S&P Global
Ratings

RatingsDirect®

Canada Pension Plan Investment Board

Primary Credit Analyst:
Hector Cedano, Toronto (1) 416 507 2536; hector.cedano@spglobal.com

Secondary Contact:
Stephen Ogilvie, Toronto (1) 416-507-2524; stephen.ogilvie@spglobal.com

Table Of Contents

Canada Pension Plan Investment Board

Rationale

Issuer Credit Rating
AAA/Stable/A-1+

The ratings on Canada Pension Plan Investment Board (CPPIB) and subsidiary CPPIB Capital Inc. reflects the CPPIB's 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 'aaa' SACP 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 the CPPIB's 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 the CPPIB's low-to-moderate leverage levels to be a credit strength. Total liabilities stood at C$64.5 billion at the end of fiscal 2017 (year ended March 31), consisting of C$60.2 billion of investment liabilities and C$4.3 billion of payables, pending trades, and accrued liabilities. Total liabilities represented 16.9% of total assets, which was down from 19.9% a year earlier. Of these, secured liabilities amounted to 10.6% of total assets and unsecured debt to 6.3%. The CPPIB has a wholly owned, guaranteed subsidiary, CPPIB Capital, through which it issues CP and term debt. The balance of borrowings was about C$19.9 billion at fiscal year-end 2017, up from C$15.6 billion 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 the CPPIB. We consider the fund's debt level to be low-to-moderate. As of the end of fiscal 2017, CPPIB Capital's debt, which is recourse to the CPPIB because of the guarantee, represented only 6.3% of total net assets, up from 5.6% a year earlier.

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 the CPPIB maintains large holdings of highly rated and highly liquid government securities. Geographic diversification is evolving as the fund has continued decreasing its exposure to Canada in fiscal 2017. Other regions, such as Asia, Europe (excluding the U.K.), Australia, and Latin America, have picked up the reduction in Canada's share. The CPPIB invests in public and private equities, government bonds, credit investments, and real assets, such as real estate and infrastructure. Credit diversification remained good, in our opinion. About 86% of the fixed income investments as well as certain derivative instruments had credit quality of 'A' or better in fiscal 2017, which was up from 79% a year earlier. Finally, we estimate the CPPIB's top-10 single-name exposure concentration was about 9% of total investments, which was down from about 13% at the end of fiscal 2016.

The fund generated a gross return of 12.2% in fiscal 2017, which was notably higher than the 3.7% return recorded a year earlier. Public equities performed the best in fiscal 2017 with returns of about 19%. Government bonds, both marketable and non-marketable, generated the lowest returns at negative 0.9% and 1.8%, respectively. The fund's five- and 10-year annualized real rates of return are 10.3% and 5.1%, respectively, both of which easily exceeded the 3.9%

required real rate of return. Net investment income was C$34.4 billion, which was significantly higher than the C$10.0 billion from the previous fiscal year.

We consider the 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 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.

The CPPIB has what we consider a strong risk management framework. The board of directors approves the reference portfolio, which expresses 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 the CPPIB's strong investment decision-making procedures. The fund manages its risks under its enterprise risk management framework, which looks at five principal categories of risk: strategic, investment, legislative and regulatory, operational, and reputational risk. In addition, the 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.

The CPPIB is the largest investment pool in Canada with net assets of C$316.7 billion as of fiscal year-end 2017. 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 grow to C$1 trillion in the next 15 years with the upcoming creation of the Additional Canada Pension Plan account.

In accordance with our government-related entities criteria, we view the likelihood of the CPPIB receiving extraordinary government support as moderately high, based on our assessment of the critical role in investing the assets of the Canada Pension Plan (CPP). The CPP, with about 20 million participants, is an essential component of Canada's social safety net because of the pension, disability, and other programs it provides. We believe the fund has a limited link with the federal government, as evidenced by the federal government's hands-off approach to the fund. The provinces are also important stakeholders in the CPP; 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 the fund if it is to maintain harmonious relations with provincial stakeholders.

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 the 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, the fund'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 the 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 the fund 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 highly liquid holdings of government securities. For fiscal 2017, net contributions amounted to C$4.3 billion. The CPPIB held C$58.2 billion in marketable government bonds in addition to C$98.9 billion in developed market equities as of fiscal year-end 2017. These well exceed the CPPIB's CP and medium-term note programs, which totaled about C$19.9 billion. Included in fixed income holdings is about C$1.1 billion of segregated securities in the short-term cash management program that the fund uses to meet CPP benefit payment obligations as they arise.

Outlook

The stable outlook reflects our expectation that the CPPIB's liquidity will remain more than adequate over the next two years and its leverage will continue to be relatively low, well below 40% of total assets. We expect that the fund will continue to be independent of federal and provincial governments and that the fund's 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 was 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 was 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.

Government Support And Government-Related Entity Methodology

In accordance with our government-related entities (GRE) criteria, we view the likelihood of CPPIB receiving extraordinary government support as moderately high, based on our assessment of the critical role in investing the assets of the CPP. The plan is an essential component of Canada's social safety net because of the pension, disability, and other programs it provides. It provides or will provide pensions to more than half of all Canadians for whom those payments will form a significant proportion of their retirement income. We believe the fund has a limited link with the federal government as evidenced by the federal government's hands-off approach to the fund. Linkages are minor: The CPPIB reports its financial results to Parliament. The provinces are also important stakeholders in the CPP; the federal government has a duty to consult with them before appointing a director, for example. Accordingly, the federal government must be careful to limit any unilateral influence on the fund if it is to maintain harmonious relations with provincial stakeholders. For this reason, we do not expect the federal government to negatively intervene in the fund.

Business Description

The CPPIB was established by federal legislation in 1997 to invest the funds of the CPP, a national social security program. The CPPIB is a Crown corporation, but it is not an agent of the Crown and its financial assets are not consolidated with those of the government. The fund operates at arm's length from the federal and participating provincial governments. Because it is not an agent of the federal government, the debt it issues is not subject to a government guarantee.

The CPP, like most national social security programs, requires workers to contribute a portion of their earnings, which employers match, in exchange for retirement, disability, and other benefits. Enrollment is mandatory for workers 18 and older, including self-employed workers. However, the plan is closed to Quebec workers, who must enroll in a provincially administered parallel program known as the Quebec Pension Plan. The CPP has 20 million contributors and beneficiaries.

The CPPIB presides over Canada's largest single-purpose capital pool. It held net assets of C$316.7 billion at fiscal year-end 2017. This is similar in size to the Caisse de depot et placement du Quebec, which manages the majority of Quebec's public sector pension and insurance plans. The CPPIB is responsible for managing CPP's assets, but not its actuarial liabilities. Consequently, we view the fund as a pension fund investment manager and not as a pension fund.

Independence

In our view, the CPPIB is independent of the government. We believe the fund has a strong corporate governance framework that promotes independence, transparency, and the plan members' best interests. The Canada Pension Plan Investment Board Act (CPPIB Act) established the board of directors to preside over the fund's operations and investment activities and appoint the CEO. The board has 12 members that serve three-year, staggered terms. The federal government chooses members according to the advice of a nomination committee consisting of federally and provincially appointed representatives in consultation with the participating provinces. The CPPIB Act prohibits elected officials and civil servants from serving as directors. The act also requires board members to be qualified professionals.

The board of directors' key responsibilities include approving the reference portfolio and the overall portfolio risk tolerance, establishing investment and audit committees, adopting a statement of investment policies standards and procedures, establishing a code of conduct and compensation framework, and publishing financial statements. We understand the board also reviews specific strategies and transactions as warranted. Management reports to the board, not the government. The government has taken a hands-off approach with the CPPIB and is not involved in investment strategies or its day-to-day operations.

The Canada Pension Plan Act (CPP Act) requires Canada's chief actuary to review the plan every three years. The most recent actuarial report was completed in September 2016, based on the plan assets and liabilities as of Dec. 31, 2015. According to this report, the CPP is sustainable for the next 75 years at its current legislated contribution rate of 9.9% of covered earnings. Moreover, the fund will continue to receive positive net CPP contributions until 2021.

In December 2016, following federal and provincial agreement, Royal Assent was given to Bill C-26, an act to amend the CPP. This act increases the amount of retirement pensions and other benefits that will be paid on contributions made after 2018. It also increases the upper limit of covered earnings. Beginning in 2019, additional contributions will be required, set at levels high enough so that together with investment income they are sufficient to fully pay these additional benefits. A seven-year phase-in of the expansion begins on Jan. 1, 2019.

The additional contributions, benefits, and assets will be accounted for separately from the current CPP, under what is called the Additional Canada Pension Plan account. Given that the CPPIB will invest the additional contributions, the fund will increase its assets more quickly than we had anticipated and will require it to scale up its operations.

The CPPIB is not responsible for determining the CPP's funding decisions; rather, those decisions lie with the participating governments who base their decisions largely on information provided by the chief actuary. The CPP Act encourages the federal and provincial governments, as plan stewards, to act objectively and consider the plan's long-term sustainability when revising the legislated contribution rate or benefits. In particular, the act requires the federal and provincial finance ministers to meet every three years to review the CPP and assess the adequacy of the legislated contribution rate and benefits. In making any revision, the act requires the ministers to consider, among other factors, the chief actuary's recommended contribution rate. To the extent this exceeds the legislated rate due to, for example, changes in actuarial variables underlying the plan's estimated liabilities or the CPPIB's assumed long-term investment performance, we would expect the ministers to safeguard the plan's long-term sustainability by agreeing to raise the legislated rate or alter benefits.

Although the act allows the ministers to expressly and publicly leave the legislated rate unchanged (to the detriment of the plan's long-term sustainability), we believe the resulting negative public attention, particularly in the context of the chief actuary's recommendations, would likely preclude this. Moreover, if the recommended rate exceeds the legislated one, and the ministers cannot agree on how to rectify this, the act contains default provisions that automatically delink future benefits from CPI and phase in the necessary increase to the legislated contribution rate. Revisions to the CPP or CPPIB Act, including the rules governing changes to the legislated contribution rate, benefits, the default provisions, or the CPPIB's mandate, require the consent of the federal government and at least two-thirds of the provinces, both in number and in population. In our judgment, governments' strong moral incentive to adjust the contribution rates and benefits whenever the plan's long-term sustainability warrants, coupled with the substantial national consensus required to revise the acts, goes a long way to keeping the plan the fund's operations free of political interference.

The CPPIB is the legal owner of the assets it invests. Money can be withdrawn from the fund for two reasons: to pay CPP funding liabilities (annual payments to the CPP exceed annual payments from the CPP, which should begin in 2021); or if a province chooses to withdraw from the plan. The CPPIB has advised us that its obligation to pay CPP funding liabilities is subject to a limitation under the CPP Act to have assets with a fair value no less than its liabilities. It has also advised us that this includes its market debt issued through its subsidiary, CPPIB Capital Inc., which provides some protection to bondholders. We view this arrangement as a positive credit factor, because it helps ensure the CPPIB's responsibility for the CPP funding liabilities, in itself, is unlikely to result in the fund becoming a net debtor.

We believe that withdrawing from the plan would be an onerous undertaking for a province. The CPP Act sets out guidelines for withdrawal. To do this, a province would have to establish a parallel comprehensive pension plan, which would be burdensome, in our opinion. In this circumstance, the withdrawing province would be entitled to a pro rata share of the CPPIB's assets and liabilities. We think demographics would play an important role in determining the impact of a province withdrawing. For instance, if the province had an older-than-average population, we believe the impact on the CPP contribution rate would be favorable (for instance, fewer contributors and more beneficiaries), while a province with a younger population would have the opposite effect. We also believe establishing a replacement plan is a large undertaking for any province, which the recent agreement and Bill C-26 bear out.

Management

In our view, the CPPIB benefits from strong management practices, a stable organizational structure, strong operational effectiveness, and good risk management.

Organization

The CPPIB was established to be a professional, independent organization with the objective of generating returns to help support the CPP's long-term sustainability. In 1997, the fund held only non-marketable government bonds valued at C$36.5 million. In 1998, it received its first funds for investment in capital markets of C$12.1 million. It has grown rapidly since then into a well-established and sophisticated global investor, with net assets of C$316.7 billion as of fiscal year-end 2017.

The CPPIB's legislated goal is to invest the CPP assets with a view to achieving a maximum rate of return without undue risk of loss and generate sufficient returns for the plan to meet its financial obligations. According to the chief actuary's latest triennial report, the fund needs to earn an average annual real return of 3.9% to preserve the CPP's long-term sustainability under current benefit provisions. To meet this goal, the board of directors approves a reference portfolio of public market assets that represents a low-cost portfolio that expresses the investment portfolio's long-term total risk appetite and would earn sufficient long-term returns to help sustain the contribution rate.

Operational effectiveness

Fiscal 2017 was a good year for the fund. The CPPIB exceeded its long-term real return target of 3.9%, producing a net nominal return of 11.8%, notably higher than the 3.4% return recorded a year earlier. Public equities performed the best in fiscal 2017 with returns of about 19%. Government bonds, both marketable and non-marketable, generated the lowest returns at negative 0.9% and 1.8%, respectively. The fund's five- and 10-year annualized real rates of return are 10.3% and 5.1%, respectively, both of which easily exceeded the 3.9% required real rate of return. Net investment income was C$34.4 billion, which was significantly higher than the C$10.0 billion from the previous fiscal year.

Table 1

Canada Pension Plan Investment Board -- Financial Asset Classes

(As of March 31, 2017)

	(Bil. C$)	% share
Public equities	116.8	36.9
Canadian	10.5	3.3
Foreign	88.4	27.9
Emerging	17.9	5.7
Private equities	58.6	18.5
Canadian	1.2	0.4
Foreign	51.6	16.3
Emerging	5.8	1.8
Government bonds	82.2	25.9
Marketable	24.0	7.6
Non-marketable	58.2	18.3
Credit investments	17.5	5.5
Real assets	73.1	23.1
Real estate	40.1	12.6
Infrastructure	24.3	7.7
Other	8.7	2.8
External debt issuance	(19.9)	(6.3)
Cash and absolute return strategies	(11.4)	(3.6)
Investment portfolio	316.9	100.0
Cash for benefits portfolio	0.0	0.0
Net investments	316.9	100.0

Table 2

Canada Pension Plan Investment Board -- Investment Returns By Asset Class

(%)	Fiscal 2017	Fiscal 2016
Public equities		
Canadian	19.2	(6.4)
Foreign	18.9	(2.8)

Table 2

Canada Pension Plan Investment Board -- Investment Returns By Asset Class (cont.)

(%)	Fiscal 2017	Fiscal 2016
Emerging	18.9	(8.7)
Private equities		
Canadian	8.6	4.0
Foreign	15.8	8.8
Emerging	15.4	17.0
Government bonds		
Marketable	(0.9)	2.3
Non-marketable	1.8	(0.2)
Credit investments	13.9	8.4
Real assets		
Real estate	8.3	12.3
Infrastructure	7.4	9.3
Other	16.8	(7.7)
Investment portfolio	12.2	3.7

The fund's assets have grown rapidly in the past 10 years as a result of continuing good investment returns and positive net contributions. Consequently, the fund has focused on the scalability of its investment strategies and operations, as well as on improving its operational systems. Given that the fund's total assets are expected to grow to C$1 trillion in the next 15 years with the creation of the Additional Canada Pension Plan account, we think that scalability will continue to be a challenge for the CPPIB.

Risk management

The fund continues to benefit from what we consider a strong risk management framework that contributes to an excellent understanding of the risks underlying its investing and operating activities. It manages its investment risks through its Risk/Return Accountability Framework, a top-down risk allocation process.

The fund is transitioning to a new investment strategy, wherein the board has set the total risk appetite at the level of a two asset class investment portfolio comprising 85% global equities and 15% Canadian government debt. We expect the portfolio will have transitioned to the new reference portfolio by the end of fiscal 2018. The strategic portfolio and target portfolio ranges will have the same risk equivalence as the reference portfolio, although they are composed of many asset classes. Upper and lower absolute risk limits, which will be defined as equity and debt risk equivalent percentages, will manage risk.

The CPPIB 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. Its investment units subject each prospective investment to a rigorous screening and pre-approval process. Proposals surviving this initial process go before each unit's investment department decision committee (IDDC), which comprises the president and CEO, the unit's senior management, and other pertinent senior managers. Depending on the type or size of investment proposal, the board of directors might need to give final approval.

A centralized risk management function complements the CPPIB's strong investment decision-making procedures. The fund manages its risks under its enterprise risk management framework, which looks at five principal categories of risk: strategic, investment, legislative and regulatory, operational, and reputational risk. In addition, an investment risk department (IR) monitors and measures all facets of investment risk across the organization. The department's tasks include measuring, monitoring, and reporting market risk; assisting the fund's IDDCs and trading functions to quantify risks that individual investments create; managing credit counterparty risk; performing stress testing and scenario analysis; vetting financial models; overseeing operational risk management practices; and maintaining organization-wide best practices in investment risk management procedures. 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.

We believe the CPPIB's investment risk monitoring is comprehensive and clearly delineates monitoring responsibilities to prevent potential surveillance gaps. Responsibility for investment risk monitoring and reporting resides with IR, which produces daily market risk reports to portfolio managers and traders, a weekly risk report to the IPC, monthly reports to senior management, and quarterly updates to the board of directors.

Diversification

The CPPIB diversifies its investment portfolio geographically and by sector, credit quality, and single-name concentration. Geographically, the fund keeps diversifying away from Canada, with its exposure dropping to 16.5% of total investments at fiscal year-end 2017 from 19.1% a year earlier. Other regions, such as Asia, Europe (excluding the U.K.), Australia, and Latin America, have picked up the reduction in Canada's share. Regional exposure tends to be driven by liquidity risk management; more specifically, the region in which the fund has large holdings of very liquid government fixed income securities, dominates geographical exposure. Nevertheless, the fund maintains adequate levels of geographical diversification.

Diversification by asset class remained good. The CPPIB invests in public and private equities, government bonds, credit investments, and real assets, such as real estate and infrastructure. Its biggest exposure by asset class was to public equities, which represented 36.9% of gross assets in fiscal 2017; government bonds represented 25.9% of gross assets. The balance was made up of real assets (23.1%), private equities (18.5%), and credit investments (5.5%).

In fiscal 2017, the CPPIB's top-10 single-name exposure concentration was down from fiscal 2016. As is the case with geographical diversification, liquidity risk management practices drive single-name diversification levels. The CPPIB's liquidity risk management portfolio is widely spread over a number of governments, which tends to lower overall single-name concentration. Furthermore, the highly rated and very liquid nature of the government debt the fund holds mitigates its single-name concentration risk.

The CPPIB's fixed income investments, as well as some derivative instruments, were concentrated in high-credit-quality securities. About 86% of those investments had credit quality of 'A' or better in fiscal 2017, which was up from 79% a year earlier.

We believe that CPPIB's portfolio is well-diversified by geography, asset class, credit risk, and single-name exposure and that the level of diversification reduces investment risk. Diversification levels have been good, in keeping with related policies and targets. We expect that investment diversification will remain near current levels, reflecting the fund's continued adherence to the limits embedded in its Risk/Return Accountability Framework.

Liquidity

We believe that the 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 2017, net contributions amounted to C$4.3 billion and operating expenses to C$923 million. We expect that the fund will remain cash-flow positive for fiscal 2017, as it has for many years. During fiscal 2017, the CPPIB established a US$3.5 billion committed credit facility to provide additional liquidity support to its financing activities.

In our opinion, the CPPIB continues to have sizable liquid assets with which to meet its liquidity needs compared with the relatively small size of its commercial paper (CP) and medium-term note (MTN) programs, which totaled about C$19.9 billion. At fiscal year-end 2017, the CPPIB held C$58.2 billion in marketable bonds in addition to C$98.9 billion in developed market equities. The fund maintains segregated securities in its short-term cash management program to meet CPP benefit payment obligations as they arise; those holdings averaged about C$1.1 billion in fiscal 2017. Total liabilities (including debt) maturing within one year were C$50.1 billion.

The CPPIB manages its cash flow needs using a 90-day rolling cash forecast to ensure it has sufficient liquid resources. The fund calculates a minimum reserve of marketable securities to be held. It further calculates a liquidity coverage ratio for the fund covering 10 days, six months, and one year -- it monitors these ratios daily. Assets in the reserve are discounted according to stress scenarios.

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.

Leverage

We consider the CPPIB's leverage levels to be very manageable. At the end of fiscal 2017, total liabilities stood at C$64.5 billion, consisting of C$60.2 billion of investment liabilities and C$4.3 billion of payables of pending trades and accrued liabilities. Total liabilities represented 16.9% of total assets, down from 19.9% in fiscal 2016.

Table 3

Canada Pension Plan Investment Board -- Leverage

(%)	Fiscal 2017	Fiscal 2016	Fiscal 2015
Total liabilities/total assets	16.9	19.9	17.8
Secured funding*/total assets	10.6	14.3	12.6
Unsecured debt/total net assets	6.3	5.6	3.8

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

The CPPIB has a wholly owned, fully guaranteed subsidiary, CPPIB Capital Inc., through which it issues CP and term debt. The balance of borrowings outstanding was about C$19.9 billion at fiscal year-end 2017, up from C$15.6 billion a year earlier. In fiscal 2018, the fund has issued €2.0 billion of new debt to date. 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 the CPPIB.

All potential liabilities of CPPIB Capital, including CP and MTN issuances, would rank pari passu with any other unsecured obligations to which CPPIB Capital is subject. In addition, the CPPIB has provided a timely, unconditional, and irrevocable guarantee covering all debt it might issue through CPPIB Capital. The fund has set the limit for the CP program at C$15 billion. The total debt limit is C$30 billion, with no more than C$15 billion maturing within one year. The borrowing is intended to manage short-term liquidity requirements and the funding of general corporate requirements. Aside from the program limits, the CPPIB is not subject to any legislative or internally imposed borrowing limits.

We consider the fund's debt low-to-moderate. As of fiscal year-end 2017, CPPIB Capital's debt (C$11.1 billion of Canadian and U.S. CP and C$8.8 billion of MTNs), which is recourse to the CPPIB because of the guarantee, represented only 6.3% of total net assets, up from 5.6% a year earlier.

We believe that CPPIB's capital markets debt could rise moderately in the next two years. This borrowing has remained relatively modest since the fund began borrowing in the capital markets in fiscal 2010. While we consider the CPPIB's leverage and debt to be low-to-moderate, a material and sustained rise in total leverage (total investment liabilities to total assets) could put downward pressure on the ratings, especially if the leverage ratio were to rise above 40%.

We understand that the CPPIB is entitled under the CPP Act to continue holding assets with a fair market value no less than properly incurred liabilities in the instance of claims made under the CPP Act. Because of this provision, we believe that the fund is unlikely to become a net debtor.

CPPIB Capital Inc.

CPPIB Capital, which is a wholly owned subsidiary of the fund, issues debt on the CPPIB's behalf. Its role is to optimize the cost of financing the fund's investment operations. CPPIB Capital-issued debt carries a timely, unconditional, and irrevocable guarantee from the CPPIB. The guarantee conforms to our guarantee criteria and the debt issues of CPPIB Capital take the same ratings as those on the CPPIB accordingly.

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
- 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 Detail (As Of October 24, 2017)		
Canada Pension Plan Investment Board		
Issuer Credit Rating		AAA/Stable/A-1+
Issuer Credit Ratings History		
04-Dec-2012	*Foreign Currency*	AAA/Stable/A-1+
26-Mar-2009	*Local Currency*	AAA/Stable/A-1+

*Unless otherwise noted, all ratings in this report are global scale ratings. S&P Global Ratings' credit ratings on the global scale are comparable across countries. S&P Global Ratings' credit ratings on a national scale are relative to obligors or obligations within that specific country. Issue and debt ratings could include debt guaranteed by another entity, and rated debt that an entity guarantees.