Report on Pension Plans

Registered in British Columbia

OCTOBER 2021

BCFSA

CLASSIFIED: PUBLIC

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1. Overview

This report presents a snapshot of the current state of registered pension plans in British Columbia, summarizing recent data. Most B.C.-registered plans have provisions categorized as defined benefit ("DB"), defined contribution ("DC"), or target benefit ("TB"). Some sections of this report are subdivided to cover those categories separately. Prepared by BC Financial Services Authority ("BCFSA"), the report also provides an opportunity for the Superintendent of Pensions to engage with stakeholders and inform them of the work the regulator is undertaking.

2. About BCFSA

BCFSA is a Crown agency responsible for the supervision and regulation of the financial service sector, including:

- Credit Unions
- Credit Union Deposit Insurance Corporation
- Insurance
- Mortgage Brokers
- Pensions
- Real Estate Professionals
- Trusts

BCFSA protects the rights of British Columbians by promoting high standards of market conduct within the financial services sectors we regulate. As a modern, effective, and efficient regulator, we're committed to providing oversight that ensures fair, transparent processes that benefit the public. We provide the information and guidance necessary to enable industry participants to comply with legislative requirements and best practices.

On August 1, 2021, the Real Estate Council of BC ("RECBC") and the Office of the Superintendent of Real Estate ("OSRE") integrated with BCFSA to create a single regulator of B.C.'s financial services sector, including real estate. This significant move allows BCFSA to further enhance its investigative, compliance, and enforcement capacity and approach, provide strengthened consumer protection, and foster increased public confidence in the province's financial services sector.

The integration seeks to simplify accountabilities and enhance regulatory oversight through more effective and efficient business processes, investigations, and enforcements. Creating a single financial services regulator was also a key recommendation from the Expert Panel on Money Laundering Report released in May 2019.

With the integration now complete, BCFSA has the sole authority over real estate education and licensing as well as investigations and discipline responsibilities for licensed and unlicensed real estate activity, including real estate development marketing. The organization also has rule-making authority governing the conduct of real estate licensees.

Following this integration, Deputy Superintendent of Pensions Michael Peters moved to a new role as Senior Advisor to the CEO. The pensions team is now part of the supervision team lead by Chris Elgar, Senior Vice President of Supervision.

Within BCFSA, the pensions department oversees the administration and enforcement of the *Pension Benefits Standards Act* ("PBSA") and the Pension Benefits Standards Regulation ("PBSR"). The PBSA and PBSR apply to individuals employed in British Columbia with the exception of those in federally regulated industries who are covered under the federal pension legislation. B.C. residents who participate in pension plans registered in other provinces are also protected under the PBSA and PBSR.

The objective of the Superintendent of Pensions is to enhance British Columbians' retirement income security by:

- Promoting the security of pension plan benefits and rights provided to B.C. pension plan members by the PBSA;
- Ensuring that B.C. pension plans comply with the PBSA and meet the minimum standards of financial health required;
- Assessing the ongoing effectiveness of the legislation and recommending improvements to the PBSA;
- Working toward administrative harmonization with other provinces and the Federal Government; and
- Keeping the regulatory burden on pension plans and the cost of pension plan supervision to a minimum.

DB and TB pension plan definitions

Going Concern Valuation: This provides an estimate of the plan's funded status if the plan continues indefinitely and benefits continue to be paid.

Going Concern Funded Ratio: This refers to the ratio of the plan's going concern assets to its going concern liabilities.

Solvency Valuation: It estimates the plan's ability to meet its obligations if terminated and required to pay all its obligations immediately.

Solvency Ratio: This refers to the ratio of the plan's solvency assets to its solvency liabilities.

Normal Cost: The amount of money needed today to be sufficient to pay the amount of pension which members will earn as they work next year. Actuaries estimate normal cost as well as the liability related to pension amounts already earned from prior years' work. To do so, they make assumptions including the amount of salary or hours of work, retirement dates, and lifespan.

Commuted Value ("CV"): A lump sum amount, the present value of the expected monthly lifetime retirement pension the member would have received if they had opted for a pension from their plan.

Provision for Adverse Deviation ("PfAD"): This is an additional contribution requirement that acts as a buffer. It is used to boost funding beyond the estimated minimum amount needed to make the pension payments over the long term.

3. Legislative Amendments

Order in Council 649/ 2019 came into effect on December 31, 2019 which brought in new funding requirements for DB plans. Changes included increased going concern funding requirements, reduced solvency funding requirements, limits on contribution holidays, and restrictions on withdrawals of going concern excess. More details are available in Bulletin PENS 20-001. In response, many plan administrators filed off-cycle actuarial valuation reports to take advantage of new contribution requirements. For more information, please go to the Contributions section.

On December 18, 2020, the PBSR was amended by Order in Council 649/2020 to offer short-term funding relief to TB plans. This was announced in our Regulatory Statement PENS 20-005. Trustees of TB plans may elect an exemption from the requirement to fund the PfAD on normal cost under Section 58 (2)(b) of the PBSR for a period that begins on a review date from December 31, 2019 to December 30, 2022 inclusive and ends before the following review date.

The exemptions are subject to the following conditions:

- Active members and those receiving pensions from the plan must be notified of the exemption in their annual statements each year that includes any portion of the exemption period; and
- The participating employer may not amend the plan text document to improve benefits under the target benefit provision during the exemption period unless the benefit improvement is required to comply with the PBSA or the Income Tax Act (Canada).

Sections 45 (5) and 58 (10) to (11) of the PBSR were also amended so that they apply to all TB plans, including those that are not collectively bargained. Section 45(5) outlines when an actuarial valuation report would be required if a material amendment is made. Sections 58 (10) and (11) set out requirements in the situation where an actuary, in preparing a valuation, determines that the expected contributions are insufficient.

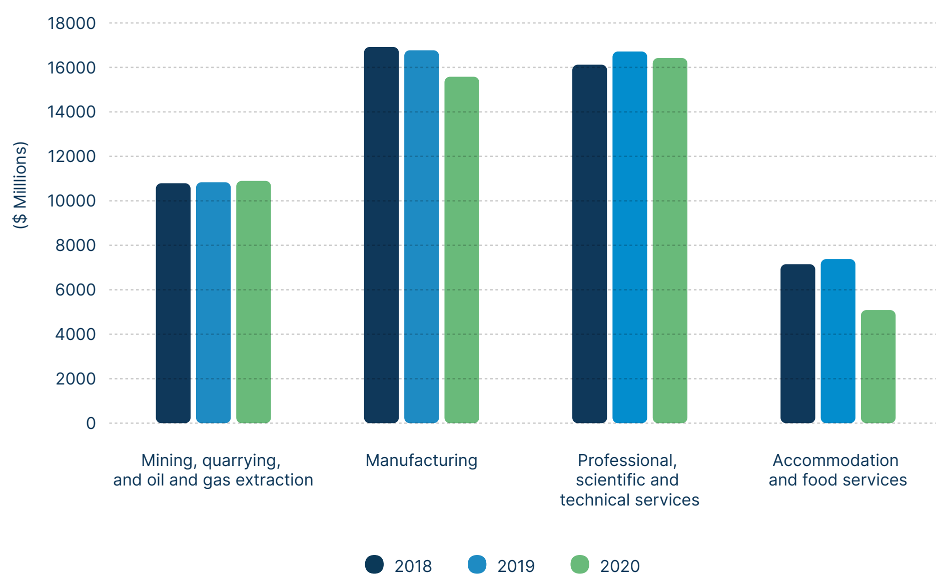
4. Economic Overview

Economic factors and market conditions impact plan sponsors and pension fund performance. The economic fallout from COVID-19 has been widespread and has hit workers as well as pension plans. In 2020, B.C.'s real gross domestic product ("GDP") declined almost twice as much as during the 2008 global financial crisis.

The graph below shows the impact of the decline which was more pronounced in sectors such as accommodation and food services. The International Monetary Fund estimates that GDP fell by 3.5 per cent globally and 5.5 per cent in Canada, the worst decline in output since the 1930s. In May 2020, B.C.'s unemployment reached a peak of 13.4 per cent.

By June 2020, B.C.'s economy began to rebound as retail spending levels returned to pre-pandemic levels. However, some sectors such as hospitality continued to experience a significant decline in revenue well into 2021.

B.C.'s GDP from Select Industries



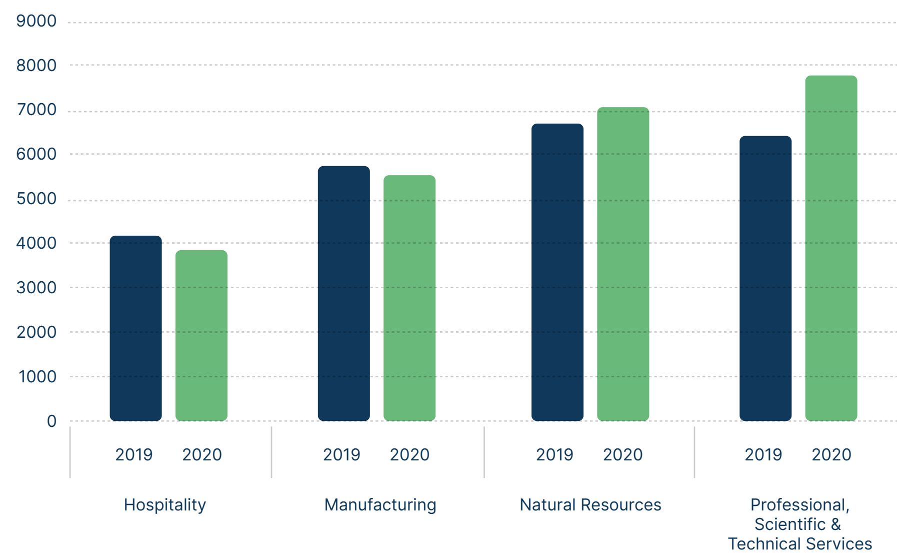
The pandemic's impact on pension plans includes:

- Reduced contributions if the number of members or their hours worked decline;
- Asset value volatility;
- Reduced liquidity; and
- Increased mortality.

CONTRIBUTIONS

The recovery has been uneven with hotels, restaurants, arts, manufacturing, and travel being the hardest hit by the pandemic. Reduced contributions to DC plans in the province's hospitality and manufacturing sectors reflect that uneven recovery.

Average DC Contributions per Active Member



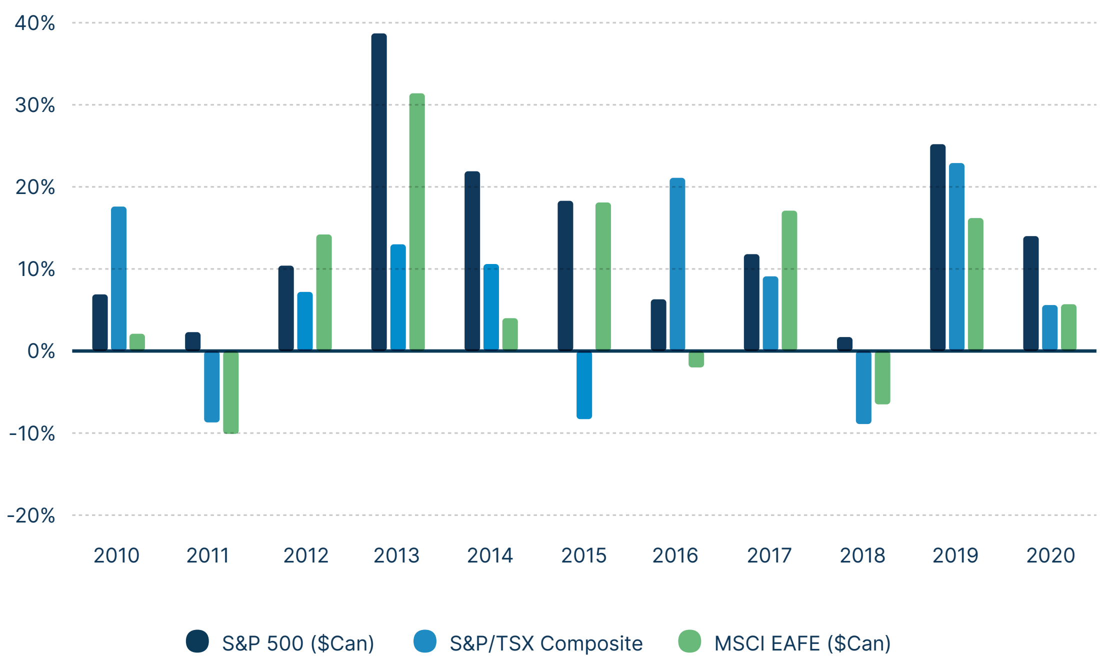
While only five DC plans were amended to suspend or reduce contributions, annual filings with BCFSA show that several other plans received lower contributions. This is because contributions are based on employee earnings, which had fallen in 2020 for some plan members. According to termination reports received, no B.C. registered plans have wound up as a result of COVID-19.

In response to the COVID-19 pandemic, BCFSA extended certain filing deadlines as announced in Bulletin PENS 20-002. The Superintendent also issued Bulletin PENS 20-004 to address questions and concerns raised by stakeholders as a result of COVID-19. Some sectors continue to experience a sharp reduction in their revenue and staffing. Affected plan administrators may request guidance or extensions. The circumstances of a given plan will be considered when granting relief.

ASSET VOLATILITY AND LIQUIDITY

Globally, asset prices fluctuated with an initial plunge followed by a rebound. For instance, Canada's S&P TSX index fell from 17,925.40 on February 19 to 11,228.50 on March 23 but rebounded to close at 17,433.40 on December 31, 2020. Central banks provided monetary support to boost liquidity and maintain credit flow. Despite significant asset price volatility, pension fund returns were positive by year end. Based on cash flows reported for B.C.-registered plans, the median investment return was 10 per cent in 2020 for TB and DB provisions.

Annual Equity Benchmark Returns



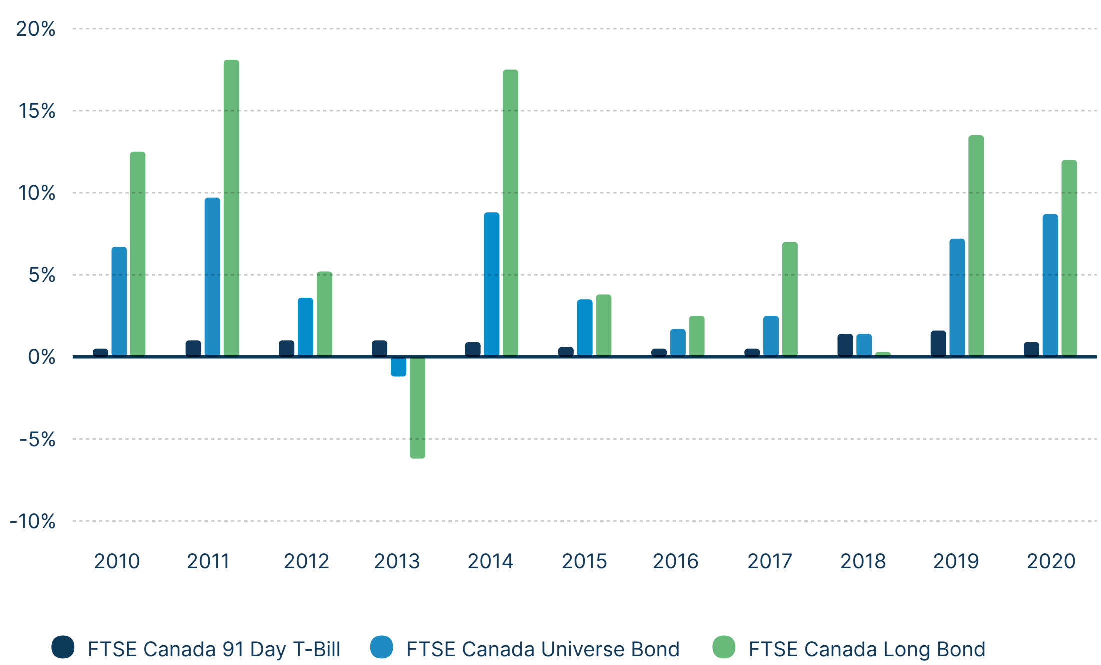
Despite price volatility caused by the pandemic, asset prices rose overall in 2020. For instance, Canada's S&P TSX index posted a return of 5.6 per cent in 2020. Stock price gains were likely driven by the higher savings rates for those households whose members remained employed or received government support. That said, by the fourth quarter of 2020 the household savings rate slipped to 11.9 per cent from 27.5 per cent in the second quarter of the same year. This drop indicated a shift from forced or precautionary savings to increased household consumption.[1]

1 Bank of Canada, COVID-19, savings and household spending, https://www.bankofcanada.ca/2021/03/covid-19-savings-and-household-spending, as of August 23, 2021, and Statistics Canada, Table 36-10-0112-01 Current and capital accounts - Households, Canada, quarterly, as of August 23, 2021.

Selected Asset Class Returns			
Stock Returns[2]	2020	2019	2018
Canadian Equities: S&P TSX Composite	5.6%	22.9%	-8.9%
U.S. Equities: S&P 500 (Canadian Dollars)	14.0%	25.2%	1.7%
Non-North American Equities: MSCI – EAFE (Canadian Dollars)	5.7%	16.2%	-6.5%
Fixed-Income Returns[3]			
FTSE Canada 91-day T-bills	0.9%	1.6%	1.4%
FTSE Canada Universe Bond	8.7%	7.2%	1.4%
FTSE Canada Long Bonds	11.9%	13.5%	0.3%

As interest rates fell in the second quarter of 2020, long bond prices climbed, leading to pension plan gains. Government of Canada long bond yields hit a low of 0.95 per cent in July 2020.

Annual Fixed Income Benchmark Returns



2 Thomson Reuters Eikon, retrieved on 21 June 2021, https://eikon.thomsonreuters.com/index.html

3 Aubin Consulting Actuary Inc.

Those falling rates increased the cost of funding DB plans. This reversed in December 2020 when the bond spreads at the time, together with the change in the Canadian Institute of Actuaries' ("CIA") standards for the method of calculating commuted values, led to higher ultimate solvency discount rates.

Changes to the Commuted Value Standards are nuanced, so will not consistently lower CVs for DB plans, but that was the impact in December 2020.

Those Standards also introduced a new subsection 3570, which provides a different basis for calculating CVs under target pension arrangements. Further details are outlined in the CIA resource Calculating Commuted Values and BCFSA's Bulletin PENS 20-003.

Government of Canada Bond Yields and Solvency Interest Rates

Government of Canada Bond Yields[4]	Dec 2020	Dec 2019	Dec 2018	Dec 2017
Long-term (V122544)	1.24%	1.67%	2.15%	2.20%
10-year (V122543)	0.70%	1.61%	1.98%	1.98%
91-day T-bill (V122541)	0.12%	1.67%	1.67%	1.05%
Solvency Interest Rates (non-indexed)[5]				
Commuted Value	1.4%/2.9%	2.4%/2.5%	3.20%/3.40%	2.60%/3.40%
Annuity Purchase	2.50%	2.96%	3.23%	3.02%

During the pandemic, liquidity pressures on real assets also affected some plans. For instance, from March 2020 to April 2021, Canada Life suspended contributions into and redemptions from its Canadian real estate segregated fund. Plans maintained exposure to real estate and infrastructure as shown in the asset data below.

4 Bank of Canada, http://www.bankofcanada.ca/rates/interest-rates/

5 Based on guidance from the Canadian Institute of Actuaries. For calculation of a commuted value (lump sum payment), the first interest rate applies to the first 10 years after the calculation date and the second interest rate applies to subsequent years. The annuity purchase rate shown is for an illustrative block with medium duration.

MORTALITY

While B.C.'s mortality rate from COVID-19 was not as high as that of Alberta or Quebec, studies suggest that COVID-19 has been one of the most significant factors affecting mortality in decades. As a result, the CIA created the C-19 Canadian Mortality Model that actuaries could use to estimate the additional fatalities caused by COVID-19 amongst plan members of a given age, sex, or region. The model can be updated with the most recent and relevant fatalities data. Several B.C. pension plans conduct mortality studies of their own membership, either solo or in conjunction with other plans, to have data from more relevant and specific populations. B.C.-specific data on the impact of COVID-19 on pension plan members' longevity has yet to be reported to BCFSA, but the CIA model includes links to several current data sources.

5. Statistics

PLANS AND MEMBERSHIP

In 2020, the total number of pension plans registered in B.C. declined slightly from 647 to 642. Conversely, total membership, including retirees and deferred members, increased two per cent to 1,183,000. Across Canada, a trend of plan mergers to realize efficiencies[6] continues. In 2020, plan mergers cut the number of DB plans registered in B.C. by three and the number of DC plans by five.

DB
$168.1 billion

147 DB plans
828,000 members

TB
$14.0 billion

35 TB plans
264,000 members

DC
$9.5 billion

460 DC plans
92,000 members

Membership in TB plans registered in B.C. increased by 0.8 per cent in the year. The number of TB plans declined to 35 because one TB plan transferred to Alberta. No new TB plans were registered nor converted from DC or DB in 2020.

The majority of TB plans have under 5,000 members.

Target Benefit Plan Membership on December 31, 2020

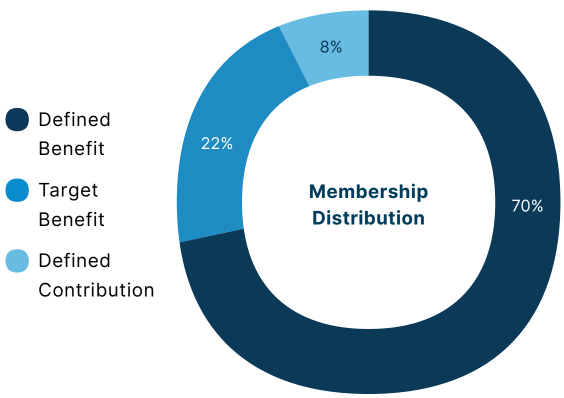
Plan Membership	Number of Plans	Total Members
Fewer than 1,000	7	4,000
1,000-4,999	17	39,000
5,000-9,999	5	38,000
10,000 or more	6	183,000
Total	35	264,000

6 CIBC Mellon, *Rise of the Consolidators: Canadian Asset Owners Pursue Scale and Opportunity*.

For DB plans, membership is concentrated in the largest plans. Among DB plans registered in B.C., 111 of the 147 have fewer than 1,000 members. Conversely, 78 per cent of members who are in DB plans belong to the four largest public sector plans (College Pension Plan, Municipal Pension Plan, Public Service Pension Plan, and Teachers' Pension Plan). Three of those have over 100,000 members each.

Defined Benefit Plan Membership on December 31, 2020

Plan Membership	Number of Plans	Total Members
Fewer than 1,000	111	19,000
1,000-4,999	24	50,000
5,000-9,999	5	36,000
10,000 or more	7	723,000
Total	147	828,000



The number of DB plans increased by three in 2020 to 147. No DB plans registered in B.C. terminated in 2020. Three transferred to other jurisdictions, and six new plans were registered. Total membership, including retired and deferred members, increased 2.6 per cent from 807,000 to 828,000. Of that, 407,100 members are actives accruing defined benefits and 13,300 are actives accruing DC benefits in a plan that also has a DB component.

Defined Contribution Plan Membership on December 31, 2020		
Plan Membership	Plans	Total Members
Fewer than 100	337	11,000
100-499	95	20,000
500-999	12	8,000
1,000 or more	16	53,000
Total	460	92,000

The DC membership table above refers to membership in plans specifically set up as DC plans. It does not include the 19,000 members who are currently in a plan with DC and DB components. Those are included in the above-mentioned count of members in DB plans. Starting 2023, plan administrators will be asked for more detail on the types of benefits members have accrued to enhance the quality of the data collected from plans with multiple benefit types.

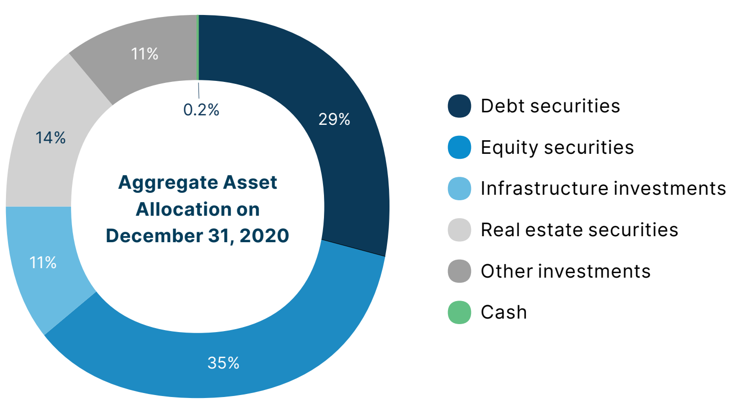
The number of plans with only a DC component declined by seven in 2020, while membership increased by 1.1 per cent to 92,000 total members. There are 17 DC plans that report having pensioners or beneficiaries in the plan.

ASSETS

Total assets in B.C.-registered pension plans increased 7.8 per cent from $177.8 billion to $191.6 billion during 2020. Pension funds were boosted by investment gains and by $5.7 billion in contributions in 2020.

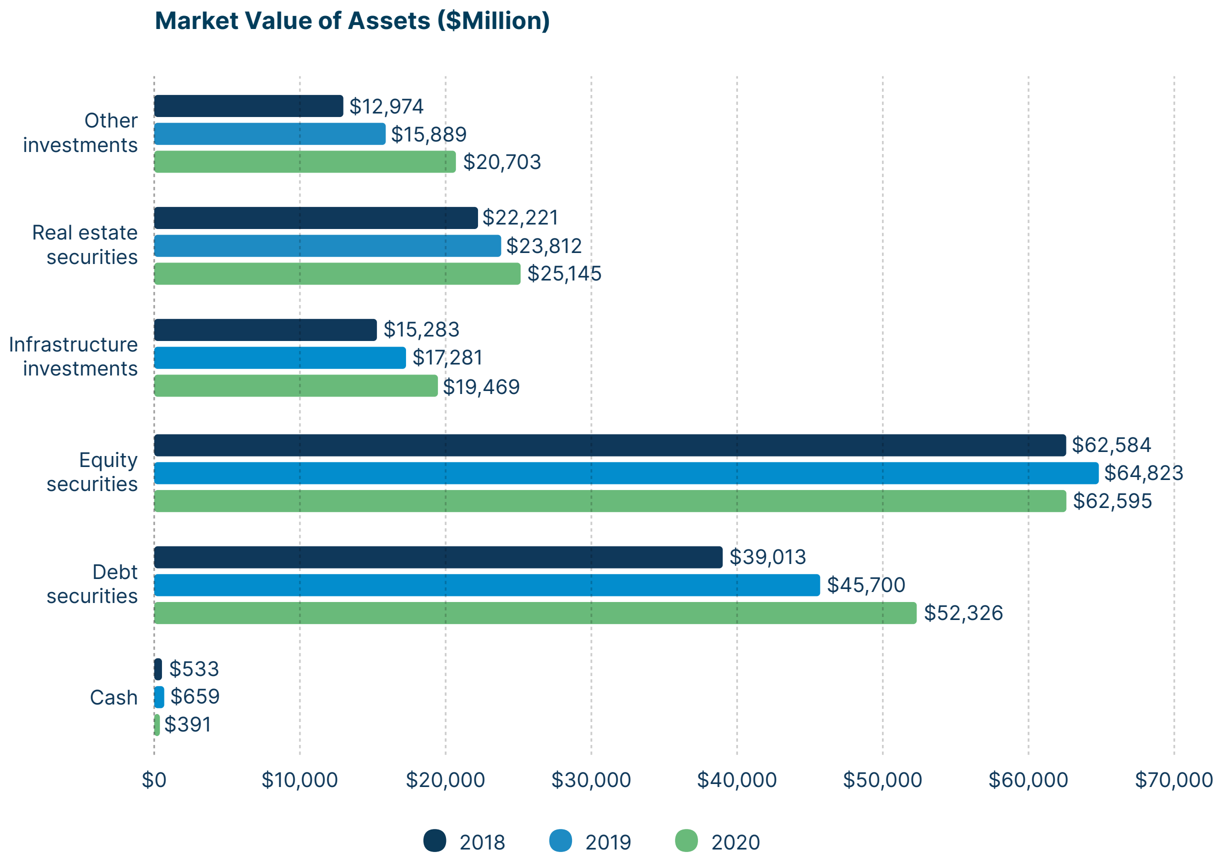
Total Assets on December 31 ($Billion)		
Plan Type	2020	2019
Defined Benefit Component	168.1	155.8
Target Benefit Component	14.0	13.1
Defined Contribution Component	9.5	8.9
Total Assets	191.6	177.8

For DB plans, the four public sector pension plans hold 77 per cent of total DB assets and 78 per cent of members. DC plans are less concentrated, with 16 plans that have over 1,000 members holding 68 per cent of DC plan assets.



Investment in infrastructure and real estate asset classes has continued to rise in recent years.

Meanwhile, allocations to traditional equity securities declined in 2020 even as equity markets were strong, demonstrating a concerted effort to allocate to alternative or fixed income assets. As in the prior year, plans report an increased allocation to the category classified as “other investments” which includes hedge funds and private equity placements. In aggregate, B.C. pension funds held $20.7 billion in other investments in 2020, up 60 per cent from the amount held two years earlier. Holdings of debt securities also rose in the year, in part because of price gains given the falling interest rates.



Many DB and TB plan administrators continued to seek opportunities to de-risk. Some increased their fixed income allocation, while others purchased annuities. Of the 127 valuation reports filed with review dates of December 31, 2019 to December 31, 2020, seven plans report holding buy-in annuities. Buy-in annuities are classified as a form of pension plan investment since they are a plan asset. In this arrangement, the insurer makes periodic payments to the pension fund equal to the sum of the pension amount due to members, rather than making pension payments to members individually. Pensions covered under the buy-in annuity continue to be paid from the pension plan.

Pension funds with assets of less than $2.5 million, plans with less than 50 total members, and DC plans are not required to file a breakdown of asset mix information. Hence, the asset allocation data in this section excludes those plans.

CONTRIBUTIONS

DC Plans

In 2020, as in 2018 and 2019, employers contributed 64 per cent of the total paid into DC plans. However, in 2020 the dollar amount contributed declined.

Due to the pandemic, contributions to defined contribution plans fell by approximately $9.3 million, or two per cent, to $519 million.

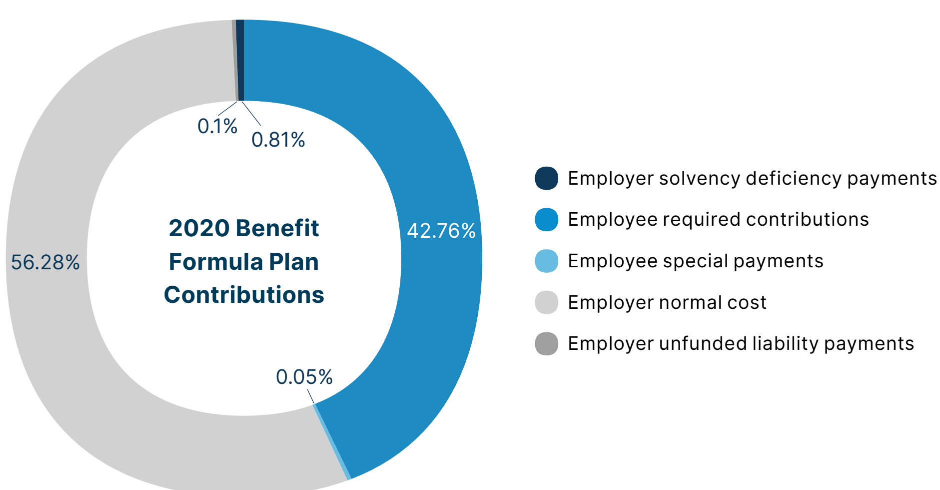
As highlighted in the Economic Overview section, the impact on plans was uneven with contribution levels falling most dramatically in the hard-hit sectors of hospitality and manufacturing.

Contributions to DC Plans ($Million)		
Contribution Category	2020	2019
Member Required	$154.7	$157.8
Member Voluntary	$33.3	$33.5
Employer	$331.4	$337.3
Total	$519.4	$528.7

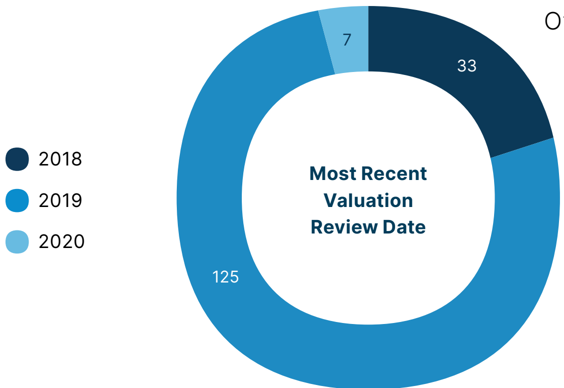
Voluntary contributions remained stable at $33 million. On the other hand, employer contributions declined by approximately $6 million.

DB and TB Plans

Unlike the experience for DC plans, total contributions to benefit formula (TB and DB) plans rose from $4.90 billion to $5.19 billion in 2020 as a result of a rise in contributions to fund new pension accruals.



Contributions to fund future service, including employee required contributions and employer normal cost payments, increased, while unfunded liability and solvency deficiency contribution amounts significantly fell. Those past service payments comprised two per cent of the total 2019 contributions but less than one per cent of 2020 contributions because of amended legislation and recently filed valuation reports.



Of the 180 benefit formula plans registered in B.C. at the time, 127 filed valuations with a 2019 review date. Of those, 105 were for DB plans, up from 26 reports filed for DB plans the year before. Many DB plan administrators filed off-cycle valuation reports with a December 31, 2019 review date to reflect the new rules for funding that require solvency special payments only when the solvency funded ratio is less than 85 per cent. For instance, 58 of those valuation reports found the DB plan was at least 85 per cent funded on a solvency basis but under 100 per cent funded. Filing a valuation report allows those plans to cease solvency deficiency payments. Furthermore, several plan administrators allowed their letter of credit to expire in the past year because those plans had valuation reviews as at December 31, 2019 that show they are at least 85 per cent funded on a solvency basis. Hence, they no longer require solvency payments nor a letter of credit. Six plan administrators are using a letter of credit to satisfy some or all their solvency deficiency funding requirements, down from nine last year.

TB and DB Plan Contributions ($Million)

Contribution Category	2020	2019
Employee Required Contributions	$2,219.7	$2,058.8
Employee Unfunded Liability Payments	$0.9	$0.8
Employee Solvency Deficiency Payments	$1.6	$3.0
Employer Normal Cost	$2,921.5	$2,740.6
Employer Unfunded Liability Payments	$5.4	$11.8
Employer Solvency Deficiency Payments[7]	$42.1	$87.3
Total Employer and Employee Contributions	$5,191.2	$4,902.3

7 CIBC Mellon, Rise of the Consolidators: Canadian Asset Owners Pursue Scale and Opportunity.

VALUATION RESULTS

While fewer plans are now required to make solvency payments following the 2019 legislative amendment, all DB plans must now contribute to fund a PfAD if they do not already have sufficient assets to cover it. This creates a buffer for the plan by requiring contributions beyond the minimum estimated to pay pensions and expenses.

DB PfAD as at December 31, 2019	
PfAD	**Number of Plans**
5% to 6.5%	14
6.5 to 8.35%	11
8.35%	74
Over 8.35%	1
Total	100

As shown in this table, most DB plans that conducted an actuarial valuation as at December 31, 2019 reported a PfAD of 8.35 per cent since their investment allocation to assets other than fixed income was 30 per cent or more. Given the long bond rate in December 2019, plans with such an asset mix will have a PfAD of 8.35 per cent based on the formula set out in the legislation. One plan administrator chose to include an additional allowance for conservatism and hence will fund a PfAD over 8.35 per cent, according to their recent actuarial valuation report.

With respect to TB plans, the average PfAD rose to 24 per cent based on reports filed in 2020. As noted above, funding relief has been provided. Trustees of TB plans may elect an exemption from the requirement to fund the PfAD on normal cost for a period starting on a selected review date within December 31, 2019 to December 30, 2022 inclusive, and ending on the day before the following review date per Order in Council 649/2020.

On average, the equity allocation for those plans climbed to 43 per cent. Discount rates fell on average due to lower expectations for real returns.

Average Target Benefit Assumptions					
Review Year	2015	2016	2017	2018	2019
Number of Valuation Reports Filed	15	19	17	8	22
Average PfAD	17%	19%	22%	22%	24%
Average Equity Allocation	49%	43%	40%	36%	43%
Average Going Concern Discount Rate	5.8%	5.7%	5.5%	5.8%	5.5%
Average Benchmark Discount Rate	5.6%	5.4%	5.0%	5.2%	4.7%

DISCOUNT RATE ASSUMPTIONS

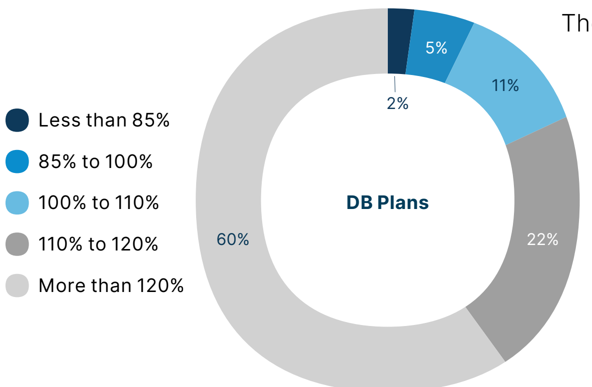
For the actuarial valuation reports, the discount rate was usually developed with a building block approach, summing up items that affect long-term investment return expectations. The table below outlines the average rates used to develop the valuation interest rates, as reported to the Superintendent in the most recently filed Actuarial Information Summaries reporting review dates in 2017-2020 for the benefit formula plans.

Development of Average Discount Rate (%)

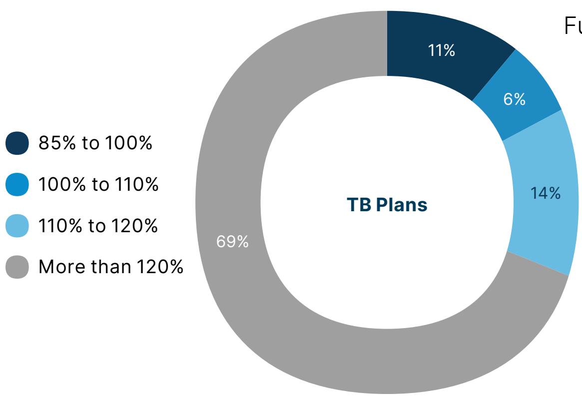
	Defined Benefit Plans	Target Benefit Plans
Best Estimate Assumed Rate of Inflation	1.97	1.96
Expected Long-term Real Return on Invested Assets	3.07	3.71
Non-investment Expenses	-0.16	-0.20
Total Investment Expense (Passive and Active)	-0.28	-0.38
Returns for Active Management	0.14	0.22
Returns for Rebalancing and Diversification	0.16	0.27
Margin for Adverse Deviation	-0.13	-0.03
Valuation Interest Rate (Net of All Expenses)	4.81	5.55
Valuation Interest Rate (Net of Investment Expenses)	4.97	5.75
Gross Valuation Interest Rate	5.25	6.13

Now that DB plans must hold an explicit PfAD (following PBSR amendments set out in Order In Council No. 649), only eight of the 103 defined benefit plans filing reports with review dates on or after December 31, 2019 included an additional margin in the discount rate. This is down from 93 per cent of DB plans filing reports with 2015-2018 review dates. Since the legislation already had required that TB plans hold a PfAD, most have always omitted a margin from their discount rate. Five TB plans, 23 per cent of those filing reports, included such a margin, compared with 24 per cent in the prior analysis period.

DISTRIBUTION OF ESTIMATED GOING CONCERN FUNDED RATIOS AS AT DECEMBER 31, 2020

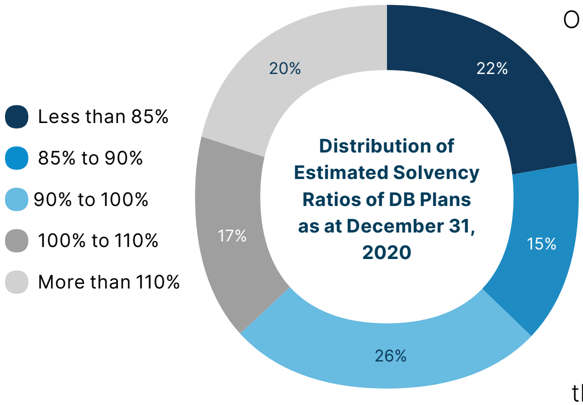


The following analysis is based on the projected[8] funding position of all benefit formula plans at the end of 2020. The figures do not include public sector plans.



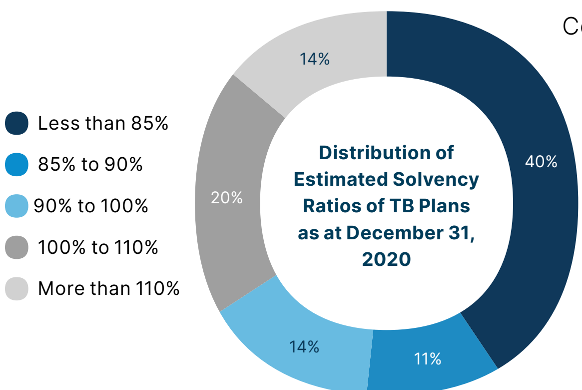
Funded status on a going concern basis improved in 2020 with only seven per cent of DB plans and 11 per cent of TB plans less than fully funded by the end of the year.

8 Based on the actual funding position if a valuation report at the indicated dates was filed.



Our projections estimate that 78 per cent of DB plans were at least 85 per cent funded on a solvency basis at the end of the year and 37 per cent were fully funded on a solvency basis. Solvency deficiency payments are now required only when a DB plan has a solvency ratio below 85 per cent. Hence, solvency special payments will be required for approximately 22 per cent of DB plans registered in B.C. after December 31, 2019 as a result of the change in solvency funding requirements once they file an updated actuarial valuation report.

This is similar to other Canadian pension plans. According to projections[9] by the Financial Services Regulatory Authority of Ontario ("FSRA"), 45 per cent of Ontario-registered plans were projected to be fully funded on a solvency basis as at December 31, 2020 and 87 per cent were projected to end the year with a solvency ratio of at least 85 per cent.



Compared with DB plans, a larger proportion of TB plans has a low solvency ratio, with 40 per cent of TB plans projected to have a solvency ratio below 85 per cent. Fewer TB plans had a funded ratio in the range of 85-100 per cent. On the other hand, the proportion of well-funded plans was similar to that of DB plans, since 34 per cent of TB plans were fully funded based on projected solvency liabilities. While TB plans are not required to fund on a solvency basis, one conclusion from the Joint Expert Panel on Pension Standards' report *Pension Reform in Alberta and B.C.* is that the solvency funded position is an important indicator of the financial health of a plan. In particular, the settlement value becomes more relevant as plans become more mature with a lower ratio of active to inactive members. For a plan's beneficiaries and other stakeholders, the solvency funded status provides useful information.

9 Financial Services Regulatory Authority of Ontario, *Quarterly update on Estimated Solvency Funded Status of Defined Benefit Pension Plans in Ontario*, December 31, 2020.

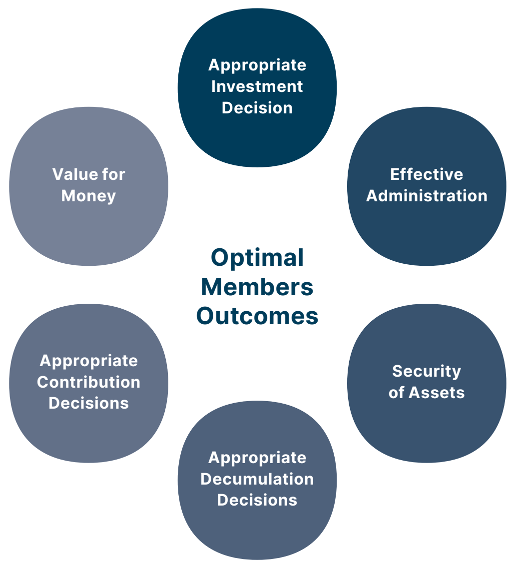
The tables below show the aggregate assets and liabilities, for DB and TB plans combined, as projected by BCFSA to December 31, 2019 and December 31, 2020. They exclude data from the four public sector plans.

Aggregate Funded Ratio as at December 31, 2020 ($Million)		
2020	Going Concern	Solvency
Total Assets	41,702	41,902
Total Liabilities	32,406	43,569
Aggregate Funding Balance	9,296	-1,667
Total Funding Balance for Plans in Deficit	-144	-4,135
Total Funding Balance for Plans in Surplus	9,440	2,468
Aggregate Funding Ratio	129%	96%

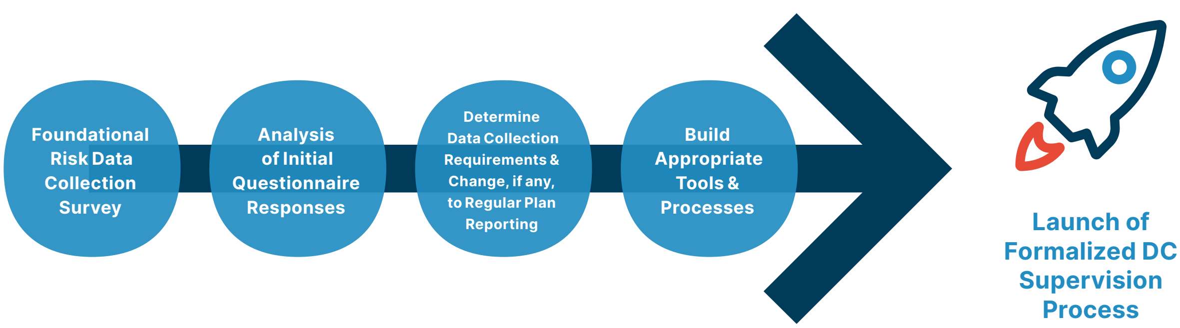
Aggregate Funded Ratio as at December 31, 2019 ($Million)		
2019	Going Concern	Solvency
Total Assets	38,916	39,693
Total Liabilities	33,858	40,219
Aggregate Funding Balance	5,058	-526
Total Funding Balance for Plans in Deficit	-261	-3,386
Total Funding Balance for Plans in Surplus	5,319	2,859
Aggregate Funding Ratio	115%	99%

6. Risk Based Supervision

BCFSA's pensions department implemented a risk-based framework applied to all plans that have benefit formula provisions. The framework helps Team Members identify inappropriate or unsafe practices and, as required, intervene with plan administrators to address the identified risks. BCFSA is expanding the current framework to include a more structured process for the risk-based supervision of DC plans. Fundamental key principles for DC risk-based supervision have been identified, and a new review process is under development. This process will focus on promoting the DC optimal member outcomes as well as managing the fundamental risks that threaten the achievement of those outcomes. Our journey toward building a more structured risk-based supervision process for DC plan will take several years.



BCFSA's Journey to Build a Risk-Based Supervision Framework for DC plans



BCFSA sent a survey to DC plan administrators in the fall of 2021 to help establish a baseline understanding of where B.C.'s DC plans stand in terms of managing the fundamental risks and stimulating optimal member outcomes. The survey results will inform the construction of our supervision process for DC plans and will be shared with DC plan administrators.

As we move along on our journey, BCFSA will examine what changes may be appropriate to the current regular reporting requirements for DC plans. Our aim is to strike a balance between the administrative burden to DC plan administrators and our office's receiving relevant and adequate data for an efficient and effective risk-based supervision. Before launching a more structured process for the risk-based supervision of DC plans, our journey will involve constructing supervision tools, analysis methods, and processes dependent on the type of data we collect.

Also informing the building of our DC supervision framework over the coming years will be learnings and insights gained from our participation in:

- The Canadian Association of Pension Supervisory Authorities ("CAPSA") Capital Accumulation Plan Guidelines Revision Industry Working Group;
- CAPSA Decumulation Committee; and
- The Technical Advisory Committee ("TAC") for the Review of Defined Contribution Plans which was jointly established by the Financial Services Regulatory Authority of Ontario ("FSRA") and the Office of the Superintendent of Financial Institutions.

The fundamental themes and principles outlined in the outcomes and recommendations by the TAC are consistent with the key principles for DC risk-based supervision that BCFSA has identified.

Risk-based supervision and regulation of plans is an iterative process. The more we learn from and work with the various pension plans within our jurisdiction – and other supervisory authorities across Canada – the better we understand what risks confront DC plans and their risk profiles as well as how to most appropriately supervise and guide DC plans in the mitigation of those risks.

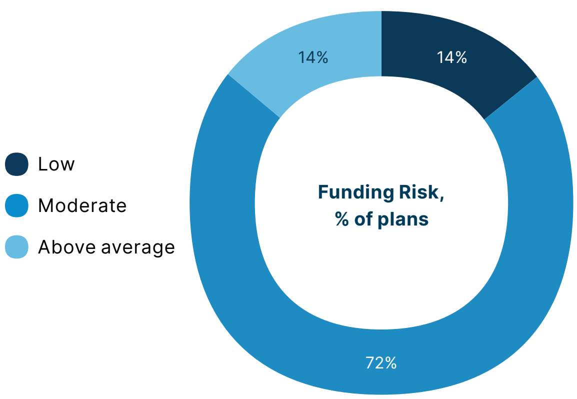
Results of Risk-based Supervision (DB and TB)

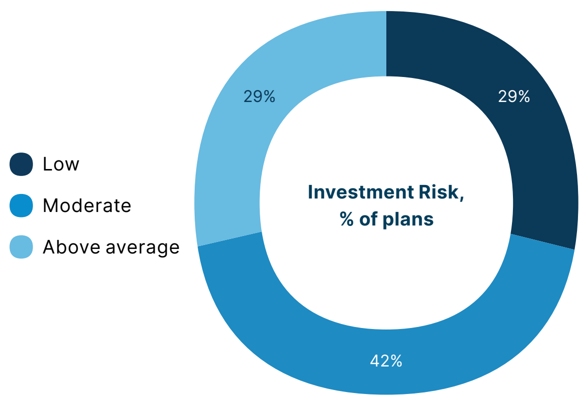
BCFSA's formalized risk-based regulatory process has primarily focused on benefit formula plans. A risk-based analysis of all plans that have benefit formula provisions is conducted annually. Under this framework, in 2020 the pensions department:

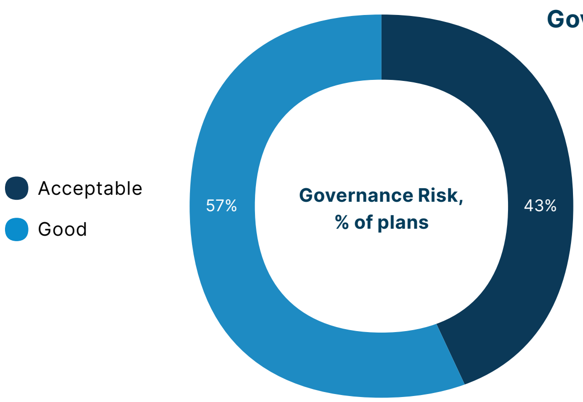
- Completed risk reviews of seven pension plans. These plans were selected for review based on their relative risk profile compared to their peers; and
- Conducted a more detailed examination of the pension plans of one organization.

Due to the pandemic, the examination was conducted virtually. The focus was on the plan administrator's governance and administrative practices. It resulted in significant revisions to the administrator's practices to ensure compliance with the legislation and provide adequate protection of member benefits.

The pie charts below demonstrate some of the conclusions of the risk reviews conducted in 2020. As a result of the reviews, two of the plans will be provided education and five will continue to be monitored.







Governance Risk

Good governance is seen as one of the most critical pieces in the effective administration of a pension plan. With the FSRA's permission, BCFSA will publish guidance based on the best practices they articulated in the Defined Benefit Multi-Employer Pension Plans – Leading Practices. Most of these leading practices are relevant to all pension plans.

In the current BCFSA Risk Framework, risk management practices and governance – specifically the quality and effectiveness of the plan's administration – are either categorized as poor, needs improvement, acceptable, or good. Of the seven plans reviewed in 2020, the governance of three was classified as acceptable.

Below are definitions of each category.

- Good: The plan has well-documented governance policy and processes as well as an effective monitoring system. Controls currently in place should be adequate to help administrators manage identified risks.
- Acceptable: The plan has documented governance policy and processes which meet the baseline developed and expected for all plans. There is no evidence of governance failure from previous activities.
- Needs Improvement: The plan's governance documents and processes do not meet the baseline expected from plans of such size. The processes currently in place may not be adequate to meet the risks identified. However, their management is willing to work with BCFSA to fill the gaps.
- Poor: The plan does not have appropriate governance documentation and processes in place to meet identified risks. There is evidence of significant governance gaps that have not been addressed. Given the risks identified, BCFSA needs to intervene to immediately close the governance gaps.

Poor governance may pose additional risks to members' benefits, while good governance could help to mitigate such risks.

Good governance encompasses a broad range of processes with a timeframe to fulfil each process. For example, including the following aspects to an education policy and regularly acting on them could promote informed decision making by those running a pension plan.

Comprehensive Orientation;

Succession Planning;

Ongoing Education on Pension Topics; and

Two-way Communication with Plan Membership.

7. BCFSA's Operational Priorities

BCFSA released its 2021/2022 Regulatory Roadmap, which lays out the organization's regulatory guidance priorities for the next three fiscal years. The Roadmap seeks to increase transparency to stakeholders and provide regulated entities with advanced notice to plan resources. The Regulatory Roadmap is available in PDF and spreadsheet format to allow sorting by sub-sector (e.g., insurance, trust, credit union, pensions, mortgage broker), type of regulatory guidance, timing, and action required by the regulated entity.

The goals of the pensions department as set out in the Regulatory Roadmap include publishing:

- An updated version of the Risk-based Supervision Framework for Pension Plans;
- An explanation of upcoming changes to the Annual Information Returns to provide more data on the type of benefit accrual of active members;
- A Regulatory Statement clarifying disclosure requirements with respect to member communications; and
- A guideline on climate risk. Climate change continues to impact financial institutions' operations. Factors pertaining to how to appropriately incorporate and provide oversight of this issue should be considered.

STAKEHOLDER ENGAGEMENT

One of BCFSA's priorities is stakeholder engagement.

To effectively and efficiently regulate, BCFSA engages with regulated entities and individuals to understand their views, challenges, and opportunities as well as to help identify potential trends to be addressed.

As well, BCFSA engages with other regulators to understand best practices and look for opportunities to harmonize regulation where possible.

Website

BCFSA launched a new website, redesigned to benefit consumers by making information easier to find and access. The website features different resources for industry professionals and members of the public. You can also access BCFSA's e-filing system, forms, advisories, regulatory statements, and responses to frequently asked questions.

In 2020, BCFSA published six Regulatory Statements related to pension plans. Topics included:

- Plan Termination Requirements;
- Legislative Amendments;
- Covid-19 Frequently Asked Questions and Relief Measures; and
- Commuted Value Calculations.

Bulletins published on the website are now called Regulatory Statements to harmonize terminology across departments of BCFSA.

Provision for Adverse Deviation Industry Working Group

In 2019, the Superintendent of Pensions established an industry working group ("Working Group"), which includes employees from the B.C. and Alberta Superintendents of Pensions and the Financial and Corporate Sector Policy Branch of the Government of B.C. as well as individuals with technical pension expertise and stakeholder representatives. Their mandate is to explore changes to the prescribed calculation method of PfADs for TB plans in B.C. and develop recommendations that may result in legislative changes.

The method for calculating PfADs for TB pension plans differs from that for DB plans. As shown in the Statistics section, PfADs are higher for TB plans than for DB plans in the current economic environment. Certain stakeholders argue that the result can be onerous contribution amounts that may be larger than the contribution levels that have been negotiated for a plan. Recommendations to long-term changes to the prescribed calculation method of PfADs is a process that requires multiple stages of collaboration to align government objectives with considerations for practical application and stakeholder input.

The Working Group recommended allowing a temporary exemption from PfAD funding pertaining to valuations with review dates from December 31, 2019 to December 30, 2022. The recommendation was reflected in legislative changes that became effective in December 2020 as set out in Order in Council 649/2020. This temporary measure provides interim funding relief for TB plans as the Working Group seeks to fulfil its mandate to make recommendations for long-term changes.

Public Forums

The Deputy Superintendent of Pensions spoke at the following industry events in 2020:

- PBLI Essential Tasks of Pension and Benefit Plan Trustees;
- Canadian Bar Association Webinar on Cybersecurity;
- ACPM Regulators' Roundtable;
- McCarthy Tetrault Client Seminar; and
- Northwinds Institute – Regulators' Roundtable.

Due to the pandemic, these presentations were conducted virtually. Additionally, at a conference organized by the Shareholder Association for Research and Education, a Senior Risk Analyst spoke about legislation relevant to environmental, social, and governance issues as they pertain to pension fund investments.

Further external engagement takes place during committees and topical consultations. For instance, pensions department managers meet monthly with B.C. members of ACPM. Furthermore, the BC Law Institute's Pension Division Review Project Committee included participants from BCFSA. The Information Security Guideline was drafted in consultation with industry stakeholders.

Ongoing engagement with industry stakeholders and the public remains an integral part of BCFSA's strategic plan.

To advance that goal, BCFSA appointed a VP of Stakeholder Engagement who develops and implements a stakeholder engagement framework focused on building relationships to increase understanding of BCFSA's services, priorities, and corporate operations.

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BCFSA Pension Regulatory Statements are found here:

https://www.bcfsa.ca/industry-resources/pension-resources/pension-regulatory-information/pension-regulatory-statements

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