

CREDIT OPINION

6 September 2019

Update



RATINGS

CPPIB Capital Inc.

Domicile	Canada
Long Term CRR	Not Assigned
Long Term Issuer Rating	Aaa
Туре	LT Issuer Rating - Dom Curr
Outlook	Stable

Please see the <u>ratings section</u> at the end of this report for more information. The ratings and outlook shown reflect information as of the publication date.

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CPPIB Capital Inc.

Update to credit analysis

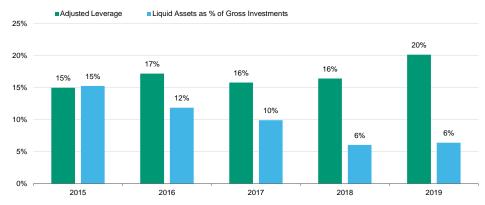
Summary

CPPIB Capital's Aaa long-term issuer rating is equal to its sponsor anchor, the Government of Canada (Aaa stable). This is based upon CPPIB's creditworthiness which is the result of (1) a legislative system that safeguards solvency and liquidity from funding shortfalls and the political process, (2) the relatively high stability and predictability of future cash flows, and (3) strong coverage of obligations by high quality liquid assets.

CPPIB Capital Inc. (CPPIB Capital) is a wholly-owned subsidiary of Canada Pension Plan Investment Board (CPPIB). It also has a backed short-term rating of Prime-1. Obligations of CPPIB Capital are unconditionally and irrevocably guaranteed by CPPIB. Moody's does not rate CPPIB, but its creditworthiness is incorporated into CPPIB Capital's Aaa long term issuer rating.

Exhibit 1

Adjusted leverage is moderate and liquid assets offer strong coverage of obligations



Fiscal year ending March 31, Liquid assets represents money market securities, Government of Canada and Provincial government securities and securities purchased under reverse repurchase agreements

Source: Moody's Investors Service, data from issuer reports

Credit strengths

- » Unconditional and irrevocable guarantee from CPPIB
- » Governing framework protects CPPIB from funding shortfalls and political risks
- » CPPIB Capital's creditors have an effective priority over pension obligations and benefit from strong coverage by high quality liquid
- » Strong structural liquidity, with positive net contributions expected until 2045

Credit challenges

- » Execution risk associated with the transition to a higher allocation to private investments
- » Private investments suit CPPIB's long-term investment horizon but weaken portfolio liquidity
- » Maintaining effective risk management as CPPIB continues to grow, particularly with respect to the Additional CPP

Outlook

CPPIB Capital's rating outlook is stable consistent with the stable rating outlook for the Government of Canada

Factors that could lead to an upgrade

» An upgrade is not possible

Factors that could lead to a downgrade

- » A downgrade of the sponsor anchor, the Government of Canada
- » A material reduction in CPPIB's liquid assets relative to our stress assumptions
- » A change in CPP's governing framework, although we do not view this as likely

This publication does not announce a credit rating action. For any credit ratings referenced in this publication, please see the ratings tab on the issuer/entity page on www.moodys.com for the most updated credit rating action information and rating history.

Key indicators table

Exhibit 2
CPPIB Capital Inc. [1][2][3]

Statistics for Canada Pension Plan Investment Board	2019	2018	2017	2016	2015
Gross Assets (C\$ millions)	499,890	431,941	381,413	348,415	321,818
CPPIB Net Assets (C\$ millions)	391,980	356,134	316,677	278,941	264,623
Fixed Income % Investments	25%	22%	27%	34%	33%
Public Equity % Investments	29%	34%	31%	24%	29%
Private Equity % Investments	20%	18%	17%	17%	14%
Real Estate % Investments [4]	9%	10%	10%	10%	9%
Infrastructure % Investments	7%	6%	7%	6%	5%
Other Investments % Investments	11%	9%	7%	10%	9%
Total Funding % Gross Assets [5]	20.6%	16.8%	15.8%	18.8%	15.7%
Unsecured borrowing (CPPIB Capital; C\$ millions)	32,016	24,851	20,096	15,568	9,955
Unsecured borrowing (CPPIB Capital; % Gross Assets)	6.4%	5.8%	5.3%	4.5%	3.1%
Derivative Notionals (C\$ millions)	336,532	195,878	205,530	345,935	208,104
Annual Reported Return (%)	9.3%	11.9%	12.2%	3.7%	18.7%
Benchmark return (%)	6.6%	9.8%	14.9%	-1.0%	17.0%

[1] 2013-2019 information based on IFRS financial statements [2] Includes unrealized gains and losses on investments [3] Fiscal year ending March 31. [4] Data is net of debt on real assets. [5] Data excludes debt on real assets.

Source: Moody's Financial Metrics, data from company reports

Profile

CPPIB was established by the Canadian Parliament to invest the assets of its national pension system (excluding the province of Québec), known as the Canada Pension Plan (CPP). CPPIB uses CPPIB Capital to add a moderate degree of leverage by raising both short-term and medium-term borrowings.

Detailed credit considerations

CPPIB's governing framework underpins its financial stability

A system of legislatively mandated and controlled cash flows provides for the overall stability and predictability of CPPIB's financial position. The CPP is funded by mandatory contributions from virtually all Canadian workers and their employers; the exception being workers in the province of Quebec which has its own mandatory pension system. The constituting act of the CPP (the CPP Act) mandates that all pension contribution payments, in excess of immediate pension benefit payments, be transferred to the CPPIB.

CPPIB's mandate is to invest the amounts transferred to it with a view to achieving a maximum rate of return without undue risk of loss, having regard to the funding requirements of CPP. In addition, the CPP Act effectively mandates that no claims can be made by the CPP on CPPIB if the effect of such payments is to cause the net assets of CPPIB to fall below zero. This effectively places CPPIB Inc creditors ahead of pension beneficiaries.

CPP contributions are legislatively set as a percentage of the median salary of Canadian workers, which is updated annually. Should the Chief Actuary of Canada stipulate a higher contribution level in the future, and appropriate legislation is not passed or the governments of the day do not otherwise act, the CPP Act provides for staged automatic contribution increases and the temporary suspension of cost-of-living adjustments to benefit payments. A change in legislation would be required for CPPIB to lose its mandate to invest for CPP. Amendments to the CPP Act (and CPPIB Act) require the assent of two-thirds of the provinces of Canada representing two-thirds of the population, an amending formula more stringent than the formula for changing Canada's constitution.

In September 2016, the Canadian government announced an expansion of CPP program benefits (Additional CPP), which are being funded through phased-in contribution increases between 2019 and 2025. The CPP Act now defines two separate parts of the CPP as the "base" CPP and "additional" CPP. As of 1 January 2019, CPPIB began managing the investment of these new contributions.

Strong structural liquidity allows CPPIB to adopt a long-term investment horizon

According to the Chief Actuary of Canada's most recent review released in April 2018, base CPP will receive more in pension contributions than it pays out for pension benefit payments up to and including 2020, after which net outflows will be required to pay benefits. However, Additional CPP will be fully funded and net inflows related to its benefits are expected to be cash flow positive upon implementation until 2060. In aggregate, this results in a net positive contribution cash flow at least until then.

CPPIB's 10-year annualized real rate of return of 8.6%, after all costs, as at its first quarter-ending 30 June 2019 exceeded the 3.9% real rate of return that is required to sustain CPP based on current assumptions. CPPIB's funding visibility, combined with the absence of redemption requests, supports a long-term investment horizon and allows CPPIB to take advantage of market dislocations.

CPPIB capital's creditors have an effective priority over pension obligations and benefit from strong coverage by high quality liquid assets

The legislative acts constituting the CPP and CPPIB do not explicitly define the priority of creditors of CPPIB Capital over pension obligations. Nevertheless, in our view CPPIB Capital creditors have an effective priority because the CPP Act mandates that no claims can be made by the CPP on CPPIB if it would cause the net assets of CPPIB to be negative. In this instance net assets means assets less liabilities, including debt. As a result, CPPIB's obligations under the guarantee of CPPIB Capital debt rank senior to amounts payable to CPP and pari passu with CPPIB's other unsecured obligations.

On a gross asset base of CAD505 billion at 30 June 2019, CPPIB had net assets of CAD401 billion, which constitutes a loss absorbing cushion for the benefit of creditors. Adjusting for nettable, but not offset, repurchase agreements, CPPIB's leverage ratio was 20% as at 31 March 2019. CPPIB's assets include CAD168 billion of highly liquid assets, comprising CAD22 billion of marketable Canadian federal, provincial and agency debt, CAD10 billion of money market securities and CAD136 billion of public equities. This compares to outstanding commercial paper at CPPIB Capital of CAD5.9 billion and term debt of CAD25.3 billion. CPPIB maintains the equivalent of over CAD6 billion in unsecured credit facilities as a liquidity backstop, which was undrawn as of 30 June 2019. CPPIB's liquidity monitoring also incorporates stressed collateral funding requirements. CPPIB has employed greater leverage while reducing its liquidity position in recent years as the fund shifts to a higher proportion of illiquid assets such as real estate and infrastructure.

Growth in alternative asset classes brings risk management challenges

We believe the most significant challenge facing CPPIB relates to concentrations and execution risks associated with its alternative investment strategy. As noted, CPPIB has built a sizable portfolio of less liquid, alternative investments, such as private equity and infrastructure. These investments have grown from 4% of the portfolio in 2005 to 55% as of 30 June 2019. These assets tend to be higher risk for creditors because they are typically illiquid and lack market pricing transparency, which leads to challenges in reliable valuations until sold.

Support and structural considerations

As noted above, CPPIB Capital's long-term issuer rating is at the highest level of Aaa. Therefore, CPPIB Capital's ratings do not have any uplift from the very high probability, in our view, that the Government of Canada (Aaa, stable) would provide CPPIB (and by definition CPPIB Capital) extraordinary support if needed.

We note that CPPIB is not guaranteed by the Government of Canada. We base our expectation of support on the fact that CPPIB's asset base supports the pension benefits of Canadians. We believe it is highly unlikely that the federal government would let the financial strength of CPPIB weaken such that its ability to meet its obligations was in doubt.

Ratings

Exhibit 3

Category	Moody's Rating
CPPIB CAPITAL INC.	
Outlook	Stable
Issuer Rating -Dom Curr	Aaa
Bkd Senior Unsecured	Aaa
Bkd Commercial Paper	P-1
Source: Moody's Investors Service	

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