

CREDIT OPINION

29 October 2020

Update

 Rate this Research

RATINGS

Canada Pension Plan Investment Board

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

Please see the [ratings section](#) 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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Canada Pension Plan Investment Board

Strong liquidity and high asset coverage are credit strengths

Summary

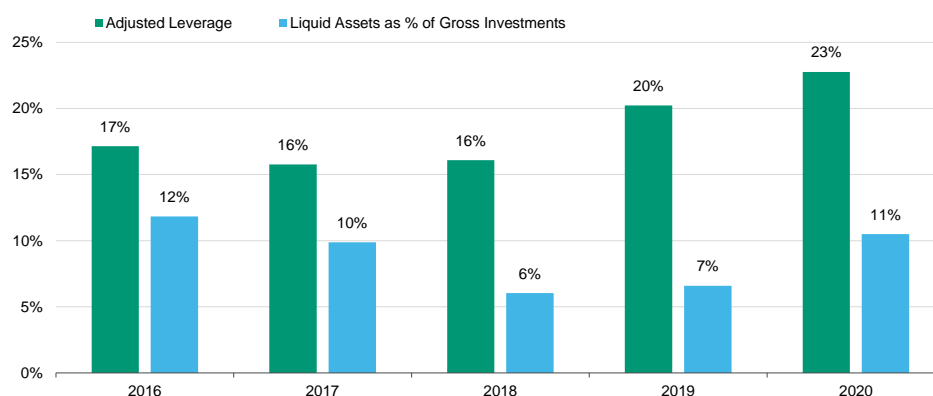
CPPIB's aa2 baseline credit assessment (BCA) reflects the pension manager's strong liquidity and predictability of future cash flows, as well as sound financial policies. The BCA is further supported by our positive view of its funding profile because as a pension manager, in contrast to a public pension plan, it does not have a direct funding obligations to pensioners. These credit strengths are constrained by a high proportion of high risk assets, growth in less-liquid investments, and a modest degree of leverage.

CPPIB's Aaa long-term senior unsecured rating is based on its aa2 BCA, our assumption of modest extraordinary support from the Government of Canada, and instrument-level structural support under our assumption that creditors have a priority of claim on net assets, creating high coverage of assets for creditors.

CPPIB Capital Inc., a wholly-owned subsidiary of CPPIB, has a backed commercial paper rating of Prime-1, reflecting the unconditional and irrevocable guarantee of its debt obligations by CPPIB. CPPIB Capital Inc. adds a moderate degree of leverage by issuing commercial paper and term debt guaranteed by CPPIB, with the goal of diversifying funding sources and enhancing overall returns of the fund.

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

Recent Developments

Market declines unleashed by the coronavirus pandemic will strain pension fund performance. In the short-term, depressed investment income and asset value declines will deteriorate funding positions. Pension managers will need to hold adequate levels of liquidity to meet operational and financial obligations. In the long-term, the investment characteristics of certain asset classes could permanently change as economies adjust to a post-pandemic reality. These changes will depend on the length and severity of the economic impact as well as associated government support measures. That said, CPPIB entered the crisis with strong liquidity, which is an important factor in its current credit profile.

Credit strengths

- » Governing legislation that mandates CPPIB as the exclusive asset manager for the national social retirement plan without responsibility for the underlying pension obligations; as such we view the plan as effectively fully-funded
- » Creditors have an effective priority over pension obligations and benefit from strong coverage by high quality liquid assets
- » Sound financial policies and an investment profile that immunizes currency mismatches with debt obligations.
- » CPPIB Capital Inc.'s issued instruments are unconditionally and irrevocably guaranteed by CPPIB

Credit challenges

- » Execution risk associated with the transition to a higher allocation to private investments
- » Comparably high levels of less liquid Level 3 assets
- » Higher levels of funding sources secured by liquid assets relative to peers.
- » Maintaining effective risk management as CPPIB continues to grow, particularly with respect to the Additional CPP

Outlook

The stable outlook reflects our expectations that CPPIB's credit fundamentals, specifically its strong and stable liquidity and level of high risk assets, will remain unchanged over the next 12 to 18 months. It also reflects the stable outlook of its government extraordinary support provider, the [Government of Canada](#) (Aaa stable). The stable outlook on CPPIB Capital Inc.'s ratings reflect the outlook of CPPIB.

Factors that could lead to an upgrade

- » An upgrade in the ratings is not possible.
- » CPPIB's aa2 BCA could be upgraded if we were to assess a material and sustained decrease in high risk assets.

Factors that could lead to a downgrade

- » The BCA could be downgraded if there was a material reduction in CPPIB's liquid assets or if a change in CPPIB's governing legislation or a legal precedent that casts doubt on the status of CPPIB's obligations as having preference over pension obligations. However, a downgrade in the BCA would not likely result in a downgrade of the long-term issuer rating because of our expectation of extraordinary support.
- » A material increase in leverage above 25% for a sustained period of time
- » A deterioration in the creditworthiness of the Government of Canada
- » The supported ratings of CPPIB Capital Inc. could be downgraded if we were to assess a change in the guarantee from CPPIB.

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

CPP Investments [1][2][3][4][5]

| Statistics for Canada Pension Plan Investment Board | 2020 | 2019 | 2018 | 2017 | 2016 |
|---|---------|---------|---------|---------|---------|
| Gross Assets (C\$ millions) | 543,144 | 500,547 | 431,941 | 381,413 | 348,415 |
| CPPIB Net Assets (C\$ millions) | 409,588 | 391,980 | 356,134 | 316,677 | 278,941 |
| Fixed Income % Investments | 29% | 25% | 22% | 27% | 34% |
| Public Equity % Investments | 22% | 28% | 34% | 31% | 24% |
| Private Equity % Investments | 20% | 19% | 18% | 17% | 17% |
| Real Estate % Investments [4] | 8% | 9% | 10% | 10% | 10% |
| Infrastructure % Investments | 6% | 7% | 6% | 7% | 6% |
| Other Investments % Investments | 15% | 11% | 9% | 7% | 10% |
| Total Funding % Gross Assets [5] | 23% | 21% | 17% | 16% | 19% |
| Unsecured borrowing (CPPIB Capital; C\$ millions) | 38,395 | 30,861 | 24,056 | 19,873 | 15,568 |
| Unsecured borrowing (CPPIB Capital; % Gross Assets) | 7% | 6% | 6% | 5% | 4% |
| Derivative Notionals (C\$ millions) | 396,476 | 336,532 | 195,878 | 205,530 | 345,935 |
| Annual Reported Return (%) | 3.1% | 9.3% | 11.9% | 12.2% | 3.7% |
| Benchmark return (%) | -3.1% | 6.6% | 9.8% | 14.9% | -1.0% |

[1] 2016-2020 information based on IFRS financial statements [2] Includes unrealized gains and losses on investments [3] Fiscal year ending 31 March [4] Data is net of debt on real assets [5] Data excludes debt on real assets

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

Profile

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

Detailed credit considerations

Funded Status - Pension reserve fund does not have responsibility for the obligation of the underlying pension liability

As an asset manager, CPPIB is not responsible for the administration of benefits, nor in setting actuarial assumptions of the underlying obligation; both which are the responsibility of the sponsoring government. In contrast to a pension fund, CPPIB is the legal and beneficial owner of its assets. As such, we consider CPPIB to be fully funded and assign a aaa-score to its Funding Ratio score.

Liquidity - Benefits of liquid fixed income portfolio and stable cash flows offset by funding sources that encumber assets

As of 31 March 2020, CPPIB had good coverage of liquid assets as compared to its cash obligations. The ratio of discounted liquid asset inflows to recognized obligation outflows was 203%, largely because of a high level of publicly-traded equity and fixed income.

That said, CPPIB uses relatively high levels of repo funding and short-sold securities compared to peers, resulting in above-average asset encumbrance and counterparty risk. As at 31 March 2020 the proportion of gross assets funded by repos and short-sold securities was just over 12%; nearly double the peer average.

In September 2016, the Canadian government announced an expansion of Canada Pension Plan 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 Canada Pension Plan as the "base" CPP and "additional" CPP. CPPIB began managing the investment of these new contributions in 2019.

According to the Chief Actuary of Canada's most recent review released in April 2018, CPP will receive more in pension contributions than it pays out for pension benefit payments up to and including 2021, 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 has an initial liquidity score of aaa, which we make a one-notch downward adjustment to aa1 to account for its comparably higher level of funding sources secured with liquid assets and associated counterparty credit risk exposures.

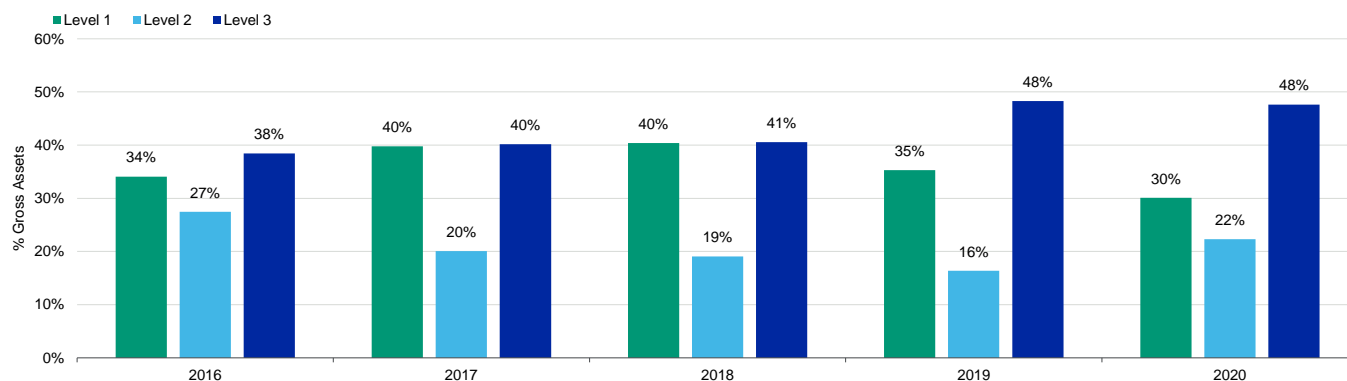
Asset Risk - High levels of less-liquid assets, but with broad geographic and sector diversification

With a ratio of high risk assets to gross assets of 80%, CPPIB has a higher level of asset risk relative to peers; largely because of a large proportion of equity investments. Less-liquid Level 3 assets, such as real estate, infrastructure and private equity, have grown to 48% as of 31 March 2020 from 38% for the same period in 2016 as highlighted in Exhibit 3 below. While these asset classes align to the pension manager's mandate to invest with a long-time horizon and offer attractive risk-adjusted returns, they also add incremental liquidity and operational risk to the fund.

Exhibit 3

CPPIB's less-liquid Level 3 assets have grown in recent years.

Real estate, infrastructure and private equity align with CPPIB's long time horizon



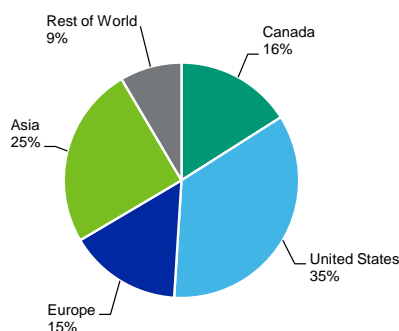
Fiscal year end 31 March

Source: Company Financials, Moody's Investors Service

That said, over 80% of CPPIB's investment portfolio was invested outside Canada as of 31 March 2020 (Exhibit 4) and is broadly diversified across several asset classes. In our view, the benefits of this diversification strategy offsets higher liquidity and operational risks associated with the portfolio's increasing share of Level 3 assets. It also reduces common credit risks with the Canadian economy, providing diversification away from the geographic location of the underlying pension obligation and related contribution cash flows.

Exhibit 4

CPPIB's investments are diversified globally.



Data as of 31 March 2020

Source: Company Financials, Moody's Investors Service

CPPIB has an initial asset risk initial score of ba3 but we make a three-notch upward adjustment to reflects the credit benefits of its portfolio's geographic and sector diversification.

Financial Policy - Conservative financial policies and investment profile is natural hedge to creditor obligations

We believe CPPIB's financial policies to be broadly conservative as expressed in our aa-score for Financial Policy. In our view, the pension manager has good liquidity and risk management practices that mitigate a modest level of leverage that creates refinancing and counterparty risks. We note CPPIB has a policy of not hedging currency exposures within its investment portfolio which has generated volatility in its investment returns. That said, almost 50% of CPPIB's investment portfolio is in USD or CAD which aligns with its creditor obligations, much of which is denominated in USD.

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 Canada Pension Plan 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 Canada Pension Plan (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 Canada Pension Plan. In addition, the CPP Act effectively mandates that no claims can be made by the Canada Pension Plan 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. A change in legislation would be required for CPPIB to lose its mandate to invest for the Canada Pension Plan. Amendments to the CPP Act require the agreement 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.

ESG considerations

CPPIB's exposure to environmental risks is low, consistent with our general assessment for the pension funds sector. See our [Environmental heatmap](#) for further information.

CPPIB's exposure to social risks is moderate, consistent with our general assessment for the pension funds sector. Pension funds' social risk exposure is largely driven by: 1) inherent susceptibility to demographic changes such as population ageing, which reduces the number of contributors and increases the number of beneficiaries; 2) employees' specialized investment knowledge which increases risks with talent recruitment and retention; and 3) increasing interconnectedness with the broader financial system which increases interdependency with financial system supply chains. See our [Social risks heatmap](#) for further information.

CPPIB has limited exposure to governance risk thanks to an independent board and management that isolates investment and liability decisions from the political process. There remains a possibility that portfolio investments may become a source of reputational risk for the fund and/or the national government.

Support and structural considerations

Very High dependence with an explicit and well-recognized mandate to manage Canada's social retirement program

Our application of default dependence reflects the joint susceptibility of a government-related issuer and its supporting government to adverse circumstances that simultaneously move them closer to default. It reflects the likelihood that the credit profiles of two obligors may be imperfectly correlated.

CPPIB has an explicit and well defined public policy mandate to invest the proceeds of Canada's national social retirement program, which, in our view, results in a very high default dependence to the national government. That said, we note CPPIB is both operationally and financially independent from the national government with respect to investment, financing decisions, organizational structure, professional management, compensation practices and board nomination processes.

High expectation of extraordinary support with a mandate as the exclusive investment manager of Canada's national social retirement program; an essential public service

Extraordinary support represents the probability that a government owner of a GRI would provide financial support, or other contractual protections, to a GRI to avoid a default on its debt obligations. The expectation of a continuation of ordinary support does not constitute extraordinary support and is instead considered in our assessment of the GRI's BCA.

As noted, CPPIB has special legal status as the exclusive asset manager for investments related to the national social retirement program of Canada. We believe the pension manager is a key element of Canada's social retirement program and therefore an important contributor to the Canadian economy. In our view, a default of CPPIB would be politically embarrassing to the Government of Canada and would have implications for the country's own ability to access debt markets. As such, we believe the Government of Canada would provide extraordinary support, financial or otherwise, to CPPIB if necessary.

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

The legislative acts constituting the Canada Pension Plan and CPPIB do not explicitly define the priority of creditors over pension obligations. Nevertheless, in our view CPPIB's creditors have an effective priority because the CPP Act mandates that no claims can be made by the Canada Pension Plan 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 Inc. debt rank senior to amounts payable to Canada Pension Plan and pari passu with CPPIB's other unsecured obligations.

On a gross asset base of CAD551 billion at 30 June 2020, CPPIB had net assets of CAD434 billion, which constitutes a loss absorbing cushion for the benefit of creditors. CPPIB's assets include CAD178 billion of highly liquid assets, comprising CAD16 billion of marketable Canadian federal, provincial and agency debt, CAD22 billion of money market securities and CAD140 billion of public equities. This compares to outstanding commercial paper at CPPIB Capital Inc. of CAD2.7 billion and term debt of CAD37 billion. CPPIB maintains the equivalent of over CAD6 billion in unsecured credit facilities as a liquidity backstop, which was undrawn as of 30 June 2020. 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.

Adjusting for nettable, but not offset, repurchase agreements, CPPIB's leverage ratio was 20% as at 31 March 2020.

Rating methodology and scorecard factors

| | | | | | | |
|---|----------------|----------------------|---------------|----------------|-----------------------------|----------------------------|
| Enter Obligor Name Here ▶ | | CPP Investment Board | | | | |
| Enter Fiscal Year-End Date Here ▶ | | 3/31/2020 | | | | |
| | Historical | | | Assigned | | |
| | Factor Weights | Historic Ratio | Initial Score | Assigned Score | Key driver #1 | Key driver #2 |
| Funding Ratio* | 40% | 100.0% | aaa | aaa | | |
| Net Assets / PBO | | | | | | |
| Liquidity | | | | | | |
| Liquidity Inflows / Outflows | 20% | 203.0% | aaa | aa1 | Asset Encumbrance | |
| Asset Quality | | | | | | |
| High Risk Assets / Gross Assets | 20% | 72.0% | ba1 | baa3 | Asset Class Diversification | Geographic Diversification |
| Financial Policy | | | | | | |
| Financial Policy | 20% | aa | aa | aa | | |
| Financial Profile Outcome | 100% | | aa2 | aa2 | | |
| | | | | | | |
| Qualitative Notching | | | | | | |
| Political Independence | | | | 0 | | |
| Corporate Behavior | | | | 0 | | |
| Scorecard-Indicated Outcome Before Constraint | | | | aa2 | | |
| Consideration of: | | | | | Comment | |
| Sovereign Constraint (Y/N) | | | | Yes | | |
| Sovereign Rating | | | | Aaa | | |
| Sponsor Constraint (Y/N) | | | | Yes | | |
| Sponsor Rating | | | | Aaa | | |
| | | | | | | |
| Scorecard-Indicated Outcome | | | | aa2 | | |

Source: Moody's Investors Service

Ratings

Exhibit 5

| Category | Moody's Rating |
|---|----------------|
| CANADA PENSION PLAN INVESTMENT BOARD | |
| Outlook | Stable |
| Issuer Rating -Dom Curr | Aaa |
| CPPIB CAPITAL INC. | |
| Outlook | Stable |
| Bkd Senior Unsecured | Aaa |
| Bkd Commercial Paper | P-1 |

Source: Moody's Investors Service

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