Rating Report

Caisse de dépôt et placement du Québec and CDP Financial Inc.

DBRS Morningstar
June 30, 2022

Contents

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Ratings

Issuer	Debt	Rating	Rating Action	Trend
Caisse de dépôt et placement du Québec	Issuer Rating	AAA	Confirmed	Stable
CDP Financial Inc.*	Long-Term Debt	AAA	Confirmed	Stable
CDP Financial Inc.*	Canadian Short-Term Promissory Notes	R-1 (high)	Confirmed	Stable
CDP Financial Inc.*	U.S. Commercial Paper Notes	R-1 (high)	Confirmed	Stable
CDP Financial Inc.*	Euro Commercial Paper Notes	R-1 (high)	Confirmed	Stable

* Guaranteed by Caisse de dépôt et placement du Québec.

Rating Update

DBRS Limited (DBRS Morningstar) confirmed the Issuer Rating of Caisse de dépôt et placement du Québec (CDPQ) at AAA. DBRS Morningstar also confirmed CDP Financial Inc.'s (CDP Financial) Long-Term Debt rating at AAA as well as its Canadian Short-Term Promissory Notes, U.S. Commercial Paper Notes, and Euro Commercial Paper Notes ratings at R-1 (high). All trends are Stable. The ratings are supported by a legislative framework that results in a substantial and captive asset base, a low-recourse debt burden, ample liquidity, and strong operating performance.

CDPQ achieved a total return of 13.5% in 2021, driven by a strong performance of real assets (including real estate and infrastructure) and equities (including both public and private equities). On a relative basis, the overall portfolio outperformed its benchmark (BM) by 276 basis points (bps), primarily because of the exceptional performance of private investments under real assets and private equities. Net assets increased by $54.3 billion to $419.8 billion in 2021 as a result of $49.4 billion in net investment income, in addition to $5.6 billion in net contributions by depositors, offset by operating expenses of $0.7 billion. Returns measured over both a five-year and a 10-year investment horizon have outperformed their BMs by 31 and 72 bps, respectively.

CDPQ's strategic orientations have remained largely unchanged in recent years. The key pillars of the strategy are (1) optimizing performance for clients, which contributed to the strong investment performance achieved in 2021; (2) contributing to the economic development of Québec, (3) increasing CDPQ's global presence, which is now being approached in a concerted effort through the recently established CDPQ Global; (4) affirming the leadership in sustainable investing, which led CDPQ to commit to a more ambitious climate strategy in 2021, with the continued goal of achieving a net-zero portfolio by 2050; and (5) investing in leading technology companies, managing technology risk, and seeking idea generation tools supported by augmented intelligence. CDPQ's credit profile continues to benefit from a diverse and captive group of depositors that has continued to grow in recent years. Management continues to strengthen its risk management and depositor relationship management functions.

Debt with recourse to CDPQ increased to $25.3 billion in 2021, or 5.7% of adjusted net assets. Despite the slight increase in dollar value, the recourse debt burden relative to adjusted net assets was unchanged and remained well below the board-approved limit of 10% of adjusted net assets, providing considerable room for cyclical fluctuations in asset values. CDPQ meets the DBRS Morningstar criteria for commercial paper (CP) liquidity support, as outlined in the Appendix to the DBRS Morningstar methodology *Rating Canadian Public Pension Funds & Related Exclusive Asset Managers* under the heading "Self-Liquidity for Canadian Public Pension Funds and Related Exclusive Asset Managers' CP Programs." CDPQ's liquidity position remains sound, with sufficient same-day available funds equal to at least five business days of upcoming liabilities and discounted assets equal to the remaining maximum authorized CP program limit, which is consistent with DBRS Morningstar's policy on backup liquidity support for pension funds and provides considerable short-term financial flexibility.

As an additional source of liquidity, CDPQ maintains a USD 4.0 billion credit facility for general corporate purposes. The credit facility was renewed in 2021 and remained undrawn as at year end.

Financial Information

	For the year ended December 31				
($ billions)	**2021**	**2020**	**2019**	**2018**	**2017**
Net depositor assets	419.8	365.5	340.1	309.5	298.5
Recourse debt [1]	25.3	22.1	21.1	15.5	13.8
As a share of adjusted net assets (%) [2]	5.7	5.7	5.8	4.8	4.4
Portfolio return (%)	13.5	7.7	10.4	4.2	9.3
BM return (%)	10.7	9.2	11.9	2.4	9.2

1. Fair value. 2. For the purposes of the ratio calculation, net assets are adjusted by adding back recourse debt.

Issuer Description

Created in 1965, CDPQ is a public-sector entity with the mandate to manage funds for 46 public and parapublic depositors. Depositors include public-sector pension and insurance plans and some government entities. CDP Financial is a wholly owned subsidiary of CDPQ set up to develop financing programs to meet the needs of CDPQ's investment groups. The ratings on the debts issued by CDP Financial are predicated on the unconditional and irrevocable guarantees provided by CDPQ.

Rating Considerations

Strengths

1. Exclusive legislated mandate to manage the assets

CDPQ has an exclusive mandate to manage a large pool of assets on behalf of public-sector depositors. The eight largest depositors, which account for 96.3% of net assets (as of December 31, 2021), are required to deposit their funds with CDPQ. The broad base of depositors provides a degree of diversification with respect to depositors' contributions. In recent years, CDPQ has worked to improve its depositor relationships through enhanced services/support, which has led to high depositor satisfaction.

2. Large base of unencumbered assets and low debt

CDPQ had net assets of $419.8 billion as at December 31, 2021, while recourse debt amounted to 5.7% of adjusted net assets, which provides a significant cushion against adverse market movements. In addition, the substantial net assets have provided CDPQ with the scale necessary to develop robust investment and risk management functions and achieve a high degree of diversification.

3. Substantial liquidity

CDPQ maintains a large pool of marketable fixed-income securities that can be readily converted to meet financial obligations. It has prudent policies and procedures in place that require sufficient liquidity to ensure all of its liquidity commitments to the capital markets and its depositors are met and it could rebalance its portfolios as well as deploy capital opportunistically during a period of market stress. CDPQ also has the ability to issue CP and term notes globally in various currencies such as USD, CAD, and euros and has access to repurchase agreements, which enables it to quickly generate liquidity if necessary. In addition, CDPQ has a committed USD 4 billion credit facility, which was renewed in 2021 and remained undrawn as at December 31, 2021.

4. No direct responsibility for depositors' liabilities

The depositors retain responsibility for their underlying pension and other obligations. While those obligations will influence asset allocation and the timing and scope of withdrawals, CDPQ is not ultimately responsible for those obligations.

Challenges

1. Legislative changes could weaken depositor relationships

The ratings are strongly supported by legislative provisions that result in a highly captive asset base available to meet debt obligations. Legislation could be introduced that results in a less-captive asset base, which could significantly reduce net assets and debt coverage. Given the historical role of CDPQ in the Province of Québec (Québec or the Province; rated AA (low) with a Stable trend by DBRS Morningstar) and its success in recent years, DBRS Morningstar considers any wholesale change in CDPQ's role as the provincial public-sector asset manager as a remote possibility.

2. Volatility inherent in investment activities

Asset valuations fluctuate over time. The current outlook of pandemic-related uncertainty, heightened geopolitical risk stemming from the conflict in Ukraine, commercial tensions between China and the U.S., rising inflation that can affect asset valuations, intensifying competition for private assets, and the transition to a low carbon economy is leading to an uncertain and challenging investment environment, with increased volatility in financial markets. A significant decline in asset valuations could result in a material erosion in CDPQ's asset base. However, this challenge is mitigated by CDPQ's diversified portfolio, disciplined investment approach, history of strong investment returns, and a low recourse debt burden that provides considerable room for asset-based movements.

Investment Performance

CDPQ generated $48.7 billion in net investment income, or a return of 13.5%, in 2021, driven by a strong performance of real assets (including real estate and infrastructure) and equities (including both public and private equities). On a relative basis, the overall portfolio outperformed its BM by 276 bps, primarily because of the exceptional performance of private investments under real assets and private equities.

Accompanied by the economic recovery in 2021, the sharp increase in rates created a difficult environment for the fixed income portfolio; thus, current yield was the portfolio's sole performance driver. In anticipation of the rising rates, the fixed income team diversified the portfolio and tilted to private credit such as corporate credit and real estate debt. Private credit was the main contributor to the outperformance of the fixed income portfolio against its benchmark return by 60 bps. In 2021, CDPQ also closed both the Real Return Bonds and Long-Term Bonds indexed portfolios. In the public equity asset class, CDPQ adjusted its investment style from quality and defensive equities to include a better mix of styles, a broader investment universe, and more dynamic management. The changes helped its portfolio benefit more from the strong market growth than it had in the past. This resulted in a 16.2% return, beating its BM of 16.1% in 2021. Notably, private equity produced the strongest performance since its inception in 2003, returning 39.2% and beating its BM of 32.1% by 7.1%. Direct investments made in technology, healthcare, and financial services, along with good operational management of assets, continued the strong returns from 2020. During 2021, the Private Equity teams were disciplined in making $10 billion in acquisitions and $13 billion in realizations. On the real assets side, the repositioning of the real estate portfolio that started two years ago resulted in a strong return of 12.4% in 2021. CDPQ has been focusing on promising sectors such as logistics, residential, and life sciences, while exposures to traditional assets such as shopping malls and office properties have been reduced to limit the repercussions of the pandemic. Infrastructure also saw its best return in the last decade. Particularly, renewable energy and telecommunications contributed favourably to the investment return.

Since the end of the 2008 financial crisis, CDPQ has generally outperformed its BM, and 2021's return generated the second-strongest outperformance. Over the last five years, CDPQ has achieved an average annual return of 8.9%, which exceeded the BM average return of 8.6%. CDPQ attributes much of this success to its efforts to enhance the investment selection process, its globalization strategy, and its focus on quality assets.

Investment Returns

	Five-Year Return	Ten-Year Return	For the year ended December 31				
			2021	**2020**	**2019**	**2018**	**2017**
Portfolio (%)	8.9	9.6	13.5	7.7	10.4	4.2	9.3
BM (%) [1]	8.6	8.9	10.7	9.2	11.9	2.4	9.2

1. CDPQ's policy portfolio BM is weighted using actual portfolio class weightings.

Investment Returns

For the year ended December 31

Percentage	2021 Return	2021 BM	2021 Variance	2020 Return	2019 Return	2018 Return	2017 Return
Fixed Income							
Rates	-2.7	-3.1	0.4	8.6	4.8	2.3	1.8
Credit	0.9	0.1	0.8	8.9	10.9	2.3	5.1
Short-term investments	0.3	0.2	0.1	1.0	1.7	1.5	0.6
Long-term bonds [1]	n/a	n/a	n/a	11.6	12.6	0.0	8.0
Real return bonds [1]	n/a	n/a	n/a	12.8	8.0	(0.1)	0.8
Total	**-0.6**	**-1.2**	**0.6**	**9.0**	**8.9**	**2.1**	**3.5**
Real Assets							
Real estate	12.4	6.1	6.3	(15.6)	(2.7)	7.8	8.0
Infrastructure	14.5	11.4	3.1	5.1	7.1	11.2	10.1
Total	**13.6**	**8.7**	**4.9**	**(7.0)**	**1.0**	**9.0**	**8.7**
Equities							
Public equity	16.2	16.1	0.1	8.3	17.2	(0.9)	13.7
Quality mandate	19.9	18.3	1.6	4.4	18.2	6.4	9.5
Canada mandate	20.7	22.6	-1.9	(1.7)	20.5	(7.2)	7.9
Growth Markets mandate	0.7	0.2	0.5	23.2	17.2	(7.9)	28.4
Value mandate	17.4	15.2	2.2	0.6	12.1		
Growth mandate [2]	n/a	n/a	n/a				
Private equity	39.2	32.1	7.1	20.7	10.5	16.6	13.0
Total	**24.6**	**22.0**	**2.6**	**12.4**	**10.4**	**3.5**	**13.6**
Other Investments							
Consolidated Asset Allocation [3]	n/a	n/a	n/a	841	n/a	n/a	n/a
Portfolio [4]	**13.5**	**10.7**	**2.8**	**7.7**	**10.4**	**4.2**	**9.3**

1. The Real Return Bonds and Long-Term Bonds specialized portfolios were closed on December 31, 2021.
2. Growth mandate began its activities on July 1, 2021.
3. Consolidated Asset Allocation activities include the Asset Allocation specialized portfolio and allocations to other specialized portfolios.
4. The total includes customized overlay operations, cash activities, and terminated activities.

Investment and Risk Management

Investment Allocations and Strategy

CDPQ manages depositors' funds in accordance with the depositors' asset allocations and investment policies, which are based upon the depositors' objectives/purposes, return requirements, risk tolerances, and investment horizons. Depositors allocate funds across 8 specialized portfolios, which are managed in accordance with specific investment policies that define, among other things, the investment philosophy and universe, the BM, value-added objectives, and concentration and risk limits. CDPQ also offers customized advisory service that allows depositors to tailor their exposures in line with their long term needs.

The BM portfolio represents the weighted average (WA) of the depositors' asset allocations; thus, depositor's adjustments to their BM portfolios have a direct impact on CDPQ's BM portfolio. CDPQ's actual asset allocation shifted generally in line with the BM portfolio in 2021, with an increased capital allocation to real assets and a decrease in public equities.

The core elements of CDPQ's investment strategy have remained stable in recent years, and revolve around the following main orientations:

- Optimization of clients' portfolio performance.
- Contribution to the economic development of Québec.
- Increase in global presence and promote integrated approach across regions and partners.
- Leadership in sustainable investing.
- Capitalization on technological trends and utilize technology in security and idea generation.

CDPQ is looking to create value by seeking investment opportunities in the areas where promising technology innovation is transforming the economy, as well as managing technology risks where they may have an impact on its current portfolio and business operations.

CDPQ has continued to move away from complex investment strategies and heavy use of derivatives. It favours a portfolio that is grounded in high-quality assets that are expected to be resilient during periods of market volatility and generate strong returns over the long run. This approach focuses less on BM replication and short-term outperformance and more on fundamental analysis and long-term convictions about the market and the real economy. BMs are still used for performance evaluation purposes, though the approach stresses strong absolute returns over the long term.

As CDPQ continued to solidify its support of the Québec economy, it launched Ambition ME, providing mid-market enterprises with support services and access to CDPQ's extensive network. CDPQ also changed its Espace CDPQ's focus to 100% venture capital for earlier stage startups. In 2021, it invested $6.5 billion of new investments and commitments to its assets in Québec, bringing its total assets in the region to $78 billion.

From 2016 to 2021, the share of the portfolio invested directly in Canada has fallen to 26% from 41%, while the share of investment into the U.S. market has increased to 44% from 31%. Furthermore, to support globalization of its portfolio as well as growth in less-liquid asset classes, CDPQ has sought to build and enhance its relationships with other institutional investors and asset managers. Through these relationships, CDPQ expects to access better investment opportunities and improve asset returns.

In recent years, illiquid private market assets have supported returns in the low-yield environment. While CDPQ has had a large real estate footprint for many years, it has quickly expanded into infrastructure. Over the last five years, CDPQ's infrastructure holdings have tripled to $45.3 billion as at YE2021. More significantly, CDPQ has begun to move into greenfield infrastructure investments to give it an edge in a highly competitive infrastructure investment market. It established CDPQ Infra in 2015 to serve as the operational subsidiary that will hold existing and new brownfield investments and carry out greenfield infrastructure projects like the light-rail network in Montréal (Réseau express métropolitain), which broke ground in the spring of 2018. While greenfield investments are notably higher risk, CDPQ expects traditional brownfield infrastructure investments will continue to account for the bulk of the infrastructure portfolio's holdings. Infrastructure also fits into a broader globalization theme. With the focus on globalizing its investment portfolios, CDPQ has invested heavily around the world, particularly in the U.S. and Latin America region, where the share in its infrastructure portfolio increased to 47.6% at the end of 2021 from 34.3% in 2016.

In 2017, the board approved an investment strategy to address the global challenge of climate change. CDPQ was the first Canadian pension asset manager to include climate change as one of its targets. It has committed to a carbon-neutral portfolio by 2050 and it has joined forces with other global asset managers to found the Net-Zero Alliance, an initiative convened by the United Nations and the Principles for Responsible Investment, to address the goals of the Paris Agreement. By actively involving in industry initiatives and forming alliances, CDPQ can continue to influence changes and solidify its leadership position in environmental, social, and governance (ESG) matters. In 2021, CDPQ increased its low-carbon assets by $3.0 billion, bringing the total investment to $39 billion and targeted to invest a total of $54 billion in green assets by 2025. Since 2017, it has reduced the carbon intensity by 49%, exceeding the target of achieving a 25% reduction by 2025. CDPQ set a more ambitious objective in 2021 to achieve a 60% reduction in carbon intensity by 2030 compared with 2017 in order to achieve the goal of a net-zero portfolio by 2050. CDPQ launched a $10 billion transition fund to decarbonize the heaviest-emitting sectors and committed to completely exit from oil production activities by the end of 2022.

Portfolio Composition

		Actual Portfolio Composition				
		As at December 31				
Percentage	**BM 2021** [1]	**2021**	**2020**	**2019**	**2018**	**2017**
Fixed Income						
Rates	11.0	10.5	8.4	9.2	10.7	13.4
Credit	19.7	20.0	20.6	19.5	18.2	17.0
Short-term investments	1.3	0.4	0.4	0.3	0.3	0.6
Long-term bonds [2]	n/a	n/a	0.9	0.9	0.9	1.0
Real return bonds [2]	n/a	n/a	0.2	0.4	0.4	0.4
Total	**32.0**	**30.9**	**30.5**	**30.3**	**30.5**	**32.4**
Real Assets						
Real estate	12.2	10.1	9.8	11.7	12.4	11.5
Infrastructure	9.7	10.8	8.8	8.2	7.3	5.4
Total	**21.9**	**20.9**	**18.6**	**19.9**	**19.7**	**16.9**
Equities						
Public equity	31.1	28.3	32.6	34.4	35.1	37.6
Private equity	15.3	19.7	17.8	14.8	13.9	12.5
Total	**46.4**	**48.0**	**50.4**	**49.2**	**49.0**	**50.1**
Other Investments						
Active overlay strategies [3]	n/a	n/a	n/a	0.2	0.2	0.2
Asset allocation	0.0	0.5	0.5	0.4	0.6	0.4
Leverage Product [4]	-0.3	-0.3	n/a	n/a	n/a	n/a
Total	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**

1. The BM portfolio composition is the weighted average of the depositors' BM portfolios.
2. Closed on December 31, 2021.
3. Closed on January 1, 2020.
4. The Leverage product has been offered since July 1, 2021.

Leverage and Debt

In 2021, CDPQ's investment-related liabilities increased by 11.7% to $50.7 billion, largely driven by short-term promissory notes issued during 2021 and an increase in securities (both equities and bonds) sold short. Positions in securities sold short have been trending downward since 2014 and, although there was an uptick in 2021, they remain constrained by CDPQ's investment and risk policies.

CDPQ makes modest use of repurchase agreements with relatively small asset and liability positions. It generally does not use repurchase agreements as a source of funding for its broader investment strategy but rather for income generation (i.e., taking advantage of specials in the repurchase agreement market). CDPQ generally sells Government of Canada and related issuers' securities under repurchase agreements with relatively short contract terms.

CDPQ, like other DBRS Morningstar-rated pension fund asset managers, makes use of derivatives to achieve various portfolio objectives; however, as at full-year 2021, liability positions remained small relative to the overall portfolio. CDPQ manages counterparty risk related to its over-the-counter derivative positions by setting credit quality standards and concentration limits, monitoring counterparties daily, netting under International Swaps and Derivatives Association master agreements, and exchanging collateral under credit support annexes.

The Board's policy limits recourse debt to 10% of adjusted net assets. Recourse debt, measured at fair value, increased by 14.6% to $25.3 billion in 2021, equivalent to 5.7% of adjusted net assets. The rise was driven by the increasing use of short-term promissory notes in 2021, offset by a lower use of medium-term notes. So far in 2022, CDPQ has issued one five-year USD 1.5 billion medium-term note and one five-year EUR 2.0 billion medium term note. Recourse debt remains well below the 10% board limit, providing considerable room for cyclical fluctuations in asset values.

CDPQ's CP programs have authorized limits of $3.0 billion and USD 10.0 billion. It has policies in place overseeing the intended use of the program and requirements to stagger maturities. CDPQ meets the DBRS Morningstar criteria for CP liquidity support, as outlined in the Appendix to DBRS Morningstar's *Rating Canadian Public Pension Funds & Related Exclusive Asset Managers* methodology. The liquidity position remains sound, with sufficient same-day available funds equal to at least five business days of upcoming liabilities and discounted assets equal to the remaining maximum authorized CP program limit, which is consistent with DBRS Morningstar's policy on backup liquidity support for pension plans and provides considerable short-term financial flexibility.

As an additional source of liquidity, CDPQ maintains a USD 4.0 billion credit facility for general corporate purposes. The credit facility was renewed in 2021 and remained undrawn as at year end.

Investment-Related Liabilities and Capital Market Debt

($ millions)	As at December 31				
	2021	**2020**	**2019**	**2018**	**2017**
Accounts payable from pending trades	3,443	3,290	1,537	1,113	2,102
Securities sold short	5,532	2,761	3,787	7,802	5,096
Securities sold under repurchase agreements	14,990	14,716	23,527	12,539	15,972
Derivatives	1,232	1,591	1,022	2,057	659
Loans	203	942	368	290	364
Short-term promissory notes payable	9,729	5,983	8,794	5,921	4,556
Term notes	15,601	16,113	12,332	9,598	9,198
Total	**50,730**	**45,396**	**51,367**	**39,320**	**37,947**
Recourse debt [1]	**25,330**	**22,096**	**21,126**	**15,519**	**13,754**
As a share of adjusted net assets (%) [2]	5.7	5.7	5.8	4.8	4.4

1. Recourse debt comprises capital market debt on a fair-value basis.
2. Net assets adjusted by adding back recourse debt.

Capital Market Debt Outstanding

As at December 31, 2021 ($ millions)			Face Value		**Effective Interest Rate**
	Maturity	**Currency**	**Currency of Issue**	**Equivalent CAD [1]**	**(%)**
Canadian Short-Term Promissory Notes (Program Size $3 billion)	< 1 year	CAD		662	0.23
U.S. Commercial Paper Notes (Program Size USD 10 billion)	< 1 year	USD		9,070	0.17
Senior Notes	Mar 2022	USD	2,000	2,526	2.75
Senior Notes	Apr 2023	USD	2,000	2,526	1.00
Senior Notes	Jul 2024	USD	2,000	2,526	3.15
Senior Notes	Jun 2025	USD	2,500	3,158	0.88
Senior Notes [2]	May 2026	USD	1,000	1,263	1.00
Senior Notes	Oct 2026	CAD	1,250	1,250	1.50
Senior Notes	Nov 2039	USD	1,250	1,579	5.60

1. Face value converted to Canadian dollars as at December 31, 2021.
2. As at December 31, 2021, term notes include $1,263 million in green bonds that have been allocated to a selection of investments that are compliant with the eligible project categories established under CDPQ's Green Bond Framework, which is aligned with the Green Bond Principles of the International Capital Market Association (nil as at December 31, 2020).

Risk Management

CDPQ has a robust risk management framework and practices. The board has instilled risk management into the culture and has adopted an integrated risk management policy. This policy sets out the broad risk management framework, roles and responsibilities, risk budgets, limits, and key methodologies and processes.

For investment activities, each specialized portfolio is governed by a separate investment policy that prescribes overall management style, return targets, key risk, and concentration limits. These policies are supplemented by additional policies, procedures, and processes that address specific risk areas (e.g., liquidity, valuations, etc.). Operationally, investment groups are responsible for managing their investment risk and are supported by various risk management functions. Within each investment group, a Business Unit Risk Manager (BURM) is assigned to support the investment decision-making process by carrying out supporting analysis, influencing strategy, and providing a linkage to the risk management department as the BURMs report to the CRO. Further supporting the investment groups and the BURMs is the independent risk management department, which carries out risk measurement and analysis on individual transactions as well as across assets groups.

Further integration of risk management into the investment approach and strategy occurs through the Investment-Risk Committee, which is responsible for reviewing and approving strategies, providing risk oversight and monitoring cross-sector risk, risk factors, liquidity, concentrations, etc. This committee is co-chaired by the CEO and the Chief Risk Officer.

CDPQ estimates the absolute risk for its portfolio by calculating the value at risk (VaR) using the historical simulation method. In 2020, CDPQ revised the observation history of the risk factors used to calculate the VaR, changing from a fixed number of 3,000 days to a longer period that goes from 2006 to the reporting date. As at December 31, 2021, CDPQ estimated the VaR over a one-year horizon with a 95% confidence level to be 14.9% of the portfolio, which was higher than the estimate of 14.5% for the BM and higher than the 2020 VaR estimate of 14.0% of the actual portfolio, reflecting less-defensive positioning in the asset allocation portfolio and the gradual increase to private equity.

In addition to the VaR measure, CDPQ conducts stress testing on its portfolios under historical and hypothetical market events as well as under risk-factor-sensitivity scenarios. A wide range of factors are considered in the analysis, ranging from share prices, interest rates, rate spreads to exchange rates, commodity prices, and market volatility. This is particularly useful to enhance the assessment of private investments where VaR is a less reliable measure.

Over the past couple of years, CDPQ has continued to further increase oversight and to enhance its internal risk modelling functions/processes to better understand asset-specific risks, improve comparability of risk estimates/processes across asset classes, and assess the broader implications of key risk factors across asset classes and sectors (transversal risks).

Liquidity Management

Liquidity management falls within CDPQ's broader risk management framework and investment risk management framework. Under the risk policies, CDPQ is expected to maintain ample liquidity so as to be able to meet all expected and unexpected liquidity requirements that could arise in a severe stress scenario. Policies also specify minimum liquidity levels and how liquidity is to be maintained. The board places considerable emphasis on liquidity and the desire to be well positioned to deploy capital during the next downturn or market correction. The overall liquidity of the plan and corresponding issues are reported to the board's Investment and Risk Management Committee regularly and reviewed internally by the Liquidity and Debt Financing Committee. As at December 2021, CDPQ had close to $50 billion in liquidity in the form of government bonds and money market securities. Under the most severe stress-testing scenarios, which include significant reductions in asset prices and margin/collateral calls, this level of liquidity continues to be ample. CDPQ also maintains further liquidity in the form of other non-government debt and public equities.

CDPQ has a Contingency Funding Plan in place in the event of a market event or funding disruption. The plan outlines various protocols, including individual responsibilities and a liquidity waterfall.

Valuation of Private Market Assets

CDPQ measures all of its investments at fair value in accordance with accounting standards. Valuation of all assets is directed by CDPQ's Investment Valuation Policy, which is approved by the board and is further supported by the valuation directive applicable to private investments and the valuation protocols that establish the methodology for each type of investment. The valuation committee reviews fair values and compliance with the valuation policy of investments semiannually and recommends the results to the Audit Committee.

Nearly all private market assets are valued externally at least once every three years. Internally, the process is such that an independent valuation group within the finance team, which is separate from the investment teams, prepares and reviews valuations. CDPQ also relies on outside valuations to supplement internal valuations. The valuation group seeks to appraise valuations individually and collectively to ensure consistency and reasonableness of assumptions and valuations across individual assets and asset classes. Valuations are approved by the internal valuation committee. CDPQ's real estate holdings are held by Ivanhoé Cambridge and nearly all assets are subject to valuations twice annually.

Depositors and Net Assets

In 2021, net assets attributable to depositors rose by $54.3 billion, or 14.9%, to $419.8 billion. Growth was driven by $49.4 billion in net investment income and $5.6 billion in net contributions by depositors, offset by $0.7 billion in operating expenses. Overall, strong investment returns from CDPQ generally satisfy or exceed the depositors’ needs.

As at YE2021, CDPQ managed $419.8 billion in net assets for 46 public- and parapublic-sector depositors, and a further $141.0 billion in assets are managed or administered for other clients, though they are not consolidated in CDPQ’s financial statements. The assets under administration have grown by 31.2% from $107.5 billion in 2020, mainly as a result of a significant increase in assets administered by MCAP Commercial LP (rated BBB with a Stable trend by DBRS Morningstar), a subsidiary of Otéra Capital, itself one of CDPQ’s subsidiaries. The eight largest depositors account for 96.3% of net assets and are required by provincial law to deposit their funds with CDPQ, resulting in a highly captive asset base for CDPQ.

- **Public-Sector Pensions ($216.0 Billion):** Three of the eight largest depositors relate to broad public-sector pension plans. The major government-sector pension plans are cost shared. Two of the depositors are for employee contributions, while the third, the Retirement Plans Sinking Fund, is the government’s share of pension contributions.

- **Québec Pension Plan ($105.9 Billion):** The Québec Pension Plan (QPP) has 4.2 million contributors and 2.1 million beneficiaries receiving $15.6 billion in benefits annually. The additional QPP plan, which gradually phases in an increased contribution rate and maximum pensionable earning over five years, was announced in 2018 and began in January 2019. The additional plan is aimed to boost the retirement income of pension earners in the future. In 2021, depositor's net contributions to CDPQ increased to $5.6 billion, largely driven by net contributions of $4.0 billion by QPP.

- **Construction Industry Pension Plan ($30.5 Billion):** In Québec, construction workers and their employers are required to contribute to a supplementary pension plan that they jointly manage. The plan has 179,000 contributors and 100,000 beneficiaries receiving $0.9 billion in benefits annually.

- **Public Sector Insurance Plans ($35.6 Billion):** CDPQ manages the investments held by the provincial workplace safety and insurance board and the provincial automobile insurance program (Québec has a public-private insurance system whereby a provincial program compensates road accident victims). The workplace insurance scheme covers 3.8 million workers while the auto insurance scheme covers 5.5 million drivers. Collectively, they paid out $3.5 billion in benefits in 2021.

- **Government Debt Sinking Fund ($16.0 Billion):** The Generations Fund was established in 2006 to accumulate funds to support the Province's debt-reduction goals and improve intergenerational fairness. The provincial government expects to keep contributing its dedicated source of revenues to the fund and they do not plan for withdrawals to repay borrowings in the medium term until 2025-26.

The strength of the rating relies heavily on the captivity of the asset base. While legislative changes could weaken the captivity of the asset base, DBRS Morningstar views this risk as very remote, given the success of the Canadian public-sector asset manager model, CDPQ's strong results in recent years, and CDPQ's established relationships with both the provincial government and its depositors.

Change in Net Assets

($ millions)	For the year ended December 31				
	2021	**2020**	**2019**	**2018**	**2017**
Investment results	49,952	26,013	32,721	13,261	25,782
Expenses	(505)	(653)	(945)	(886)	(650)
Net investment results	**49,447**	**25,360**	**31,776**	**12,375**	**25,132**
Operating Expenses	(718)	(609)	(630)	(585)	(536)
Net contributions (withdrawals)	5,576	632	(548)	(791)	3,170
Increase (decrease) in net assets	**54,305**	**25,383**	**30,598**	**10,999**	**27,766**
Net assets	**419,797**	**365,492**	**340,109**	**309,511**	**298,512**

Depositors' Net Assets

	For the year ended December 31					
($ billions)	**First Deposit**	**2021**	**2020**	**2019**	**2018**	**2017**
Pension Plans						
Government and Public Employees Retirement Plan	1973	91.5	82.4	76.8	70.4	68.5
Retraite Québec	1966	105.9	87.8	81.6	72.6	69.3
Retirement Plans Sinking Fund	1994	112.9	99.4	93.0	83.2	78.5
Supplemental Pension Plan for Employees of the Québec Construction Industry	1970	30.5	27.6	25.8	23.3	22.4
Pension Plan for Management Personnel	1973	11.6	10.1	9.1	8.0	6.9
Other	1977-2017	11.0	9.1	8.7	7.9	7.2
Total		**363.4**	**316.4**	**295.1**	**265.4**	**252.7**
Insurance Plans						
Commission des normes de l'équité, de la santé et de la sécurité au travail	1973	20.7	18.8	18.1	16.6	16.2
Société de l'assurance automobile du Québec	1978	14.9	13.4	13.0	12.1	11.9
Other	1967-2005	2.8	2.8	2.8	2.4	2.3
Total		**38.4**	**35.1**	**33.9**	**31.1**	**30.4**
Other						
Generations Fund	2007	16.0	12.0	9.2	11.3	13.8
Other	1992-2012	2.0	2.0	1.9	1.7	1.6
Total		**18.0**	**14.0**	**11.1**	**13.0**	**15.4**
Net Assets		**419.8**	**365.5**	**340.1**	**309.5**	**298.5**

About CDPQ

CDPQ is one of Canada's largest institutional investment managers, with $419.8 billion in net assets as at December 31, 2021. CDPQ manages assets on behalf of public-sector entities in Québec, which include pension plans, insurance plans, and other public-sector entities.

CDPQ is governed by the *Act Respecting CDPQ de dépôt et placement du Québec* (the Act), which, among other things, states that CDPQ shall seek to optimize the return on capital within the framework of the depositors' investment policies while at the same time contributing to Québec's economic development. While CDPQ is established by provincial legislation and that legislation imposes governance requirements and a process for appointing the board, CDPQ operates independently of the Province and does not serve as the Province's economic development arm. The Act specifically includes a provision recognizing CDPQ's independence.

While CDPQ holds $78 billion in assets in Québec, its investment decisions are not driven by political or economic development considerations. Its investments in the Province are driven by commercial and investment considerations. Given its long history of investing in Québec and its scale, CDPQ continues to be viewed as among the best-informed investors in Québec.

At present, the leading political parties in the Province remain committed to maintaining an independent CDPQ. While its independence could be tested by subsequent governments, DBRS Morningstar views this risk as remote, given the success of the current model, the increasing complexity and scale of the investment operation, and the potential downside risk that could result from interference or mismanagement.

Governance

CDPQ is governed by a 14-member board that includes independent and non-independent members. The Act limits the board to 15 members, at least two-thirds of whom must be independent directors and three-quarters of whom must be Québec residents. The legislative framework does not require depositors to be represented on the board. Board members are appointed by the Province on the recommendation of the existing board, which conducts a selection and screening process to ensure the prospective members have the skills and attributes necessary to complement those of the existing board. The board is composed of professionals with significant executive-level experience in a range of industries, including investment management, finance, insurance, economics, and government. Board members are appointed to terms of up to five years, which may be renewed to a combined total of 10 years.

The board acts independently of the Province and makes decisions in the best interests of CDPQ and its depositors. While day-to-day management of CDPQ is delegated to the management team, the board retains responsibility for appointing the president and CEO, providing general management oversight, setting compensation, strategic planning, ensuring that there are adequate internal controls and risk management systems, developing and approving key policies, approving key investment and risk management policies, overseeing the audit, and approving key financial policies.

The board operates through four sub-committees: Audit, Human Resources, Governance and Ethics, and Investment and Risk Management. The Act specifically requires the first three committees and outlines their responsibilities.

In 2021, Jean St-Gelais was appointed as independent member of the board and then trusted to become chairman of the board at the end of the mandate of Robert Tessier in October 2021.

Management

CDPQ has a strong and well-established management team. The team has put in place a stable and coherent investment strategy with a robust track record of delivering consistent strong results in the past 10 years. Risk management functions are robust and well-integrated into the investment decision-making process. On this front, CDPQ continuously improves its risk management framework so as to strengthen its monitoring process and to support investment initiatives, such as the development of large-scale transaction analysis framework, mitigation of operation risks from transactions, globalization of CDPQ’s portfolio and organizational transformation, and further integration of ESG risks in transaction structuring.

As of December 31, 2021, CDPQ had 1,454 direct employees and more than 758 people employed by its two real estate subsidiaries, Ivanhoé Cambridge and Otéra Capital, with another 124 employed by its infrastructure subsidiary, CDPQ Infra. The organization has been expanding and seeking to hire top talent in the sectors and regions in which it operates. CDPQ has subsidiaries with offices in New York, D.C., Paris, Singapore, Shanghai, Mexico City, Sydney, London, New Delhi, and São Paulo.

Ranking and Guarantees

The depositors retain responsibility for their underlying pension and other obligations. While those obligations will influence depositors' asset allocations and the timing and scope of withdrawals, CDPQ is not ultimately responsible for those obligations. DBRS Morningstar has reviewed a legal opinion provided to CDPQ stating that counterparty liabilities, such as the guaranteed obligations, are senior to the participation deposits of the depositors, with the exception of certain secured deposits that comprise a small fraction of assets.

CDPQ irrevocably guarantees the full payment of principal and interest with respect to the debentures and CP programs of CDP Financial. Should CDP Financial fail to make required payments, investors would be able to seek payment from CDPQ without first exhausting recourse to CDP Financial. Governing legislation permits guarantors to terminate guarantees after three years under certain circumstances. However, CDPQ will waive its right to revoke its guarantee. Obligations under the guarantee will not accelerate unless there is a default by CDP Financial and CDPQ. DBRS Morningstar has received a legal opinion stating that the guarantee is enforceable and is provided in accordance with board resolutions and governing bylaws and that the net assets of CDPQ (net of certain forms of deposits that represent a negligible fraction of assets) would be available to satisfy obligations arising under the guarantee.

ESG Checklist

There were no ESG factors or considerations with a significant or relevant impact on the credit ratings.

ESG Factor		ESG Credit Consideration Applicable to the Credit Analysis:	Y/N	Extent of the Effect on the ESG Factor on the Credit Analysis: Relevant (R) or Significant (S)*
Environmental		Overall:	N	N
	Emissions, Effluents, and Waste	Do we consider the costs or risks result, or could result in changes to an issuer's financial, operational, and/or reputational standing?	N	N
	Carbon and GHG Costs	Does the issuer face increased regulatory pressure relating to the carbon impact of its or its clients' operations resulting in additional costs?	N	N
	Climate and Weather Risks	Will climate change and adverse weather events potentially disrupt issuer or client operations, causing a negative financial impact?	N	N
Social		Overall:	N	N
	Social Impact of Products and Services	Do we consider that the social impact of the issuer's products and services could pose a financial or regulatory risk to the issuer?	N	N
	Human Capital and Human Rights	Is the issuer exposed to staffing risks, such as the scarcity of skilled labour, uncompetitive wages, or frequent labour relations conflicts that could result in a material financial or	N	N
		Do violations of rights create a potential liability that could negatively affect the issuer's financial wellbeing or reputation?	N	N
		Human Capital and Human Rights:	N	N
	Product Governance	Does failure in delivering quality products and services cause damage to customers and expose the issuer to financial and legal liability?	N	N
	Data Privacy and Security	Has misuse or negligence in maintaining private client or stakeholder data resulted, or could result, in financial penalties or client attrition to the issuer?	N	N
	Community Relations	Does engagement, or lack of engagement, with local communities pose a financial or reputational risk to the issuer?	N	N
	Access to Basic Services	Does a failure to provide or protect with respect to essential products or services have the potential to result in any significant negative financial impact on the issuer?	N	N
Governance		Overall:	N	N
	Bribery, Corruption, and Political Risks	Do alleged or actual illicit payments pose a financial or reputational risk to the issuer?	N	N
		Are there any political risks that could impact the issuer's financial position or its reputation?	N	N
		Bribery, Corruption, and Political Risks:	N	N
	Business Ethics	Do general professional ethics pose a financial or reputational risk to the issuer?	N	N
	Corporate / Transaction Governance	Does the issuer's corporate structure limit appropriate board and audit independence?	N	N
		Have there been significant governance failures that could negatively affect the issuer's financial wellbeing or reputation?	N	N
		Corporate / Transaction Governance:	N	N
		Consolidated ESG Criteria Output:	N	N

* A **Relevant Effect** means that the impact of the applicable ESG risk factor has not changed the rating or rating trend on the issuer.
A **Significant Effect** means that the impact of the applicable ESG risk factor has changed the rating or trend on the issuer.

If any factor is proposed to have a Significant Effect, this should be reflected in the Press Release

Rating History

	Current	2021	2020	2019	2018	2017
Caisse de dépôt et placement du Québec						
Issuer Rating	AAA	AAA	AAA	AAA	AAA	AAA
CDP Financial Inc.						
Long-Term Debt	AAA	AAA	AAA	AAA	AAA	AAA
Canadian Short-Term Promissory	R-1 (high)	R-1 (high)	R-1 (high)	R-1 (high)	R-1 (high)	R-1 (high)
U.S. Commercial Paper Notes	R-1 (high)	R-1 (high)	R-1 (high)	R-1 (high)	R-1 (high)	R-1 (high)
Euro Commercial Paper Notes	R-1 (high)	R-1 (high)	R-1 (high)	R-1 (high)	R-1 (high)	R-1 (high)

Previous Action

- Confirmed, July 2, 2021.

Related Research

- *Rating Canadian Public Pension Funds & Related Exclusive Asset Managers*, April 26, 2022.

Commercial Paper Limit

- CDP Financial Inc., Canadian Short-Term Promissory Notes and Euro Commercial Paper Notes: $3.0 billion.
- CDP Financial Inc., U.S. Commercial Paper Notes: USD 10.0 billion.

Previous Report

- Caisse de dépôt et placement du Québec and CDP Financial Inc.: Rating Report, July 2, 2021.

Notes:
All figures are in Canadian dollars unless otherwise noted.

For the definition of Issuer Rating, please refer to Rating Definitions under Rating Policy on www.dbrsmorningstar.com.

Generally, Issuer Ratings apply to all senior unsecured obligations of an applicable issuer, except when an issuer has a significant or unique level of secured debt.

About DBRS Morningstar

DBRS Morningstar is a full-service global credit ratings business with approximately 700 employees around the world. We're a market leader in Canada, and in multiple asset classes across the U.S. and Europe.

We rate more than 3,000 issuers and nearly 60,000 securities worldwide, providing independent credit ratings for financial institutions, corporate and sovereign entities, and structured finance products and instruments. Market innovators choose to work with us because of our agility, transparency, and tech-forward approach.

DBRS Morningstar is empowering investor success as the go-to source for independent credit ratings. And we are bringing transparency, responsiveness, and leading-edge technology to the industry.

That's why DBRS Morningstar is the next generation of credit ratings.

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