

CREDIT OPINION

2 May 2025

Update



Send Your Feedback

RATINGS

Caisse de dépôt et placement du Québec

Domicile	Quebec City, Quebec, 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.

Contacts

Robert Colangelo +1.416.214.3847
VP-Sr Credit Officer
robert.colangelo@moody's.com

Sam Lilly +1 212.553.4983
Ratings Associate
sam.lilly@moody's.com

Fadi Abdel Massih, +1.212.553.0441
CFA
Associate Managing Director
fadi.massih@moody's.com

CLIENT SERVICES

Americas 1-212-553-1653

Asia Pacific 852-3551-3077

Japan 81-3-5408-4100

EMEA 44-20-7772-5454

Caisse de dépôt et placement du Québec

Update to credit analysis

Summary

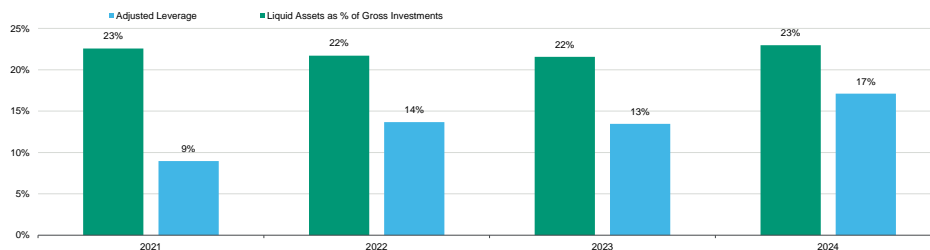
[Caisse de dépôt et placement du Québec](#) (CDPQ) has a Baseline Credit Assessment (BCA) of aa2 which reflects the pension asset manager's strong liquidity and predictability of future cash flows, as well as sound financial policies and low leverage. CDPQ's governing legislation mandates it as the exclusive asset manager for public sector investment pools in the Canadian [Province of Québec](#) (Aa2 stable) without responsibility for the underlying pension obligations. As such, for analytical purposes, we view CDPQ as fully funded. These credit strengths are offset by a high proportion of high risk assets (as defined under our methodology), as well as limited visibility into depositor contributions and withdrawals. In addition, we note that CDPQ's dual mandate to optimize returns and also contribute to the economic development of Québec, may give rise to potential governance challenges, although to date this has been well managed.

CDPQ's long-term issuer rating of Aaa is based on its aa2 BCA as well as instrument-level structural support under our assumption that CDPQ's obligations rank senior to the amounts payable to its depositors. While we have a high assumption of extraordinary support from the Province of Québec, given that CDPQ's BCA is at the same level as the long-term senior unsecured debt rating of the province, the pension asset manager's long-term issuer rating does not currently benefit from any uplift for government support.

[CDP Financial Inc.](#), a wholly-owned subsidiary of CDPQ, has a backed commercial paper rating of Prime-1, reflecting the unconditional and irrevocable guarantee of its debt obligations by CDPQ. CDP Financial Inc. adds a moderate degree of leverage by issuing commercial paper and term debt guaranteed by CDPQ, with the goal of diversifying funding sources and enhancing overall returns for the fund's depositors.

Exhibit 1

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



Source: Company financials, Moody's Ratings

Credit strengths

- » Governing legislation that mandates CDPQ as the exclusive asset manager for Québec's provincial social retirement plan and other public investment pools without responsibility for the underlying pension obligations;
- » CDPQ's creditors have an effective priority claim over pension obligations, benefitting from very strong asset coverage;
- » Comparably higher levels of liquidity than peers, sound financial policies and an investment profile that matches its debt obligations.

Credit challenges

- » A dual mandate to optimize returns for the fund's depositors as well as contribute to the overall economic development of Québec, which may result in governance challenges;
- » Limited visibility around net depositor contributions or withdrawals;
- » A high level of high risk assets, which we define as all investments excluding investment grade fixed income, although CDPQ's proportion is consistent with its Moody's rated peers.

Outlook

The stable outlook reflects our expectation that CDPQ's credit fundamentals, specifically its strong and stable liquidity and low leverage, will remain unchanged over the next 12 to 18 months. It also reflects the stable outlook of the Province of Québec's rating, which is a constraint on CDPQ's BCA.

The stable outlook on CDP Financial Inc.'s ratings reflects the outlook of its parent.

Factors that could lead to an upgrade

Given CDPQ's Aaa long-term issuer rating, an upgrade is not possible. An upgrade of the aa2 BCA could be driven by a sustained decrease in CDPQ's high risk assets.

Factors that could lead to a downgrade

CDPQ's BCA could be downgraded if there was a material reduction in liquid assets or if leverage was to increase above 25% for a sustained period of time. The ratings could also be downgraded if there was a change in CDPQ's governing provincial legislation, allowing CDPQ's depositors to select an alternative asset manager or there was a legal precedent that cast doubt on the status of CDPQ's obligations as having preference over depositors' obligations. However, a downgrade of the BCA would not likely lead to a downgrade of the Aaa long-term issuer rating because of Moody's expectation of extraordinary support from its support provider as well as asset coverage considerations.

A downgrade in the rating of the Government of Canada or the Province of Québec would lower the BCA as it is a BCA constraint.

CDP Financial Inc.'s ratings would be downgraded if CDPQ's rating was downgraded, or if we believed CDPQ would not honour the guarantee provided to CDP Financial Inc.'s obligations.

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.moody.com> for the most updated credit rating action information and rating history.

Key indicators table

Exhibit 2

Statistics for Caisse de dépôt et placement du Québec [1][2]	2024	2023	2022	2021	2020
Gross Assets (C\$ millions)	573,474	511,449	473,807	472,366	412,093
Depositors' Net Assets (C\$ millions)	473,287	434,247	401,887	419,797	365,492
Fixed Income % Depositors' Net Assets	33%	31%	30%	31%	31%
Equity % Depositors' Net Assets	46%	45%	45%	48%	50%
Real Assets % Depositor's Net Assets	22%	24%	26%	21%	19%
Other % Depositors' Net Assets	-1%	0%	0%	0%	1%
Liabilities (C\$ millions)	100,187	77,202	71,920	52,569	46,601
Liabilities % Gross Assets	17%	15%	15%	11%	11%
Unsecured Debt (C\$ millions)	41,580	37,825	34,809	25,533	23,038
Unsecured Debt % Gross Assets	7.3%	7.4%	7.3%	5.4%	5.6%
Secured Funding (C\$ millions)	52,335	32,626	33,534	21,754	19,068
Secured Funding % Gross Assets	9.1%	6.4%	7.1%	4.6%	4.6%
Other Liabilities % Gross Assets	1.1%	1.3%	0.8%	1.1%	1.1%
Indebtedness towards Depositors (C\$ millions)	2,644	5,053	2,399	2,628	6,702
Net Participation Deposits (C\$ millions)	470,643	429,194	399,488	417,169	358,790
Net Participation Deposits % Gross Assets	82.1%	83.9%	84.3%	88.3%	87.1%
Derivative Notionals (C\$ millions)	564,173	473,895	413,583	361,445	364,289
Annual Reported Return (%)	9.4%	7.2%	-5.6%	13.5%	7.7%
Benchmark Return (%)	11.8%	7.3%	-8.3%	10.7%	9.2%

[1] Information is based on IFRS financial statements. [2] As at fiscal year end December 31.

Source: Company financials, Moody's Ratings

Profile

CDPQ is a mandatary (or agent) of the province of Québec under governing legislation and manages institutional funds from public and quasi-public institutions, primarily pension and insurance funds in Québec. The assets managed by CDPQ are funded largely through 'participation deposits' from its institutional clients that represent a participation similar to equity in CDPQ's individual funds or investment portfolios. CDPQ is an asset manager and does not have legal responsibility for the pension or insurance liabilities of its depositors.

Detailed credit considerations

Funded Status - Not responsible for the public sector benefit obligations, although it has limited visibility around net depositor contributions or withdrawals

As an asset manager, CDPQ is not responsible for the administration of benefits, nor in the setting of actuarial assumptions of the underlying public sector obligations. These are both the responsibility of its government entity depositors. As such, CDPQ cannot have a pension shortfall nor a surplus, and we therefore consider CDPQ to be fully funded for analytical purposes. That said, we note that CDPQ's underlying obligation has a comparably higher level of complexity relative to its two Canadian asset manager peers, specifically with respect to limited visibility around net depositor contributions or withdrawals.

CDPQ has an initial Funding Ratio score of aaa, which we make a one-notch downward adjustment to aa1 to account for the limited visibility around net depositor contributions and withdrawals.

Liquidity - Highly liquid investment portfolio supported by a high proportion of publicly traded equities

CDPQ's coverage of liquid assets to cash obligations was strong with a ratio of 314% as of 31 December 2024, which compares to 445% for 2023. CDPQ's coverage is supported by very high levels of fixed income assets and publicly traded equities. We also note that in contrast to a number of its Canadian peers, CDPQ has only a minimal level of portfolio level financing that encumbers its assets.

This strong liquidity offsets the limited visibility around net contribution flows from depositors beyond a rolling three-year horizon. As of 31 December 2024, CDPQ's CAD8.8 billion in commercial paper and CAD32.3 billion in term notes were covered roughly 1.4 times

by CAD56 billion of liquid high quality fixed income assets (including Canadian and US government securities, Canadian provincial securities and other highly liquid assets). CDPQ also owns substantial amounts of marketable securities in the form of widely-traded equities and corporate debt instruments and has a USD4 billion committed revolving credit facility. In addition, CDPQ's liquidity monitoring incorporates appropriate valuation haircuts and stressed collateral funding requirements.

CDPQ's assigned Liquidity score is aaa, which is in line with the initial score.

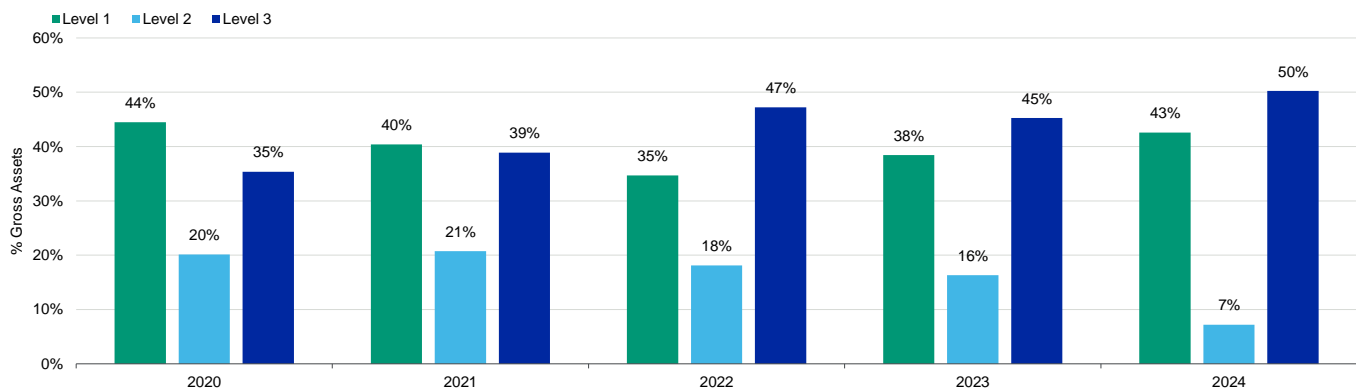
Asset Risk - High levels of less liquid assets, although mitigated by broad geographic and sector diversification

CDPQ's ratio of high risk assets (defined as all investments other than investment grade fixed income assets) to gross assets was 73% as of 31 December 2024, which is broadly in line with its Moody's rated pension fund peer group. CDPQ's high risk asset ratio reflects the pension asset manager investing a larger percentage of fund assets in less liquid Level 3 assets such as real estate, infrastructure and private equity. While CDPQ's investment in Level 3 assets has remained relatively stable over the last three years (Exhibit 3), it has grown, similar to peers, representing 50% of gross assets as of 31 December 2024, with CDPQ having a comparably lower ratio of less liquid Level 3 assets relative to its peers.

Exhibit 3

CDPQ's less liquid Level 3 assets have grown, although this is mitigated by strong liquidity

Fair value hierarchy as a % of gross assets



Fiscal year ended 31 December.

Source: Company financials, Moody's Ratings

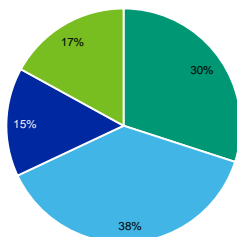
CDPQ's investment portfolio remains well diversified globally (Exhibit 4) as well as across sectors (Exhibit 5). The benefits of this diversification strategy offsets higher liquidity and operational risks associated with CDPQ's growing exposure to Level 3 assets. In addition, this reduces common credit risks with the Canadian and Québec economy, providing diversification away from the geographic location of its pension obligation and related contribution cash flows, with approximately 70% of its investment portfolio invested outside of Canada.

CDPQ generated a portfolio return for its fiscal year ended 31 December 2024 of 9.4%, compared to a return of 7.2% in 2023, although this was lower than the benchmark return of 11.8%. Positive returns were realized across all asset classes, with equities experiencing a strong positive performance of 22.1% during the year.

Exhibit 4

CDPQ's investments are globally diversified with 70% invested outside of Canada...
As of 31 December 2024

- Canada
- United States
- Europe
- Rest of World

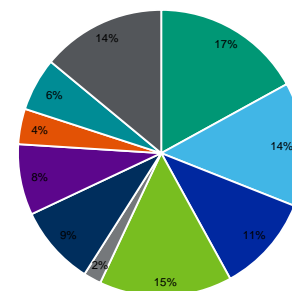


Source: Company financials, Moody's Ratings

Exhibit 5

...and remain broadly diversified across sectors
As of 31 December 2024

- Government
- Real Estate
- Financials
- Industrials
- Energy
- IT
- Consumer
- Healthcare
- Utilities
- Other



Source: Company financials, Moody's Ratings

CDPQ has an initial Asset Risk score of ba1, which we adjust upwards by three notches to baa1 to account for the benefits of geographic and sector diversification in its investment portfolio.

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

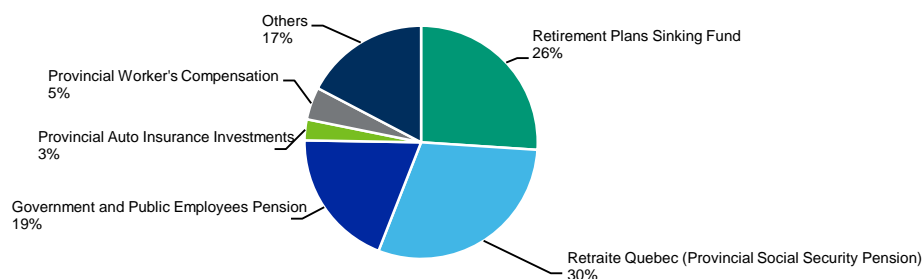
CDPQ's financial policies are broadly conservative as expressed by our aa-score. Overall, the pension asset manager has good liquidity and risk management practices which has mitigated a modest level of leverage that creates refinancing and counterparty risks. In addition, CDPQ hedges currency risks within specialized portfolios and has natural currency matches between its investments and funding. We note that approximately two-thirds of CDPQ's investment portfolio is denominated in USD or CAD, which aligns with its creditor obligations, much of which are denominated in USD.

Legal framework creates a captive client base

CDPQ's client base encompasses a broad range of provincial government and government-related pension plans, insurance plans and other types of funds. This client base is exceptionally stable because most of these entities are required by provincial law to deposit their assets with CDPQ, which is a mandatory (or agent) of the province of Québec. As at 31 December 2024, CDPQ managed assets for 48 depositors, with almost three-quarters of the fund being ascribed to three main depositors (Exhibit 6). Each depositor invests its funds in specialized portfolios, which are internal accounts of CDPQ, and the receive a return based on the performance of those portfolios.

Exhibit 6

Depositor's net assets
As of 31 December 2024



Source: Company financials, Moody's Ratings

The stability of CDPQ's franchise has also supported by healthy investment returns, with an average actual annualized portfolio return for the last five years (ended 31 December 2024) was 6.2% compared to 5.9% for its internal benchmark portfolio. The benchmark

portfolio is a weighted average of the benchmarks of CDPQ's depositors, which is determined by their individual investment allocation decisions.

Potential corporate governance challenges associated with the CDPQ's dual mandate

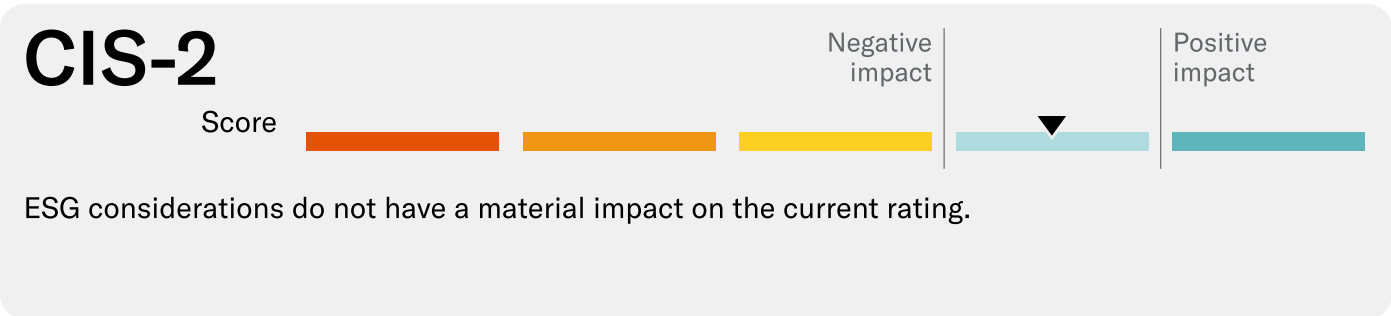
CDPQ has a dual mandate to achieve an optimal return on capital within the framework of depositors' investment policies while at the same time contributing to Québec's economic development. Investments in Québec represented 16% of total assets at the end of 2024. This investment profile reflects CDPQ's natural strengths of evaluating investment opportunities in Québec due to their deep understanding of that market. CDPQ manages its investment strategy independently of the provincial government. Nevertheless, given macroeconomic uncertainty due to escalating trade tensions, CDPQ could come under political pressure to support Québec in a way that may erode its ability to achieve the optimal return for depositors. CDPQ's rating does anticipate that the pension asset manager will be able to balance the requirements of its dual mandate.

CDPQ's risk management philosophy, including its risk architecture and asset allocation strategy, has evolved and adapted, with its risk management practices remaining strong relative to international peers.

ESG considerations

Caisse de depot et placement du Quebec's ESG credit impact score is CIS-2

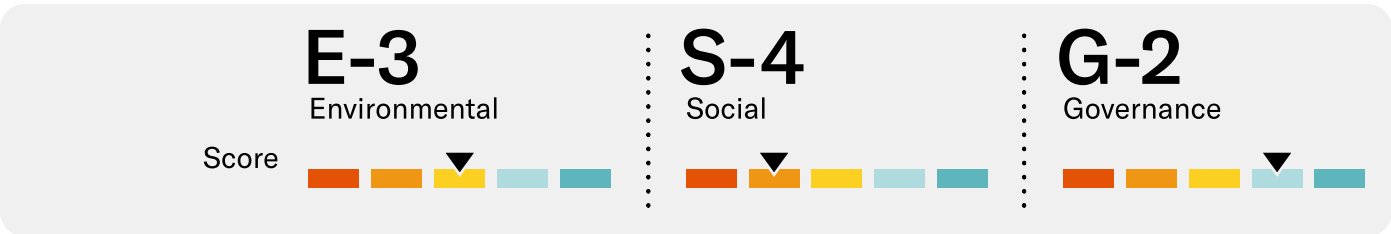
Exhibit 7
ESG credit impact score



Source: Moody's Ratings

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

Exhibit 8
ESG issuer profile scores



Source: Moody's Ratings

Environmental

CDPQ faces moderate exposure to environmental risks related to carbon-intensive investments in its investment portfolio, such as oil & gas and transportation sector holdings. As well, the fund's real estate and infrastructure portfolios are exposed to physical climate risk where assets could be damaged by extreme weather or rising sea levels. CDPQ is committed to assist and influence sectors with elevated carbon transition risks.

Social

CDPQ faces industry-wide exposure to social risks arising from demographic and societal trends and customer relations that are common to pension asset managers. CDPQ is exposed to risks associated with changes in unemployment or immigration rates, which can impact contribution cash flows. However, in contrast to a pension fund, CDPQ 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 public and para-public institutions in the province of Québec. This also reduces the impact of a privacy or data breach because CDPQ does not warehouse beneficiary data.

Governance

CDPQ faces low governance risks, as the pension asset manager's governance practices and risk management framework are in line with the Canadian financial services sector. CDPQ has a 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 Québec public sector entities

Extraordinary support represents the probability that a government sponsor 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, CDPQ has special legal status as the exclusive asset manager for investments related to the social retirement programs of Québec. We believe the pension asset manager is a key element of the province's social retirement program and therefore an important contributor to the overall economy of Québec. In our view, a default of CDPQ would be politically embarrassing to the Province of Québec and would have implications for the province's own ability to access debt markets. As such, we have a high assumption of extraordinary support from the Province of Québec to CDPQ, if necessary. Given that CDPQ's BCA is at the same level as long-term senior unsecured debt rating of the province, the pension asset manager's long-term issuer rating does not currently benefit from any uplift for government support.

Creditors have a material buffer against any asset value deterioration

The CDPQ reported a gross asset base of CAD 573 billion at year-end 2024. Net participation deposits represented approximately 82%, CAD 471 billion, of the gross asset base which, in our view, constitute loss absorbing equity because participation deposits rank junior in priority to the CDPQ's unsecured creditors, including its obligations under the guarantee of CDP Financial Inc.'s debt. Secured liabilities (including non-recourse asset level debt) representing approximately 9.1% of gross assets rank ahead of the CDPQ unsecured creditors. Participation deposits do not bear interest and constitute a participation of their holders in the net equity and net revenue of the fund or portfolio in which they are made. Under provincial law, the CDPQ is explicitly entitled to encumber all of the assets that it manages. CDPQ therefore effectively has a very high capitalization, which provides creditors with a material buffer against any future asset value deterioration.

Adjusting for nettable, but not offset, repurchase agreements, CDPQ's leverage ratio was 17.1% as at 31 December 2024.

Rating methodology and scorecard factors

Exhibit 9

Rating Factor

Public Pension Manager						
Caisse de dépôt et placement du Québec						
2025						
	Historical		Assigned			
	Factor Weights	Historic Ratio	Initial Score	Assigned Score	Key driver #1	Key driver #2
Funding Ratio*						
Net Assets / PBO	45%	100.0%	aaa	aa1	Liability Opacity	
Liquidity						
Liquidity Inflows / Outflows	18%	308.8%	aaa	aaa		
Asset Quality						
High Risk Assets / Gross Assets	18%	71.1%	ba1	baa1	Asset Class Diversification	Geographic Diversification
Financial Policy						
Financial Policy	18%	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 10

Category	Moody's Rating
CAISSE DE DEPOT ET PLACEMENT DU QUEBEC	
Outlook	Stable
Baseline Credit Assessment	aa2
Issuer Rating -Dom Curr	Aaa
CDP FINANCIAL INC.	
Outlook	Stable
Senior Unsecured	Aaa
Bkd Commercial Paper	P-1

Source: Moody's Ratings

© 2025 Moody's Corporation, Moody's Investors Service, Inc., Moody's Analytics, Inc. and/or their licensors and affiliates (collectively, "MOODY'S"). All rights reserved.

CREDIT RATINGS ISSUED BY MOODY'S CREDIT RATINGS AFFILIATES ARE THEIR CURRENT OPINIONS OF THE RELATIVE FUTURE CREDIT RISK OF ENTITIES, CREDIT COMMITMENTS, OR DEBT OR DEBT-LIKE SECURITIES, AND MATERIALS, PRODUCTS, SERVICES AND INFORMATION PUBLISHED OR OTHERWISE MADE AVAILABLE BY MOODY'S (COLLECTIVELY, "MATERIALS") MAY INCLUDE SUCH CURRENT OPINIONS. MOODY'S DEFINES CREDIT RISK AS THE RISK THAT AN ENTITY MAY NOT MEET ITS CONTRACTUAL FINANCIAL OBLIGATIONS AS THEY COME DUE AND ANY ESTIMATED FINANCIAL LOSS IN THE EVENT OF DEFAULT OR IMPAIRMENT. SEE APPLICABLE MOODY'S RATING SYMBOLS AND DEFINITIONS PUBLICATION FOR INFORMATION ON THE TYPES OF CONTRACTUAL FINANCIAL OBLIGATIONS ADDRESSED BY MOODY'S CREDIT RATINGS. CREDIT RATINGS DO NOT ADDRESS ANY OTHER RISK, INCLUDING BUT NOT LIMITED TO: LIQUIDITY RISK, MARKET VALUE RISK, OR PRICE VOLATILITY. CREDIT RATINGS, NON-CREDIT ASSESSMENTS ("ASSESSMENTS"), AND OTHER OPINIONS INCLUDED IN MOODY'S MATERIALS ARE NOT STATEMENTS OF CURRENT OR HISTORICAL FACT. MOODY'S MATERIALS MAY ALSO INCLUDE QUANTITATIVE MODEL-BASED ESTIMATES OF CREDIT RISK AND RELATED OPINIONS OR COMMENTARY PUBLISHED BY MOODY'S ANALYTICS, INC. AND/OR ITS AFFILIATES. MOODY'S CREDIT RATINGS, ASSESSMENTS, OTHER OPINIONS AND MATERIALS DO NOT CONSTITUTE OR PROVIDE INVESTMENT OR FINANCIAL ADVICE, AND MOODY'S CREDIT RATINGS, ASSESSMENTS, OTHER OPINIONS AND MATERIALS ARE NOT AND DO NOT PROVIDE RECOMMENDATIONS TO PURCHASE, SELL, OR HOLD PARTICULAR SECURITIES. MOODY'S CREDIT RATINGS, ASSESSMENTS, OTHER OPINIONS AND MATERIALS DO NOT COMMENT ON THE SUITABILITY OF AN INVESTMENT FOR ANY PARTICULAR INVESTOR. MOODY'S ISSUES ITS CREDIT RATINGS, ASSESSMENTS AND OTHER OPINIONS AND PUBLISHES OR OTHERWISE MAKES AVAILABLE ITS MATERIALS WITH THE EXPECTATION AND UNDERSTANDING THAT EACH INVESTOR WILL, WITH DUE CARE, MAKE ITS OWN STUDY AND EVALUATION OF EACH SECURITY THAT IS UNDER CONSIDERATION FOR PURCHASE, HOLDING, OR SALE.

MOODY'S CREDIT RATINGS, ASSESSMENTS, OTHER OPINIONS, AND MATERIALS ARE NOT INTENDED FOR USE BY RETAIL INVESTORS AND IT WOULD BE RECKLESS AND INAPPROPRIATE FOR RETAIL INVESTORS TO USE MOODY'S CREDIT RATINGS, ASSESSMENTS, OTHER OPINIONS OR MATERIALS WHEN MAKING AN INVESTMENT DECISION. IF IN DOUBT YOU SHOULD CONTACT YOUR FINANCIAL OR OTHER PROFESSIONAL ADVISER.

ALL INFORMATION CONTAINED HEREIN IS PROTECTED BY LAW, INCLUDING BUT NOT LIMITED TO, COPYRIGHT LAW, AND NONE OF SUCH INFORMATION MAY BE COPIED OR OTHERWISE REPRODUCED, REPACKAGED, FURTHER TRANSMITTED, TRANSFERRED, DISSEMINATED, REDISTRIBUTED OR RESOLD, OR STORED FOR SUBSEQUENT USE FOR ANY SUCH PURPOSE, IN WHOLE OR IN PART, IN ANY FORM OR MANNER OR BY ANY MEANS WHATSOEVER, BY ANY PERSON WITHOUT MOODY'S PRIOR WRITTEN CONSENT. FOR CLARITY, NO INFORMATION CONTAINED HEREIN MAY BE USED TO DEVELOP, IMPROVE, TRAIN OR RETRAIN ANY SOFTWARE PROGRAM OR DATABASE, INCLUDING, BUT NOT LIMITED TO, FOR ANY ARTIFICIAL INTELLIGENCE, MACHINE LEARNING OR NATURAL LANGUAGE PROCESSING SOFTWARE, ALGORITHM, METHODOLOGY AND/OR MODEL.

MOODY'S CREDIT RATINGS, ASSESSMENTS, OTHER OPINIONS AND MATERIALS ARE NOT INTENDED FOR USE BY ANY PERSON AS A BENCHMARK AS THAT TERM IS DEFINED FOR REGULATORY PURPOSES AND MUST NOT BE USED IN ANY WAY THAT COULD RESULT IN THEM BEING CONSIDERED A BENCHMARK.

All information contained herein is obtained by MOODY'S from sources believed by it to be accurate and reliable. Because of the possibility of human or mechanical error as well as other factors, however, all information contained herein is provided "AS IS" without warranty of any kind. MOODY'S adopts all necessary measures so that the information it uses in assigning a credit rating is of sufficient quality and from sources MOODY'S considers to be reliable including, when appropriate, independent third-party sources. However, MOODY'S is not an auditor and cannot in every instance independently verify or validate information received in the credit rating process or in preparing its Materials.

To the extent permitted by law, MOODY'S and its directors, officers, employees, agents, representatives, licensors and suppliers disclaim liability to any person or entity for any indirect, special, consequential, or incidental losses or damages whatsoever arising from or in connection with the information contained herein or the use of or inability to use any such information, even if MOODY'S or any of its directors, officers, employees, agents, representatives, licensors or suppliers is advised in advance of the possibility of such losses or damages, including but not limited to: (a) any loss of present or prospective profits or (b) any loss or damage arising where the relevant financial instrument is not the subject of a particular credit rating assigned by MOODY'S.

To the extent permitted by law, MOODY'S and its directors, officers, employees, agents, representatives, licensors and suppliers disclaim liability for any direct or compensatory losses or damages caused to any person or entity, including but not limited to by any negligence (but excluding fraud, willful misconduct or any other type of liability that, for the avoidance of doubt, by law cannot be excluded) on the part of, or any contingency within or beyond the control of, MOODY'S or any of its directors, officers, employees, agents, representatives, licensors or suppliers, arising from or in connection with the information contained herein or the use of or inability to use any such information.

NO WARRANTY, EXPRESS OR IMPLIED, AS TO THE ACCURACY, TIMELINESS, COMPLETENESS, MERCHANTABILITY OR FITNESS FOR ANY PARTICULAR PURPOSE OF ANY CREDIT RATING, ASSESSMENT, OTHER OPINION OR INFORMATION IS GIVEN OR MADE BY MOODY'S IN ANY FORM OR MANNER WHATSOEVER.

Moody's Investors Service, Inc., a wholly-owned credit rating agency subsidiary of Moody's Corporation ("MCO"), hereby discloses that most issuers of debt securities (including corporate and municipal bonds, debentures, notes and commercial paper) and preferred stock rated by Moody's Investors Service, Inc. have, prior to assignment of any credit rating, agreed to pay Moody's Investors Service, Inc. for credit ratings opinions and services rendered by it. MCO and all MCO entities that issue ratings under the "Moody's Ratings" brand name ("Moody's Ratings"), also maintain policies and procedures to address the independence of Moody's Ratings' credit ratings and credit rating processes. Information regarding certain affiliations that may exist between directors of MCO and rated entities, and between entities who hold credit ratings from Moody's Investors Service, Inc. and have also publicly reported to the SEC an ownership interest in MCO of more than 5%, is posted annually at ir.moody.com under the heading "Investor Relations — Corporate Governance — Charter and Governance Documents - Director and Shareholder Affiliation Policy."

Moody's SF Japan K.K., Moody's Local AR Agente de Calificación de Riesgo S.A., Moody's Local BR Agência de Classificação de Risco LTDA, Moody's Local MX S.A. de C.V., I.C.V., Moody's Local PE Clasificadora de Riesgo S.A., and Moody's Local PA Clasificadora de Riesgo S.A. (collectively, the "Moody's Non-NRSRO CRAs") are all indirectly wholly-owned credit rating agency subsidiaries of MCO. None of the Moody's Non-NRSRO CRAs is a Nationally Recognized Statistical Rating Organization.

Additional terms for Australia only: Any publication into Australia of this document is pursuant to the Australian Financial Services License of MOODY'S affiliate, Moody's Investors Service Pty Limited ABN 61 003 399 657 AFSL 336969 and/or Moody's Analytics Australia Pty Ltd ABN 94 105 136 972 AFSL 383569 (as applicable). This document is intended to be provided only to "wholesale clients" within the meaning of section 761G of the Corporations Act 2001. By continuing to access this document from within Australia, you represent to MOODY'S that you are, or are accessing the document as a representative of, a "wholesale client" and that neither you nor the entity you represent will directly or indirectly disseminate this document or its contents to "retail clients" within the meaning of section 761G of the Corporations Act 2001. MOODY'S credit rating is an opinion as to the creditworthiness of a debt obligation of the issuer, not on the equity securities of the issuer or any form of security that is available to retail investors.

Additional terms for India only: Moody's credit ratings, Assessments, other opinions and Materials are not intended to be and shall not be relied upon or used by any users located in India in relation to securities listed or proposed to be listed on Indian stock exchanges.

Additional terms with respect to Second Party Opinions and Net Zero Assessments (as defined in Moody's Ratings Rating Symbols and Definitions): Please note that neither a Second Party Opinion ("SPO") nor a Net Zero Assessment ("NZA") is a "credit rating". The issuance of SPOs and NZAs is not a regulated activity in many jurisdictions, including Singapore. JAPAN: In Japan, development and provision of SPOs and NZAs fall under the category of "Ancillary Businesses", not "Credit Rating Business", and are not subject to the regulations applicable to "Credit Rating Business" under the Financial Instruments and Exchange Act of Japan and its relevant regulation. PRC: Any SPO: (1) does not constitute a PRC Green Bond Assessment as defined under any relevant PRC laws or regulations; (2) cannot be included in any registration statement, offering circular, prospectus or any other documents submitted to the PRC regulatory authorities or otherwise used to satisfy any PRC regulatory disclosure requirement; and (3) cannot be used within the PRC for any regulatory purpose or for any other purpose which is not permitted under relevant PRC laws or regulations. For the purposes of this disclaimer, "PRC" refers to the mainland of the People's Republic of China, excluding Hong Kong, Macau and Taiwan.

