ 118	
	2,687	133	887	(61)	-	-	3,646	118	
Foreign developed markets									
Public equities	-	2	98	-	-	-	100	2	
Private equities	49,019	2,674	5,552	(4,637)	22	(1,235)	51,395	315	
	49,019	2,676	5,650	(4,637)	22	(1,235)	51,495	317	
Emerging markets									
Public equities	170	30	-	-	-	-	200	30	
Private equities	5,341	413	532	(597)	1	(665)	5,025	191	
	5,511	443	532	(597)	1	(665)	5,225	221	
Total equities	57,217	3,252	7,069	(5,295)	23	(1,900)	60,366	656	
Fixed income									
Other debt ⁶	21,827	863	5,392	(5,415)	-	(256)	22,411	596	
Total fixed income	21,827	863	5,392	(5,415)	-	(256)	22,411	596	
Absolute return strategies									
	1,314	92	-	-	-	-	1,406	92	
Real assets									
Real estate	35,857	660	2,205	(1,558)	-	-	37,164	384	
Infrastructure	20,373	(183)	58	(123)	1,688	-	21,813	120	
Total real assets	56,230	477	2,263	(1,681)	1,688	-	58,977	504	
Investment receivables									
Derivative receivables	2	(1)	-	-	-	-	1	(1)	
Total investment receivables	2	(1)	-	-	-	-	1	(1)	
Total	\$ 136,590	\$ 4,683	\$ 14,724	\$ (12,391)	\$ 1,711	\$ (2,156)	\$ 143,161	\$ 1,847	

¹ Included in Investment income.

² Includes return of capital.

³ Transfers into and out of Level 3 are deemed to have occurred at the end of period values.

⁴ Includes the entire change in fair value for the period for those investments that were transferred into Level 3 during the period, and excludes the entire change in fair value for the period for those investments that were transferred out of Level 3 during the period.

⁵ Opening balance has been revised for an immaterial misclassification from level 2 to level 3.

⁶ Amounts have been revised for an immaterial misclassification from level 2 to level 3.

During the six-month periods ended September 30, 2017 and September 30, 2016, transfers into and out of Level 3 were primarily due to changes in the availability of market observable inputs used to determine fair value.

Canada Pension Plan Investment Board

Notes to the Condensed Interim Consolidated Financial Statements

For the three and six-month periods ended September 30, 2017

(Unaudited)

c) Level 3 – Significant unobservable inputs

The following presents fair values of the investments categorized within Level 3 of the fair value hierarchy, valuation techniques used to determine their fair values, ranges and weighted averages of unobservable inputs:

Valuation techniques and inputs used in the fair value measurement of Level 3 investments

As at September 30, 2017					
(CAD millions)	Fair value	Primary valuation techniques used	Significant unobservable inputs	Range of input values ³	Weighted average ³
Public equities					
Fund investments ²	\$ 240	Net asset value provided by Investment Manager	-	-	-
Private equities					
Direct ^{1,2}	28,628	Earnings multiples of comparable companies	EBITDA multiple	8.0x-15.4x	11.3x
		Discounted cash flow	Discount rate	12.0%-12.9%	12.1%
		Value provided by Investment Manager	-	-	-
Fund investments ²	37,011	Net asset value provided by Investment Manager	-	-	-
Other debt					
Direct private debt ¹	9,819	Discounted cash flow	Discount rate	5.0%-22.6%	10.3%
Direct private real estate debt	4,042	Discounted cash flow	Discount rate	4.7%-9.6%	6.7%
Asset-backed securities ²	4	Valuation model by third-party pricing vendor	-	-	-
Fund investments ²	2,067	Net asset value provided by Investment Manager	-	-	-
Absolute return strategies					
Fund investments ²	1,500	Net asset value provided by Investment Manager	-	-	-
Real estate					
Direct ^{1,2}	20,987	Discounted cash flow	Discount rate	5.0%-15.0%	6.4%
			Terminal capitalization rate	3.5%-9.5%	5.2%
	15,411	Net asset value provided by Investment Manager	-	-	-
Fund investments ²	3,071	Net asset value provided by Investment Manager	-	-	-
Infrastructure					
Direct ¹	27,203	Discounted cash flow	Discount rate	7.4%-12.2%	9.6%
Fund investments ²	46	Net asset value provided by Investment Manager	-	-	-
Derivative receivables					
Warrants	1	Option model	Market volatility	30.0%	30.0%
Total	\$ 150,030				

Canada Pension Plan Investment Board

Notes to the Condensed Interim Consolidated Financial Statements

For the three and six-month periods ended September 30, 2017

(Unaudited)

As at March 31, 2017					
(CAD millions)	Fair value	Primary valuation techniques used	Significant unobservable inputs	Range of input values ³	Weighted average ³
Public equities					
Fund investments ²	\$ 229	Net asset value provided by Investment Manager	-	-	-
Private equities					
Direct ^{1,2}	28,721	Earnings multiples of comparable companies	EBITDA multiple	8.0X-15.4X	11.2X
		Discounted cash flow	Discount rate	12.0%	12.0%
		Value provided by Investment Manager	-	-	-
Fund investments ²	34,856	Net asset value provided by Investment Manager	-	-	-
Other debt					
Direct private debt ¹	9,485	Discounted cash flow	Discount rate	4.8%-19.6%	10.7%
Direct private real estate debt ⁴	3,937	Discounted cash flow	Discount rate	5.0%-10.0%	7.1%
Asset-backed securities ²	10	Valuation model by third-party pricing vendor	-	-	-
Fund investments ^{2,4}	2,296	Net asset value provided by Investment Manager	-	-	-
Absolute return strategies					
Fund investments ²	1,536	Net asset value provided by Investment Manager	-	-	-
Real estate					
Direct ^{1,2}	21,010	Discounted cash flow	Discount rate	4.4%-14.3%	6.4%
			Terminal capitalization rate	3.5%-9.5%	5.3%
	14,440	Net asset value provided by Investment Manager	-	-	-
Fund investments ²	3,282	Net asset value provided by Investment Manager	-	-	-
Infrastructure					
Direct ¹	27,860	Discounted cash flow	Discount rate	7.4%-15.8%	9.8%
Fund investments ²	39	Net asset value provided by Investment Manager	-	-	-
Derivative receivables					
Warrants	1	Option model	Market volatility	30.0%	30.0%
Total	\$ 147,702				

Canada Pension Plan Investment Board

Notes to the Condensed Interim Consolidated Financial Statements

For the three and six-month periods ended September 30, 2017

(Unaudited)

As at September 30, 2016					
(CAD millions)	Fair value	Primary valuation techniques used	Significant unobservable inputs	Range of input values ³	Weighted average ³
Public equities					
Fund investments ²	\$ 300	Net asset value provided by Investment Manager	-	-	-
Private equities					
Direct ^{1,2}	27,822	Earnings multiples of comparable companies	EBITDA multiple	6.8X-13.2X	11.1X
		Discounted cash flow	Discount rate	9.5%-27.6%	12.5%
		Value provided by Investment Manager	-	-	-
Fund investments ²	32,244	Net asset value provided by Investment Manager	-	-	-
Other debt					
Direct private debt ¹	10,436	Discounted cash flow	Discount rate	4.4%-30.9%	10.0%
Direct private real estate debt ⁴	3,412	Discounted cash flow	Discount rate	4.7%-9.2%	6.9%
Asset-backed securities ²	6,281	Valuation model by third-party pricing vendor	-	-	-
Fund investments ^{2,4}	2,282	Net asset value provided by Investment Manager	-	-	-
Absolute return strategies					
Fund investments ²	1,406	Net asset value provided by Investment Manager	-	-	-
Real estate					
Direct ^{1,2}	23,432	Discounted cash flow	Discount rate	3.3%-14.8%	6.3%
			Terminal capitalization rate	3.5%-14.6%	5.2%
	10,202	Net asset value provided by Investment Manager	-	-	-
Fund investments ²	3,530	Net asset value provided by Investment Manager	-	-	-
Infrastructure					
Direct ¹	21,774	Discounted cash flow	Discount rate	7.5%-15.8%	10.1%
Fund investments ²	39	Net asset value provided by Investment Manager	-	-	-
Derivative receivables					
Warrants	1	Option model	Market volatility	30.0%	30.0%
Total	\$ 143,161				

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

² In certain cases, external valuations are prepared by a third-party and hence, valuation information is not available.

³ 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.

⁴ Amounts have been revised for an immaterial misclassification from level 2 to level 3.

Significant increases (decreases) 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 are 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 value of these direct investments classified within Level 3 of the fair value hierarchy above 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. By using valuation methods based on reasonable alternative assumptions, different fair values could result. With all other variables held constant the use of reasonable alternative assumptions would result in a decrease of \$3,200 million (March 31, 2017 - \$3,400 million, September 30, 2016 - \$3,300 million) or increase of \$3,800 million (March 31, 2017 - \$3,800 million, September 30, 2016 - \$3,700 million) in net assets. This sensitivity analysis excludes investments where fair values are provided by Investment Managers as the underlying assumptions used are not available to CPP Investment Board.

5. Investment risk management

CPP Investment Board and its unconsolidated investment holding companies manage the investment portfolio on behalf of the Canada Pension Plan (CPP Investment Portfolio). The CPP Investment Portfolio is exposed to a variety of financial risks. These risks include market risk, credit risk and liquidity risk. CPP Investment Board utilizes a total portfolio approach to risk management which considers all of the investment activities taken together, including those made through its unconsolidated investment holding companies. In the discussion that follows, any references to the investment activities and exposures to risk of CPP Investment Board also include those of its unconsolidated investment holding companies.

CPP Investment Board manages and mitigates financial risks through the Risk Policy approved by the Board of Directors at least once every fiscal year. This policy contains risk limits and risk management provisions that govern investment decisions. It has been designed to achieve the mandate of CPP Investment Board, which is to invest its assets with a view to achieving a maximum rate of return, without undue risk of loss, having regard to the factors that may affect the funding of the CPP and the ability of the CPP to meet its financial obligations on any given business day.

Upper and Lower Absolute Risk Limits and the Absolute Risk Operating Range (AROR) are included within the Risk Policy, and these govern the amount of total investment risk that CPP Investment Board can take in the long term CPP Investment Portfolio. CPP Investment Board monitors the absolute risk, the possible loss of value expressed in absolute dollar and percentage terms, in the CPP Investment Portfolio daily and reports risk exposures to the Board of Directors on at least a quarterly basis. Risk targeting for the Investment Portfolio, and compliance with the Upper/Lower Risk Limits and AROR is assessed using an equity/debt risk equivalence ratio. Financial risk management, as well as the latest broader Risk/Return Accountability Framework, is discussed in greater detail on page 31 of the 2017 Annual Report.

a) Market risk

Market risk is the risk that the fair value or future cash flows of an investment or investment liability will fluctuate because of changes in market prices and rates. As discussed previously, CPP Investment Board manages market risk through the Risk/Return Accountability Framework. This includes investing across a wide spectrum of asset classes and investment strategies to earn a diversified set of risk premiums at the

Notes to the Condensed Interim Consolidated Financial Statements

For the three and six-month periods ended September 30, 2017

(Unaudited)

total fund level, based on risk limits established in the risk policies. In addition, derivatives are used, where appropriate, to manage certain risk exposures.

Market risk comprises the following:

Equity risk

The CPP Investment Portfolio invests in both publicly traded and private equities. Equity risk, which is the risk that the fair value or future cash flows will fluctuate because of changes in equity prices, is a significant source of risk of the investment portfolio.

After taking into account derivative positions and with all other variables held constant, a 1% decrease/increase in the S&P 500 Index would result in a loss/profit of \$1,100 million (March 31, 2017 - \$1,000 million, September 30, 2016 - \$869 million) on public equity investments. This calculation assumes that equities other than the S&P 500 Index would move in accordance with their historical behaviour conditional on a 1% decrease/increase in the S&P 500 Index.

Currency risk

The CPP Investment Portfolio is exposed to currency risk through holdings of investments or investment liabilities in various 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.

In Canadian dollars, the net currency exposures, after allocating foreign currency derivatives are as follows:

Currency risk exposures

<i>(CAD millions)</i>	As at September 30, 2017			As at March 31, 2017			As at September 30, 2016		
	Currency	Net exposure	% of total	Net exposure	% of total	Net exposure	% of total		
United States dollar	\$	129,222	39 %	\$	122,750	39 %	\$	116,656	39 %
Euro		37,377	12		34,003	11		32,867	11
British pound sterling		19,820	6		18,839	6		17,005	6
Japanese yen		17,533	5		20,788	7		20,986	7
Australian dollar		10,260	3		10,790	3		8,981	3
Hong Kong dollar		5,598	2		4,423	1		3,562	1
Chinese yuan		4,371	1		3,434	1		3,079	1
Indian rupee		4,225	1		3,586	1		3,031	1
Swiss franc		3,635	1		4,381	1		2,770	1
South Korean won		3,605	1		2,857	1		1,976	1
Brazilian real		2,441	1		3,425	1		3,460	1
Chilean peso		2,340	1		2,387	1		2,677	1
Other		10,360	3		8,424	3		8,282	3
Total foreign exposure		250,787	76		240,087	76		225,332	76
Canadian dollar		77,322	24		76,793	24		75,182	24
Total	\$	328,109	100 %	\$	316,880	100 %	\$	300,514	100 %

Notes to the Condensed Interim Consolidated Financial Statements

For the three and six-month periods ended September 30, 2017

(Unaudited)

With all other variables and underlying values held constant, a 1% appreciation/depreciation of the Canadian dollar against all other currencies would result in a decrease/increase in net investments as follows:

Currency risk sensitivity

<i>(CAD millions)</i>	As at September 30, 2017		As at March 31, 2017		As at September 30, 2016	
Currency	Decrease/Increase in Net Assets		Decrease/Increase in Net Assets		Decrease/Increase in Net Assets	
United States dollar	\$	1,292	\$	1,228	\$	1,167
Euro		374		340		329
British pound sterling		198		188		170
Japanese yen		175		208		210
Other		469		437		377
Total	\$	2,508	\$	2,401	\$	2,253

Interest rate risk

Interest rate risk is the risk that the fair value or future cash flows of an investment or investment-related liability will fluctuate because of changes in market interest rates. The CPP Investment Portfolio is exposed to interest rate risk primarily through holdings of fixed income securities, certain investment liabilities and interest rate derivative instruments.

With all other variables held constant, a 1 basis point increase/decrease in nominal risk free rates would result in a decrease/increase in the value of investments directly impacted by interest rate changes as follows:

Interest rate risk sensitivity¹

<i>(CAD millions)</i>	As at September 30, 2017		As at March 31, 2017		As at September 30, 2016	
Maturity	Decrease/Increase in Net Assets		Decrease/Increase in Net Assets		Decrease/Increase in Net Assets	
Within 1 year	\$	-	\$	1	\$	-
1 to 5 years		8		8		9
6 to 10 years		11		12		5
Over 10 years		35		31		32
Total	\$	54	\$	52	\$	46

¹ This sensitivity only applies to small yield curve changes, more substantial (stress) shocks would impact the value of assets such as real estate and infrastructure but for 1 basis point moves their values remain unchanged.

The CPP Investment Portfolio's exposure to various country's risk free rates are concentrated in North America with 52% (March 31, 2017 – 56%, September 30, 2016 – 68%) in Canada and 49% (March 31, 2017 – 43%, September 30, 2016 - 31%) in the United States, and minor exposures to Europe, United Kingdom and Japan in both years.

Notes to the Condensed Interim Consolidated Financial Statements

For the three and six-month periods ended September 30, 2017

(Unaudited)

Credit spread risk

Credit spread 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. As at September 30, 2017, 83% (March 31, 2017 – 84%, September 30, 2016 – 89%) of credit spread risk was in A or better rated debt, primarily in Canadian provincial bonds.

With all other variables held constant, a 1 basis point widening of the credit spreads would result in a decrease in net assets by \$31 million (March 31, 2017 – \$33 million, September 30, 2016 - \$39 million).

Other price risk

Other price risk is the risk that the fair value or future cash flows of an investment will fluctuate because of changes in market prices arising from other risk factors such as commodity price risk, basis risk and volatility.

b) Credit risk

Credit risk is the risk of financial loss due to a counterparty failing to meet its contractual obligations, or a reduction in the value of the assets due to a decline in the credit quality of the borrower, counterparty, guarantor or the assets (collateral) supporting the credit exposure. The CPP Investment Portfolio’s credit risk exposure arises primarily through its investment in debt securities and over-the-counter derivatives. The carrying amounts of these investments as presented in the Condensed Interim Consolidated Schedule of Investment Portfolio represent the maximum direct credit risk exposure at the Balance Sheet date.

The fair value of debt securities and over-the-counter derivatives exposed to credit risk, by credit rating category and without taking account of any collateral held or other credit enhancements was as follows:

Credit risk exposures

Credit rating	As at September 30, 2017							As at March 31, 2017	As at September 30, 2016
	Bonds ¹	Money market securities ¹	Reverse repurchase agreements ¹	Over-the-counter derivatives	Other ^{1,2}	Total	% of total	Total	Total
AAA	\$ 10,538	\$ 13	\$ -	\$ -	\$ -	\$ 10,551	12 %	\$ 13,156	\$ 17,965
AA	25,079	4,082	812	138	-	30,111	33	36,791	39,336
A	22,875	4,663	7,267	1,662	453	36,920	40	33,831	41,879
BBB	1,031	-	902	290	1,624	3,847	4	3,826	10,818
BB	187	-	-	-	3,156	3,343	4	3,047	3,808
B	-	-	-	-	5,577	5,577	6	5,718	6,143
CCC/D	-	-	-	-	847	847	1	1,061	2,541
Total	\$ 59,710	\$ 8,758	\$ 8,981	\$ 2,090	\$ 11,657	\$ 91,196	100 %	\$ 97,430	\$ 122,490

¹ Includes accrued interest.

² Includes direct investments in private debt and asset-backed securities.

In addition to the above, the CPP Investment Portfolio is indirectly exposed to credit risk on the underlying securities of fund investments.

Credit risk exposure is mitigated on certain financial assets and financial liabilities, which have conditional offset rights in the event of default, insolvency or bankruptcy. For securities purchased under reverse repurchase agreements, securities sold under repurchase agreements and over-the-counter derivatives, collateral is collected from or pledged to counterparties to manage credit exposure (see note 7). In addition, in the event of default, amounts with a specific counterparty are settled on a net basis under master netting or similar arrangements, such as the Global Master Repurchase Agreement and the International Swaps and Derivatives Association Netting Agreements.

Credit Risk for the CPP Investment portfolio is estimated using a Monte Carlo simulation that incorporates likelihood of default, credit rating migration and recovery in the event of default for underlying credit instruments. The primary risk measure used to monitor credit risk at the total portfolio level is Value at Risk (VaR) over a one year period at a 99% level of confidence. As at September 30, 2017, Credit VaR was \$3.7 billion (March 31, 2017 - \$4.0 billion, September 30, 2016 - \$4.5 billion) which implies there is a 1% chance that the CPPIB portfolio of credit instruments will lose more than this amount in any given year due to default and credit migration risk.

c) Absolute risk

CPP Investment Board adopted a new risk model to estimate Absolute Risk within the CPP Investment Portfolio to better align with its long term investment mandate. The revised methodology was adopted for the second quarter of fiscal year 2018 as the main risk governance model. Notable changes included a longer historical period for calibration of model inputs, a longer future horizon over which risk is assessed, and a more conservative total portfolio risk measure used for governance.

CPP Investment Board uses a simulation methodology to derive a distribution of potential portfolio outcomes at a future point in time. These distributions are used to estimate a variety of risk measures to monitor the absolute risk of the CPP Investment Portfolio across various time periods. The primary risk governance measure within the Risk/Return Accountability Framework is expressed using an Equity/Debt risk equivalency Ratio (EDR). It is the proportion of equity versus debt in a simple two-asset-portfolio (Global Equity and Canadian Government Bonds) that would give the same measured absolute risk as that of the CPP Investment Portfolio. Absolute Risk for this purpose is defined as the Conditional Value at Risk (CVaR), after inflation, at the 90th percentile expressed over a five-year horizon and encompasses both market and credit risks.

The Absolute Risk measure, CVaR, is based on the average of the worst ten percent outcomes in the simulated return distribution over a five-year period. It captures the impact of extreme market events that would lead to large losses within the CPP Investment Portfolio.

The methodology employed to calculate CVaR assumes that historical market data is a sound basis for estimating potential future losses but it allows for the incorporation of forward-looking return expectations. If future market conditions and interrelationships of equity markets, interest rates, foreign exchange rates and other market prices differ significantly from those of the past, then the actual losses could materially differ from those estimated. To ensure a variety of business cycles and market conditions are captured within the risk model, a long historical data period (1971-current) is used in simulating the distribution of potential outcomes. The CVaR measure provides an estimate of the average value in this distribution of potential losses that CPP Investment Portfolio could experience. It is not an estimate of the worst-case scenario.

Notes to the Condensed Interim Consolidated Financial Statements

For the three and six-month periods ended September 30, 2017

(Unaudited)

As at September 30, 2017 the CVaR of the CPP Investment Portfolio was \$69.4 billion (March 31, 2017 - \$64.6 billion, September 30, 2016 - \$58.7 billion) with an associated EDR of 85% (March 31, 2017- 83%, September 30, 2016 – 79%). Note that the CVaR measure necessitates an estimate of mean expected returns on the CPP Investment Portfolio over the upcoming five years. The above CVaR estimate is strongly influenced by equity returns realized throughout the historical data period used within the risk model. As forward-looking expectations are further considered within the modeling process the CVaR value may move materially as the mean return estimates change through time. Changes in EDR will also occur, but likely smaller in magnitude.

Stress testing

To complement the suite of risk measures used to monitor CPP Investment Portfolio risk, CPP Investment Board further examines the potential impact of exceptional but plausible adverse market events. Stress scenarios are based upon either forward-looking predictive views on events of imminent concern, such as the Brexit, or designed to mimic market moves from periods of historical distress, such as the Global Financial Crisis. A committee with representatives from each investment department meets regularly to identify probable market disruptions and to review underlying assumptions adopted in quantifying the impact of the specific stress scenario. Results are used to detect vulnerabilities in the portfolio and presented to senior management and the Board to affirm overall risk appetite.

d) Liquidity risk

Liquidity risk is the risk of being unable to generate sufficient cash or its equivalent in a timely and cost-effective manner to meet investment commitments and investment liabilities as they come due. CPP Investment Board supplements its management of liquidity risk through its ability to raise funds through the issuance of commercial paper and term debt and transacting in securities sold under repurchase agreements.

CPP Investment Board also maintained \$5.9 billion (March 31, 2017 - \$6.2 billion, September 30, 2016 - \$1.5 billion) of unsecured credit facilities to meet potential liquidity requirements. There were no credit facilities drawn as at September 30, 2017 (March 31, 2017 - \$nil, September 30, 2016 - \$nil).

Refer to note 5e for investment liabilities terms to maturity.

Canada Pension Plan Investment Board

Notes to the Condensed Interim Consolidated Financial Statements

For the three and six-month periods ended September 30, 2017

(Unaudited)

e) Terms to maturity

The tables below present the contractual maturities of investments and investment liabilities:

Investments

	Terms to maturity										
	As at September 30, 2017					As at March 31, 2017		As at September 30, 2016			
(CAD millions)	Within 1 year	1 to 5 years	6 to 10 years	Over 10 years	Total ¹	Average effective yield	Total ¹	Average effective yield	Total ¹	Average effective yield	
Non-marketable bonds											
Canadian provincial government	\$ 81	\$ 5,775	\$ 5,629	\$ 11,818	\$ 23,303	3.1 %	\$ 23,887	2.9 %	\$ 25,262	2.4 %	
Marketable bonds											
Government of Canada	-	2,742	548	1,092	4,382	2.2	5,872	1.6	4,522	1.0	
Canadian provincial government	-	1,461	1,652	2,633	5,746	3.1	6,856	2.8	6,543	2.3	
Canadian government corporations	-	792	486	379	1,657	2.7	1,543	2.4	2,072	2.1	
Foreign government	245	14,312	3,332	4,480	22,369	2.5	22,718	2.3	27,465	1.6	
Corporate bonds	-	-	-	1,738	1,738	3.1	364	2.6	3,253	1.8	
Other debt											
Private debt ¹	104	3,766	3,516	685	8,071	9.1	8,214	9.7	9,581	10.0	
Private real estate debt ²	302	1,952	1,788	-	4,042	6.8	3,937	7.2	3,412	6.6	
Asset-backed securities	-	3	-	5	8	4.3	10	4.4	6,281	1.7	
Securities purchased under reverse repurchase agreements	8,981	-	-	-	8,981	0.9	5,207	0.6	15,339	0.5	
Total	\$ 9,713	\$ 30,803	\$ 16,951	\$ 22,830	\$ 80,297	3.3 %	\$ 78,608	3.1 %	\$ 103,730	2.4 %	

¹ Represents fair value.

² Represents direct investments.

Investment liabilities

	Terms to maturity										
	As at September 30, 2017					As at March 31, 2017		As at September 30, 2016			
(CAD millions)	Within 1 year	1 to 5 years	6 to 10 years	Over 10 years	Total ¹	Weighted average interest rate	Total ¹	Weighted average interest rate	Total ¹	Weighted average interest rate	
Securities sold under repurchase agreements	\$ 19,264	\$ -	\$ -	\$ -	\$ 19,264	1.4 %	\$ 14,753	1.4 %	\$ 21,606	0.7 %	
Securities sold short^{2,3}	13,425	-	-	-	13,425	n/a	24,177	n/a	30,449	n/a	
Debt financing liabilities											
Commercial paper payable	11,927	-	-	-	11,927	1.3	11,120	0.9	9,786	0.7	
Term debt	-	8,486	2,957	-	11,443	1.2	8,783	1.8	6,037	1.1	
Total	\$ 44,616	\$ 8,486	\$ 2,957	\$ -	\$ 56,059	n/a %	\$ 58,833	n/a %	\$ 67,878	n/a %	

¹ Represents contractual amounts.

² Considered repayable within one year based on the earliest period in which the counterparty could request payment under certain conditions.

³ Includes equities sold short for which the average interest rate is not applicable.

Canada Pension Plan Investment Board

Notes to the Condensed Interim Consolidated Financial Statements

For the three and six-month periods ended September 30, 2017

(Unaudited)

6. Net investment income

Net investment income is reported net of transaction costs and investment management fees, and is grouped based on the Strategic Portfolio asset class categories as discussed on page 28 of the 2017 Annual Report.

Net investment income

For the three-month period ended September 30, 2017							
(CAD millions)		Investment income (loss) ¹		Investment management fees ²		Transaction costs	Net investment income (loss)
Equities	\$	3,128	\$	(97)	\$	(18)	\$ 3,013
Fixed Income		(954)		(255)		(29)	(1,238)
Real assets		382		(30)		(19)	333
Debt financing liabilities		430		-		-	430
Total	\$	2,986	\$	(382)	\$	(66)	\$ 2,538

For the three-month period ended September 30, 2016 ⁴							
(CAD millions)		Investment income (loss) ¹		Investment management fees ²		Transaction costs	Net investment income (loss)
Equities	\$	10,344	\$	(141)	\$	(76)	\$ 10,127
Fixed income		2,090		(150)		(37)	1,903
Real assets		2,079		(40)		(35)	2,004
Debt financing liabilities		(152)		-		(3)	(155)
Total	\$	14,361	\$	(331)	\$	(151)	\$ 13,879

For the six-month period ended September 30, 2017							
(CAD millions)		Investment income (loss) ¹		Investment management fees ³		Transaction costs	Net investment income (loss)
Equities	\$	7,709	\$	(328)	\$	(77)	\$ 7,304
Fixed Income		1,143		(414)		(65)	664
Real assets		(38)		(63)		(31)	(132)
Debt financing liabilities		712		-		-	712
Total	\$	9,526	\$	(805)	\$	(173)	\$ 8,548

For the six-month period ended September 30, 2016 ⁴							
(CAD millions)		Investment income (loss) ¹		Investment management fees ³		Transaction costs	Net investment income (loss)
Equities	\$	12,273	\$	(263)	\$	(98)	\$ 11,912
Fixed income		4,753		(275)		(75)	4,403
Real assets		2,247		(72)		(64)	2,111
Debt financing liabilities		(230)		-		(6)	(236)
Total	\$	19,043	\$	(610)	\$	(243)	\$ 18,190

¹ Includes realized gains and losses from investments, changes in unrealized gains and losses on investments, interest income, dividends, private real estate operating income (net of interest expense), interest expense on the debt financing liabilities and other investment-related income and expenses.

² Includes performance fees of \$108 million (September 30, 2016 - \$62 million).

³ Includes performance fees of \$297 million (September 30, 2016 - \$150 million).

⁴ Certain comparative figures have been updated to be consistent with current period presentation.

Notes to the Condensed Interim Consolidated Financial Statements

For the three and six-month periods ended September 30, 2017

(Unaudited)

7. Collateral

Collateral transactions are conducted to support investment activities under terms and conditions that are common and customary to collateral arrangements. The net fair value of collateral held and pledged was as follows:

Collateral held and pledged

<i>(CAD millions)</i>	As at September 30, 2017	As at March 31, 2017	As at September 30, 2016
Assets held as collateral on:			
Reverse repurchase agreements ¹	\$ 8,987	\$ 5,196	\$ 15,189
Over-the-counter derivative transactions ¹	648	493	454
Other debt ¹	681	726	1,095
Assets pledged as collateral on:			
Repurchase agreements	(19,192)	(14,785)	(21,564)
Securities sold short	(12,665)	(27,575)	(26,497)
Over-the-counter derivative transactions	(313)	-	-
Private equities	(5,194)	(5,291)	(5,988)
Other debt	(3,923)	(3,957)	(3,843)
Total	\$ (30,971)	\$ (45,193)	\$ (41,154)

¹ The fair value of the collateral held that may be sold or repledged as at September 30, 2017 was \$9,792 million (March 31, 2017 - \$6,192 million, September 30, 2016 - \$16,571 million). The fair value of collateral sold or repledged as at September 30, 2017 was \$3,710 million (March 31, 2017 - \$2,677 million, September 30, 2016 - \$6,810 million).

8. Commitments

CPP Investment Board has 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, 2017, the commitments totalled \$39.4 billion (March 31, 2017 - \$38.9 billion, September 30, 2016 - \$38.5 billion).

CPP Investment Board made lease and other commitments, which require future annual payments as follows:

Lease and other commitments

<i>(CAD millions)</i>	As at September 30, 2017	As at March 31, 2017	As at September 30, 2016
Within one year	\$ 31	\$ 37	\$ 30
After one year but not more than five years	118	123	97
More than five years	35	46	48
Total	\$ 184	\$ 206	\$ 175

9. Related party transactions

Related parties of CPP Investment Board include unconsolidated subsidiaries, joint ventures and associates and all related party investments are measured at fair value. Investments in joint ventures are those arrangements where CPP Investment Board has joint control. An associate is an entity which CPP Investment Board has the ability to exercise significant influence over decision making.

Related party transactions consist of investments and investment income primarily in private equities, debt, real estate and infrastructure and are presented in detail in the Condensed Interim Consolidated Schedule of Investment Portfolio. Related party transactions are measured at fair value and will therefore have the same impact on net assets and net investment income as those investment transactions with unrelated parties.

Related party transactions with consolidated subsidiaries are eliminated upon consolidation.

10. Guarantees

As part of certain investment transactions, CPP Investment Board agreed to guarantee, as at September 30, 2017, up to \$2.6 billion (March 31, 2017 - \$3.1 billion, September 30, 2016 - \$2.3 billion) to other counterparties in the event certain investee entities default under the terms of loan and other related agreements.