

Research Update:

Canada Pension Plan Investment Board 'AAA' Ratings Affirmed; Outlook Remains Stable

October 3, 2019

Overview

- Canada Pension Plan Investment Board's (CPPIB) solid investment returns continued to exceed its required real rate of return in fiscal 2019 and its leverage remained low-to-moderate.
- We are affirming our 'AAA' long-term and 'A-1+' short-term issuer credit ratings on CPPIB, as well as our 'AAA' senior unsecured debt rating, and 'A-1+' global scale and 'A-1(High)' Canada scale commercial paper ratings on subsidiary CPPIB Capital Inc.
- The stable outlook reflects our expectation that CPPIB will continue to realize good medium-term investment returns, liquidity will remain more than adequate, and leverage will remain below 40% of total assets in the next two years.

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Rating Action

On Oct. 3, 2019, S&P Global Ratings affirmed its 'AAA' long-term and 'A-1+' short-term issuer credit ratings on Canada Pension Plan Investment Board (CPPIB). The outlook is stable. At the same time, S&P Global Ratings affirmed its 'AAA' senior unsecured debt rating, and 'A-1+' global scale and 'A-1(High)' Canada scale commercial paper (CP) ratings on subsidiary CPPIB Capital Inc.

Rationale

The 'AAA' rating on CPPIB reflects its stand-alone credit profile (SACP), which S&P Global Ratings assesses at 'aaa'. The rating also reflects our opinion of a moderately high likelihood that the Canadian government would provide extraordinary support in the event of financial distress. The SACP on CPPIB reflects our assessment of the fund's low-to-moderate leverage, strong liquidity, very large and diversified portfolio, history of strong investment returns, independence in day-to-day operations, and strong corporate governance, management, and risk management. The fund's need to appropriately scale up investment strategies and operations as assets continue to grow rapidly somewhat mitigates these strengths.

We consider CPPIB's low-to-moderate leverage levels to be a credit strength. Total liabilities stood at C\$107.9 billion at the end of fiscal 2019 (year ended March 31), consisting of C\$102.9 billion of

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investment liabilities and C\$5.0 billion of payables, pending trades, and accrued liabilities. Total liabilities represented 21.6% of total assets, which was up from 17.6% a year earlier.

CPPIB has a wholly owned subsidiary, CPPIB Capital, through which it issues CP and term debt. The fund has set the total debt limit at C\$35 billion and the CP program limit at C\$15 billion. CPPIB has provided a timely, unconditional, and irrevocable guarantee covering all debt it might issue through CPPIB Capital. The guarantee conforms to our guarantee criteria and the debt issues of CPPIB Capital take the same ratings as those on CPPIB accordingly. As of fiscal year-end 2019, CPPIB Capital's debt, which is recourse to CPPIB because of the guarantee, totaled C\$30.9 billion (7.9% of net assets), up from C\$24.1 billion (6.8% of net assets) a year earlier. Individual portfolio companies in which CPPIB has an equity interest (for instance, real estate, infrastructure, private equity) have debt of their own, but the asset issues this debt in its own name and is nonrecourse to CPPIB. All potential liabilities of CPPIB Capital, including CP and term debt, would rank pari passu with any other unsecured obligations to which CPPIB Capital is subject.

Canada Pension Plan Investment Board -- Leverage

(%)	Fiscal 2019	Fiscal 2018	Fiscal 2017	Fiscal 2016	Fiscal 2015
Total liabilities/total assets	21.6	17.6	16.9	19.9	17.8
Secured funding*/total assets	14.4	11.2	10.6	14.3	12.6
Unsecured debt/net assets	7.9	6.8	6.3	5.6	3.8

*Secured funding includes repos, short selling of securities, and amounts related to derivatives positions.

We believe that the fund's portfolio is broadly diversified by geography, asset class, credit risk, and single-name exposure; and that the level of diversification reduces investment risk. Liquidity risk management practices have a strong influence on diversification levels, because CPPIB maintains large holdings of highly rated and highly liquid government securities. Geographic diversification is evolving as the fund's exposure to the U.S. continued decreasing while its exposure to Asia continued increasing in fiscal 2019. CPPIB invests in public and private equities, government bonds, credit investments, and real assets, such as real estate, infrastructure, energy and resources, as well as power and renewables. Credit diversification remained good, in our opinion. About 80% of the fixed income investments as well as certain derivative instruments had credit quality of 'A' or better in fiscal 2019, which was down from 82% a year earlier. Finally, we estimate CPPIB's top-10 single-name exposure concentration was about 15% of total investments, which was up from about 14% at the end of fiscal 2018.

The total CPP fund generated a net nominal return of 8.9% in fiscal 2019, lower than the 11.5% return recorded a year earlier. The fund's five- and 10-year annualized net real rates of return are 8.9% and 9.2%, respectively, both of which easily exceeded the Chief Actuary of Canada's 3.9% assumed real rate of return required to sustain the base CPP. Net investment income was C\$33.2 billion, which was lower than the C\$37.8 billion from the previous fiscal year.

We consider CPPIB independent, both operationally and financially, from the Government of Canada and participating provinces. These governments have established a governance framework that supports the fund's independent functioning, while establishing a clear framework for transparency and accountability, and have maintained a hands-off approach to CPPIB's day-to-day operations. We expect no changes to the current governance framework for the foreseeable future.

We view CPPIB's corporate governance and management as strong. We consider the board of directors independent and highly qualified. The fund has a clearly articulated risk budgeting

process and formal enterprise risk management policies in place. We believe management maintains a clear and comprehensive set of operating principles, objectives, and strategies and that it performs well against its targets. Audit and control systems are extensive.

CPPIB has what we consider a strong risk management framework. The board of directors approves risk limits and the specification of a reference portfolio, which define the investment portfolio's long-term total risk appetite. In turn, the investment planning committee determines each investment unit's active risk budget based on current and planned investments. The fund also adheres to what we view as a straightforward, prescriptive investment decision-making process that requires management to evaluate investment opportunities according to each investment's individual risks and how these fit within the portfolio's risk profile. A centralized risk management function complements CPPIB's strong investment decision-making procedures. The fund manages its risks under its Risk Management Framework, which looks at six principal categories of risk: market, credit, liquidity, operational, regulatory and legal, and strategic. In addition, CPPIB has established an investment risk department to monitor and measure all facets of investment risk across the organization. We believe the fund's risk management framework, although thorough and well organized, should continue evolving as the portfolio increases and incorporates new and potentially more sophisticated investments.

CPPIB is the largest investment pool in Canada with net assets of C\$392.0 billion as of fiscal year-end 2019. Thanks to continuing good investment returns and positive net contributions, the fund's assets have grown rapidly in the past 10 years. We believe that rapid growth can introduce investment and operational challenges as investment operations scale up, while maintaining returns on investments above the fund's required real rate of return of 3.9%. In our view, it is crucial that risk management policies and practices grow at the same pace as investment activities to ensure that all risks are understood, managed, and monitored. This is especially important as the fund's total assets are expected to increase to C\$1 trillion in the next 15 years with the recent creation of the Additional Canada Pension Plan (ACPP). In January 2019, CPPIB started receiving transfers of funds from the ACPP, which results in further contributions that, together with investment income, are expected to be sufficient to pay for the plan's additional benefits, which consist of increases in maximum benefits and in covered earnings.

In accordance with our criteria for rating government-related entities, we view the likelihood of CPPIB receiving extraordinary government support as moderately high. We base this on our assessment of CPPIB's critical role and limited link with the federal government. CPPIB has a critical role in investing the assets of the CPP fund. The plan is an essential component of Canada's social safety net because of the pension, disability, and other programs it delivers. The plan has about 20 million participants for whom benefit payments will represent a significant proportion of their retirement income. CPPIB has a limited link with the federal government as evidenced by the federal government's hands-off approach to the fund. Linkages are minor: CPPIB reports its financial results to Parliament. The provinces are also important stakeholders in the CPP fund; the federal government has a duty to consult with the provinces in certain circumstances, such as the appointment of a director. Accordingly, the federal government must be careful to limit any unilateral influence on CPPIB if it is to maintain harmonious relations with provincial stakeholders. For this reason, we do not expect the federal government to negatively intervene in CPPIB.

We have used our "Principles Of Credit Ratings" in conjunction with "USPF Criteria: Public Pension Funds," "Counterparty And Debt Rating Methodology For Alternative Investment Organizations: Hedge Funds," "Rating Government-Related Entities: Methodology And Assumptions," and "Rating Private Equity Companies' Debt And Counterparty Obligations" as our criteria foundation for our analysis of CPPIB's creditworthiness. We also use our "Methodology For Linking Long-Term And Short-Term Ratings" criteria as a basis to provide short-term ratings. In our view, CPPIB's

qualitative credit factors, such as management and independence, are similar to those of rated pension funds and pension fund investment boards, such as Caisse de depot et placement du Quebec and the Public Sector Pension Plan Investment Board. We also believe CPPIB's quantitative credit factors, including liquidity, leverage, and portfolio diversification, are more akin to those of alternative asset managers, such as closed-ended U.K. Investment Trusts.

Liquidity

We believe that CPPIB has more-than-adequate liquidity, thanks to its net cash inflows from net contributions and investment income and from the strength of its considerable and largely liquid balance sheet. For fiscal 2019, net contributions amounted to C\$3.9 billion and operating expenses to C\$1.2 billion. We expect that the fund will remain cash-flow positive for fiscal 2020, as it has for many years.

CPPIB held C\$63.9 billion in marketable government bonds in addition to C\$90.6 billion in developed market equities as of fiscal year-end 2019. These well exceed CPPIB's CP and medium-term note programs, which totaled about C\$30.9 billion. Total liabilities (including debt) maturing within one year were C\$77.7 billion. The fund also maintains segregated securities in its short-term cash management program to meet CPP benefit payment obligations as they arise.

We consider withdrawal risk remote because of the impediments that a withdrawing province would face in establishing an organization that could invest its share of CPP assets. Beneficiaries cannot withdraw.

Outlook

The stable outlook reflects our expectations that CPPIB will continue to realize good medium-term investment returns, liquidity will remain more than adequate, and leverage will remain below 40% of total assets in the next two years. We expect that the fund will continue to be independent of federal and provincial governments and that its investments will remain diversified. As well, we expect the fund to expand and refine its risk management systems, and maintain strong management and governance practices. In addition, we do not anticipate any change to our assessment of a moderately high likelihood that the Canadian government would provide extraordinary support to the fund in the event of financial distress.

We could lower the ratings if there were a substantial increase in liabilities, such that total liabilities exceeded 40% of total assets in the next two years. We could also lower our ratings if there were a dramatic drop in the liquidity levels or we believed the quality of management (including risk management) deteriorated significantly and was therefore unable to evolve in tandem with the growing size and sophistication of CPPIB's investment portfolio. As well, we could consider a downgrade if Canada's creditworthiness deteriorated and the federal government became more involved in the fund's operations or strategy development. We consider these scenarios unlikely over our two-year outlook horizon.

Related Criteria

- General Criteria: Methodology For Linking Long-Term And Short-Term Ratings, April 7, 2017
- General Criteria: Guarantee Criteria, Oct. 21, 2016
- General Criteria: Rating Government-Related Entities: Methodology And Assumptions, March 25, 2015

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- General Criteria: Principles Of Credit Ratings, Feb. 16, 2011
- General Criteria: Use Of CreditWatch And Outlooks, Sept. 14, 2009
- Criteria | Financial Institutions | Other: Rating Private Equity Companies' Debt And Counterparty Obligations, March 11, 2008
- Criteria | Governments | U.S. Public Finance: Public Pension Funds, June 27, 2007
- Criteria | Financial Institutions | Fixed-Income Funds: Counterparty And Debt Rating Methodology For Alternative Investment Organizations: Hedge Funds, Sept. 12, 2006

Ratings List

Ratings Affirmed

Canada Pension Plan Investment Board

Issuer Credit Rating AAA/Stable/A-1+

CPPIB Capital Inc.

Senior Unsecured AAA

Commercial Paper A-1(HIGH)

Commercial Paper A-1+

Certain terms used in this report, particularly certain adjectives used to express our view on rating relevant factors, have specific meanings ascribed to them in our criteria, and should therefore be read in conjunction with such criteria. Please see Ratings Criteria at www.standardandpoors.com for further information. Complete ratings information is available to subscribers of RatingsDirect at www.capitaliq.com. All ratings affected by this rating action can be found on S&P Global Ratings' public website at www.standardandpoors.com. Use the Ratings search box located in the left column.

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