

CREDIT OPINION

5 February 2025

Update



RATINGS

Canada Pension Plan Investment Board

| 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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Canada Pension Plan Investment Board

Update to credit analysis following ratings affirmation

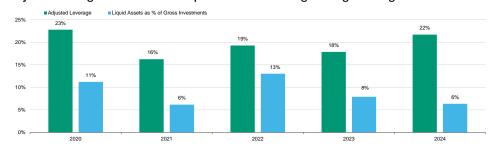
Summary

<u>Canada Pension Plan Investment Board</u>'s (CPPIB) Aa2 baseline credit assessment (BCA) reflects the pension manager's strong liquidity and predictability of future cash flows, as well as sound financial policies. CPPIB's governing legislation mandates it as the exclusive asset manager of Canada's national social retirement program, the Canada Pension Plan (CPP), without responsibility for the underlying pension obligations. As such, for analytical purposes, we consider CPPIB to be fully funded because it cannot have a pension shortfall nor a surplus. These credit strengths are constrained by a high proportion of high-risk assets (as defined in our rating methodology) including growth in private markets and other less-liquid investments, and modest levels of leverage.

CPPIB's Aaa long-term issuer rating reflects its Aa2 BCA and high assumption of extraordinary support from its sponsor, the <u>Government of Canada</u> (Aaa stable). The issuer rating further benefits from the uplift from asset coverage because of our expectation that CPPIB's obligations rank senior to the amounts payable to the Canada Pension Plan in the event of a default, which provides a substantial cushion of assets and increases expected recoveries. However, the Government of Canada's issuer rating is a constraint on CPPIB's BCA.

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. Moody's leverage ratio is adjusted for improved comparability between US GAAP and IFRS by deducting nettable, but not offset, repurchase agreements and derivative contracts. Source: Company financials, Moody's Ratings

<u>CPPIB Capital Inc.</u>, 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.

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 CPPIB as effectively fully funded for analytical purposes;

- » Creditors have an effective priority over pension obligations and benefit from strong asset 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 growth in private markets and other less-liquid investments;
- » Higher level of secured borrowings relative to peers;
- » Maintaining effective risk management as CPPIB continues to grow, particularly with respect to the Additional CPP Investment Portfolio.

Outlook

The stable outlook reflects our expectation that CPPIB's credit fundamentals, specifically its strong and stable liquidity and modest leverage will remain in line with current levels over the next 12 to 18 months. It also reflects the stable outlook of its government support provider, the Government of Canada.

Factors that could lead to an upgrade

- » An upgrade of the Aaa ratings is not possible.
- » An upgrade of its aa2 BCA could be driven by a material and sustained decrease in CPPIB's high-risk assets.

Factors that could lead to a downgrade

- » CPPIB's BCA could be downgraded if there was a material reduction in its liquid assets or if the pension manager's leverage was to increase above 25% for a sustained period of time. The ratings could also be downgraded if there was 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 of the BCA would not likely lead to a downgrade of the Aaa long-term issuer rating because of our expectation of extraordinary support from the Government of Canada as well as asset coverage considerations. That said, a downgrade in the rating of Government of Canada would lower the BCA and the Aaa issuer rating as it is a BCA constraint.
- » CPPIB Capital Inc.'s supported ratings could be downgraded if CPPIB's ratings were downgraded or if we believed that the guarantee provided by CPPIB to its obligations would not be honored.

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

Key indicators table

Exhibit 2

| Statistics for Canada Pension Plan Investment Board | 2024 | 2023 | 2022 | 2021 | 2020 |
|---|---------|---------|---------|---------|---------|
| Gross Assets (C\$ millions) | 815,081 | 706,286 | 687,675 | 599,385 | 543,144 |
| CPPIB Net Assets (C\$ millions) | 632,367 | 570,042 | 539,311 | 497,187 | 409,588 |
| Fixed Income % Investments | 28% | 27% | 24% | 24% | 29% |
| Public Equity % Investments | 26% | 23% | 23% | 29% | 22% |
| Private Equity % Investments | 25% | 26% | 25% | 27% | 20% |
| Real Estate % Investments [4] | 5% | 6% | 6% | 6% | 8% |
| Infrastructure % Investments | 6% | 7% | 7% | 7% | 6% |
| Other Investments % Investments | 10% | 10% | 15% | 7% | 15% |
| Total Funding % Gross Assets [5] | 21% | 20% | 19% | 17% | 23% |
| Unsecured borrowing (CPPIB Capital; C\$ millions) | 73,122 | 59,362 | 49,507 | 39,997 | 38,395 |
| Unsecured borrowing (CPPIB Capital; % Gross Assets) | 9.0% | 8.4% | 7.2% | 6.7% | 7.1% |
| Derivative Notionals (C\$ millions) | 698,551 | 667,940 | 508,800 | 436,688 | 396,476 |
| Annual Reported Return (%) | 8.0% | 1.3% | 6.8% | 20.4% | 3.1% |
| Benchmark return (%) | 0.0% | 0.0% | 4.7% | 30.4% | -3.1% |

^{[1] 2013-2016} information based on IFRS financial statements [2] Includes unrealized gains & losses on investments [3] Fiscal year ending March 31 Source: Company financials, Moody's Ratings

Profile

CPPIB was established by the Canadian government in 1997 by an Act of Parliament to invest the assets of its national pension system (excluding the province of Québec), the Canada Pension Plan (CPP). While CPPIB is accountable to Parliament and to federal and provincial ministers, it operates independently through an independent Board of Directors. 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 of 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 Funding Ratio score of aaa.

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

As of year-end 31 March 2024, CPPIB had good coverage of its cash obligations by liquid assets. The ratio of discounted liquid asset inflows to recognized obligation outflows was 232%, although this is down from 261% in the year prior, largely because of higher levels of payables as well as level 1 fixed income securities.

CPPIB uses relatively higher levels of repo funding and short-sold securities compared to peers, resulting in above-average asset encumbrance and counterparty risk exposure. As of 31 March 2024, the proportion of gross assets funded by repos and short-sold securities was 11.4%.

According to the Chief Actuary of Canada's most recent review released in December 2022, the base CPP will receive more in pension contributions than it pays out for pension benefit payments up to and including 2025, after which net outflows will be required to pay benefits. However, the Additional CPP Investment Portfolio, which reflects the additional benefits and additional contributions that started in January 2019, will be fully funded, with net inflows related to its benefits expected to be cash flow positive until 2058. In aggregate, this results in a net positive contribution cash flow until then.

CPPIB's initial liquidity score is aaa, which we adjust down to aa1 to reflect that the asset manager has higher levels of secured borrowings compared to its peers.

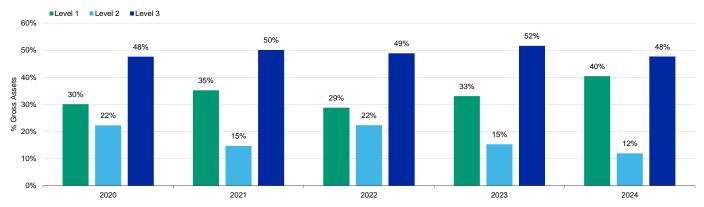
Asset Risk - High levels of less-liquid assets, but with broad geographic and sector diversification

With a ratio of high risk assets to gross assets of 73% as of 31 March 2024, CPPIB has very high asset risk exposure. The proportion of less-liquid Level 3 assets, such as real estate, infrastructure and private equity, remained stable at 48% of the portfolio as of 31 March 2024, compared to 48% in 2020 which is shown in Exhibit 3. While these asset classes align to CPPIB's mandate to invest with a long-time horizon and offer attractive risk-adjusted returns, they also add incremental liquidity and operational risks to the fund.

Exhibit 3

CPPIB's less-liquid Level 3 assets has remained stable in recent years.

Real estate, infrastructure and private equity align with CPPIB's longer investment horizon



Fiscal year end 31 March
Source: Company financials, Moody's Ratings

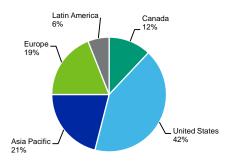
As of 31 March 2024, 79% of CPPIB's investment portfolio was invested outside of Canada (Exhibit 4) and is broadly diversified across several asset classes. The benefits of this diversification strategy offsets the higher liquidity and operational risks associated with the portfolio's increasing share 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. The effectiveness of these diversification efforts have been evident with the pension manager's positive investment performance during the current economic crisis.

For the fiscal year ending 31 March 2024, CPPIB posted a 8.0% return net of investment costs, with net assets growing by CAD62 billion to CAD632 billion. The increase in net assets consisted of CAD46.4 billion in net income and CAD15.9 billion in net transfers from the CPP. As of 31 March 2024, CPPIB had a 10-year net nominal return of 9.2% per annum.

CPPIB has an initial asset risk initial score of ba3, which we adjust upwards by two notches to baa3 to reflect the benefits its diverse investment portfolio provides to its overall credit profile.

Exhibit 4

CPPIB's investments are diversified globally.



Data as of 31 March 2024
Source: Company financials, Moody's Ratings

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

CPPIB's financial policies are conservative as expressed in our aa-score for Financial Policy. The pension manager has good liquidity and risk management practices that mitigate a modest level of leverage that creates refinancing and counterparty risks. CPPIB regularly reviews its foreign currency exposures, and when its Canadian dollar exposures differ from the size of CPPIB's investments, the pension manager will hedge its currency exposure to maintain a targeted level of Canadian dollar exposure. As of 31 March 2024, 66% of CPPIB's currency exposure was to 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 (with the exception of workers/employers in the province of Québec which has its own mandatory pension system). The Canada Pension Plan Act (CPP Act) mandates that CPPIB is responsible for assisting the Canada Pension Plan (CPP) in meeting its obligations to contributors and beneficiaries. Under the Act, 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 in the best interests of CPP beneficiaries and contributors. CPPIB's assets are to be invested in accordance with the Canada Pension Plan Investment Board Act (CPPIB Act), 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. 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 creditors ahead of pension beneficiaries. A change in legislation would be required for CPPIB to lose its mandate to invest assets for the CPP. Amendments to the CPP Act would require the agreement of two-thirds of the provinces of Canada representing two-thirds of the country's population, which is an amending formula more stringent than the formula for changing Canada's constitution.

ESG considerations

Canada Pension Plan Investment Board's ESG credit impact score is CIS-2

Exhibit 5

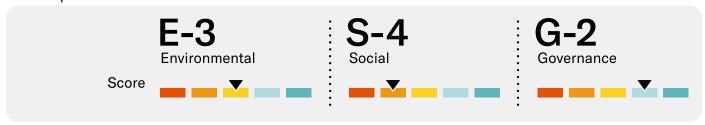
ESG credit impact score



Source: Moody's Ratings

CPPIB's ESG CIS-2 score reflects the limited impact of environmental, social and governance considerations on the current rating.

Exhibit 6
ESG issuer profile scores



Source: Moody's Ratings

Environmental

CPPIB faces moderate exposure to environmental risks related to carbon-intensive investments in its portfolio, such as oil & gas, transportation and financial services (insurance) holdings. As well, the fund's real assets portfolio, which includes real estate and infrastructure, are exposed to physical climate risk where assets could be damaged by extreme weather or rising sea levels. In addition, these assets are used as a hedge against inflation.

Social

CPPIB faces industry-wide exposure to social risks, primarily from changes in unemployment or immigration rates, which can impact contribution cash flows. However, in contrast to a pension fund, CPPIB does not have direct exposure to an aging population because it is not responsible for making benefit payments nor in managing the pension benefit obligation, both of which are the responsibility of the national government. This also reduces the impact of a privacy or data breach because CPPIB does not warehouse beneficiary data.

Governance

CPPIB faces low governance risks, with governance practices that are in line with most standards within the Canadian financial services sector. This includes a defined risk appetite statement, risk and performance benchmarks and a professional board of directors and standing Board control committees. This reflects organizational complexity from its global investment footprint, offset by its strategic commitment to influence stronger ESG disclosures and practices of their investment companies through its ownership interests.

ESG Issuer Profile Scores and Credit Impact Scores for the rated entity/transaction are available on Moodys.com. In order to view the latest scores, please click here to go to the landing page for the entity/transaction on MDC and view the ESG Scores section.

Support and structural considerations

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 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. While there have been no precedents set for the settlement of claims for a failed public pension manager in Canada, several private sector failures has resulted in creditors placed before pensioners in liquidation.

On a gross asset base of CAD815 billion at 31 March 2024, CPPIB had net assets of CAD633 billion, which is effectively a loss absorbing cushion for the benefit of creditors. CPPIB maintains the equivalent of CAD1.5 billion in unsecured credit facilities as a liquidity backstop, which was undrawn as of 31 March 2024. CPPIB's liquidity monitoring also incorporates stressed collateral funding requirements. In our view, 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 22% as at 31 March 2024 (the most recent data available). As of 31 March 2024, CPPIB's debt financing liabilities increased to CAD73 billion and we estimate CPPIB's adjusted leverage increased to approximately 20%. This level of leverage results in a two-notch upward adjustment to CPPIB's issuer rating at account for strong asset coverage.

Rating methodology and scorecard factors

| Ex | | |
|----|--|--|
| | | |

| EXTITUTE 7 | | | | | | |
|---|----------------|----------------|---------------|----------------|-----------------------------|-------------------------------|
| Public Pension Manager | | | | | | |
| Canada Pension Plan Investment Board | | | | | | |
| 2025 | | | | | | |
| | Historical | | | Assigned | | |
| | Factor Weights | Historic Ratio | Initial Score | Assigned Score | Key driver #1 | Key driver #2 |
| Funding Ratio* | | | | | | |
| Net Assets / PBO | 40% | 100.0% | aaa | aaa | | |
| Liquidity | | | | | | |
| Liquidity Inflows / Outflows | 20% | 232.0% | aaa | aa1 | Asset Encumbrance | |
| Asset Quality | | | | | | |
| High Risk Assets / Gross Assets | 20% | 73.3% | 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 Ratings

Ratings

Exhibit 8

| 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 Ratings | |

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