Treasury Board of Canada Secretariat
Secrétariat du Conseil du Trésor du Canada

Canada

Report on the Public Service Pension Plan

for the fiscal year ended March 31, 2017

ANNUAL REPORT

Catalogue No. BT1-13E-PDF
ISSN 2291-4285

This document is available on the Government of Canada website at www.canada.ca

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Her Excellency the Right Honourable Julie Payette, C.C., C.M.M., C.O.M., C.Q., C.D.
Governor General of Canada

Excellency:

I have the honour to submit to Your Excellency the Report on the Public Service Pension Plan for the Fiscal Year Ended March 31, 2017.

Respectfully submitted,

Original signed by

The Honourable Scott Brison, P.C., M.P.
President of the Treasury Board

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Message from the President of the Treasury Board

The Honourable Scott Brison
President of the Treasury Board

The Report on the Public Service Pension Plan for the Fiscal Year Ended March 31, 2017 provides plan members, parliamentarians, and the public with insight into how the Government of Canada managed this plan in the last fiscal year. I hope that you will find it informative.

In fiscal year 2016 to 2017, employee pension contribution rates were increased, and we reached the targeted employer employee cost sharing ratio of 50:50 by the end of 2017. Achieving this target took 5 years, and it ensures a more equitable sharing of the cost of the pension plan between the employer and plan members.

A healthy pension plan is a strong incentive for those contemplating a career in the public service and plays an important part in retaining our innovative and high-performing employees. We will continue to help ensure that the public service pension plan provides fair, appropriate and affordable benefits to plan members, and that it remains sustainable.

Thank you to our public servants for all of their efforts to deliver results for Canadians.

Original signed by

The Honourable Scott Brison, P.C., M.P.
President of the Treasury Board

Message from the Chief Human Resources Officer

It is my pleasure to present the Report on the Public Service Pension Plan for the Fiscal Year Ended March 31, 2017.

My office, which is within the Treasury Board of Canada Secretariat, provides the Treasury Board with strategic advice and interpretation related to the management of the public service pension plan. We also liaise with pension stakeholders, communicate timely information to plan members, and prepare this annual report.

I am proud to highlight the progress we have made over the past fiscal year on issues related to the public service pension plan. We have continued work to address the 2014 Auditor General of Canada's performance audit of the public sector pension plans. Building on the previous year's benchmarking of pension governance practices, in 2016 we conducted an in-depth governance review and advanced a funding policy proposal, in collaboration with the Royal Canadian Mounted Police and the Department of National Defence. The governance review has resulted in recommendations to ensure sound governance in all areas of the plans. The funding policy provides guidance to help ensure that the plan accumulates sufficient assets to meet the cost of pension benefits.

In addition, we amended certain regulations under the Public Service Superannuation Act. The amended regulations distinguish between public servants who began participating in the pension plan before 2013 and those who began participating on or after January 1, 2013. They also provide direction concerning the application of deductions, benefits, transfer values and survivor benefits.

Original signed by

Anne Marie Smart
Chief Human Resources Officer
Treasury Board of Canada Secretariat

Introduction to the public service pension plan

The public service pension plan is a defined benefit pension plan that is funded by contributions from members and the Government of Canada. The pension plan serves 595,850 active and retired members, including survivors and deferred annuitants. The plan is the largest of its kind in Canada in terms of total membership, covering nearly all employees of the Government of Canada. Members include employees of departments and agencies in the federal public service, certain Crown corporations and the territorial governments. The Government of Canada has a legal obligation to pay pension benefits. The public service pension plan has been governed by the Public Service Superannuation Act since 1954.

Public service pension plan: year at a glance

297,757
Active plan members

$7.2 billion
Pension benefits paid

298,093
Retired plan members, survivors and deferred annuitants

$4.5 billion
Employer and plan member contributions

12.8%
Net rate of return

$37,785
Average annual pension paid

$98.5 billion
Net value of assets held by the Public Sector Pension Investment Board

Highlights for fiscal year ended March 31, 2017

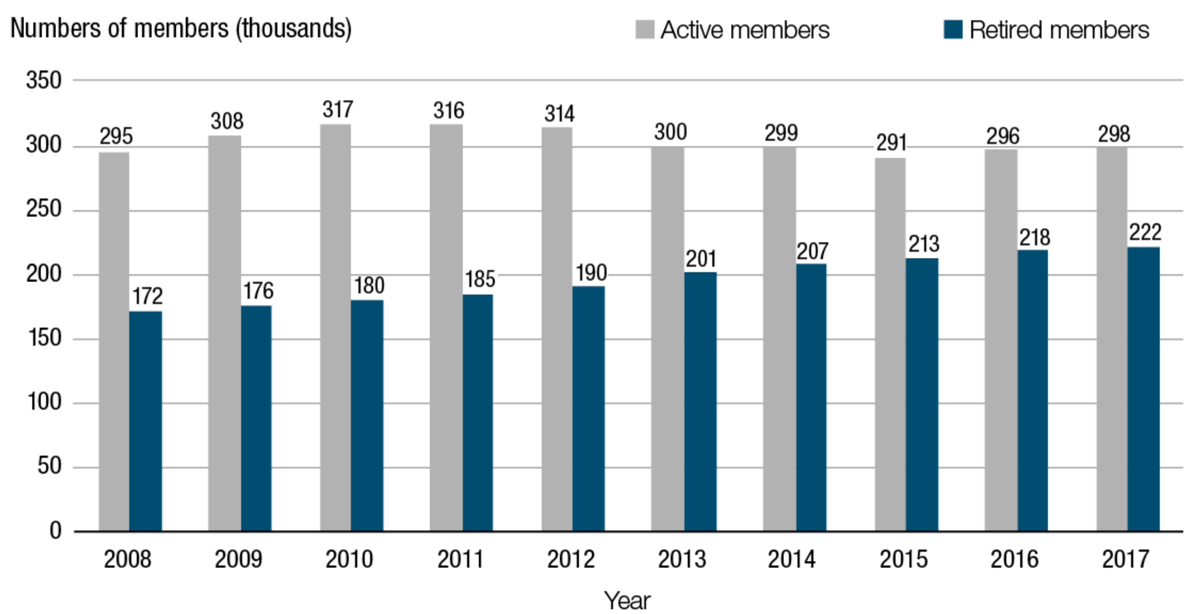
- To ensure the continued sustainability of the public service pension plan, employee pension contribution rates continued to increase toward an employer-employee cost-sharing ratio of 50:50. The targeted ratio was reached by the end of 2017.
- Significant progress was made in responding to the 2014 Auditor General of Canada's performance audit of the public sector pension plans. Specifically, the Treasury Board of Canada Secretariat, in collaboration with the Royal Canadian Mounted Police and the Department of National Defence, conducted an in-depth governance review and advanced a funding policy proposal. The governance review resulted in recommendations to help ensure sound governance in all areas of the plans. The funding policy provides guidance to make sure that the plan accumulates sufficient assets to meet the cost of pension benefits.
- The Pension Transformation Administration Initiative concluded in January 2017. This 10-year project brought the Government of Canada's 4 major pension plans together using a common pension administration solution.
- In 2016, the Public Service Superannuation Regulations were amended to align with the Public Service Superannuation Act. The amended regulations distinguish between public servants who began participating in the pension plan before 2013 and those who began participating on or after January 1, 2013. They also provide direction concerning the application of deductions, benefits, transfer values and survivor benefits.

Demographic highlights

Active members and retired members over last 10 years

Figure 1 shows the number of active members relative to the number of retired members over the last 10 years.

Figure 1. Active members and retired members from 2008 to 2017 (fiscal year ended March 31)



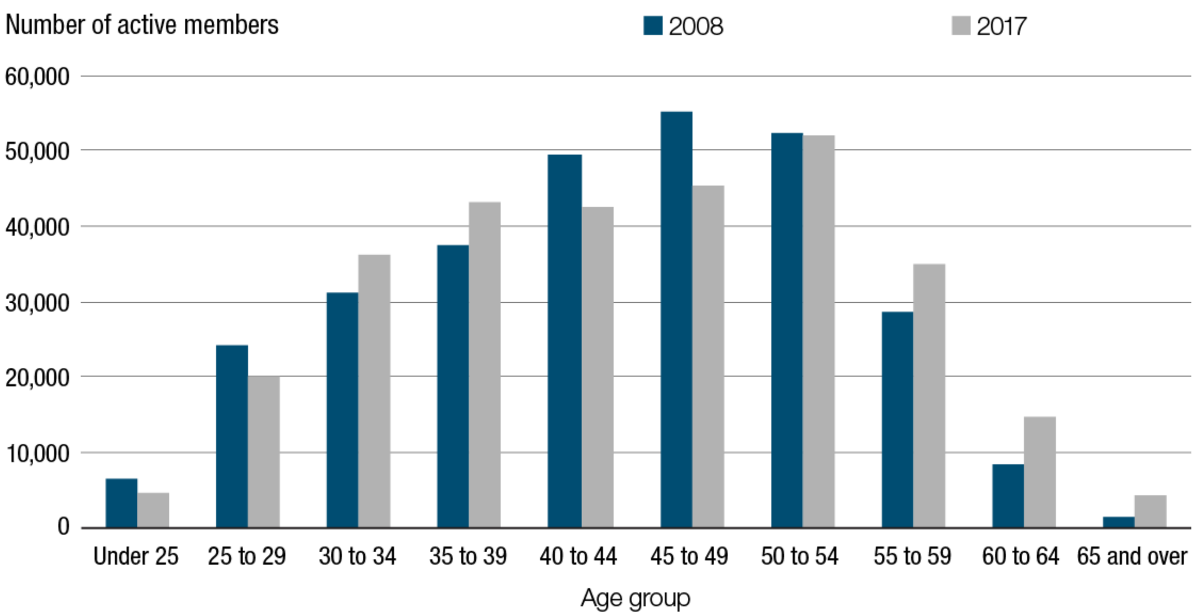
The 10-year annual average growth rate for active members was 0.5% (0.7% in 2016) compared with 2.8% for retired members (2.9% in 2016).[1]

1. The average annual growth rate throughout this report is the compounded growth rate or geometric mean, unless otherwise specified.

Active members by age group (2008 and 2017)

Figure 2 shows the number of active members by age group in 2017 relative to the number of active members in 2008.

Figure 2. Active members by age group in 2008 and 2017 (fiscal year ended March 31)



Note: The breakdown of members by age group was estimated by applying a pro rata methodology using data from the Actuarial Report on the Pension Plan for the Public Service of Canada. Data for 2008 was obtained from the actuarial report as at March 31, 2005, and data for 2017 was obtained from the actuarial report as at March 31, 2014.

Members by membership type (2008 and 2017)

Table 1 shows the breakdown of plan membership by membership type in 2008 and 2017.

Table 1. Comparison of membership type in 2008 and 2017 (fiscal year ended March 31)

Membership type	Number of members 2008	Number of members 2017
Active members	294,979	297,757
Retired members	171,651	221,673
Survivors	58,755	55,123
Deferred annuitants*	6,439	21,297
Total	**531,824**	**595,850**

* The figure for 2008 represents the number of **new** deferred annuitants only; these are plan members who left the public service and opted for a deferred annuity during the previous fiscal year. The figure for 2017 represents the total number of deferred annuitants.

From 2008 to 2017, the ratio of active to retired members (including survivors and deferred annuitants) in the public service pension plan declined:

- Ratio in 2008: 1.2 active members to 1 retired member
- Ratio in 2017: 1.0 active member to 1 retired member

From 2008 to 2017:

- number of active members increased by 0.9%
- number of retired members increased by 29.1%
- number of survivors decreased by 6.2%

Financial overview

Contribution rates

Public service pension plan benefits are funded through compulsory contributions from the employer and plan members, as well as from investment earnings. To ensure the sustainability of the public service pension plan, employee pension contribution rates have been increasing toward an employer-employee cost-sharing ratio of 50:50. The targeted ratio was reached by the end of 2017.

Generally, if an employee was participating in the plan on or before December 31, 2012, the contribution rates for Group 1 (members with a normal retirement age of 60) are applied. If an employee began participating in the plan on or after January 1, 2013, contribution rates for Group 2 (members with a normal retirement age of 65) are applied.

As illustrated in Table 2, Group 2 plan members pay lower contribution rates than Group 1 members because they are eligible to receive a pension benefit 5 years later than Group 1 members. Since Group 2 members receive a benefit that has a lower overall cost, they pay less than those who are eligible for an unreduced pension at age 60.

Table 2. Employee contribution rates

	2017	2016
Members who were participating in the plan on or before December 31, 2012 (Group 1)		
On salary* up to the year's maximum pensionable earnings**	9.47%	9.05%
On salary over the year's maximum pensionable earnings	11.68 %	11.04 %
Members who began participating in the plan on or after January 1, 2013 (Group 2)		
On salary up to the year's maximum pensionable earnings	8.39%	7.86%
On salary over the year's maximum pensionable earnings	9.94%	9.39%

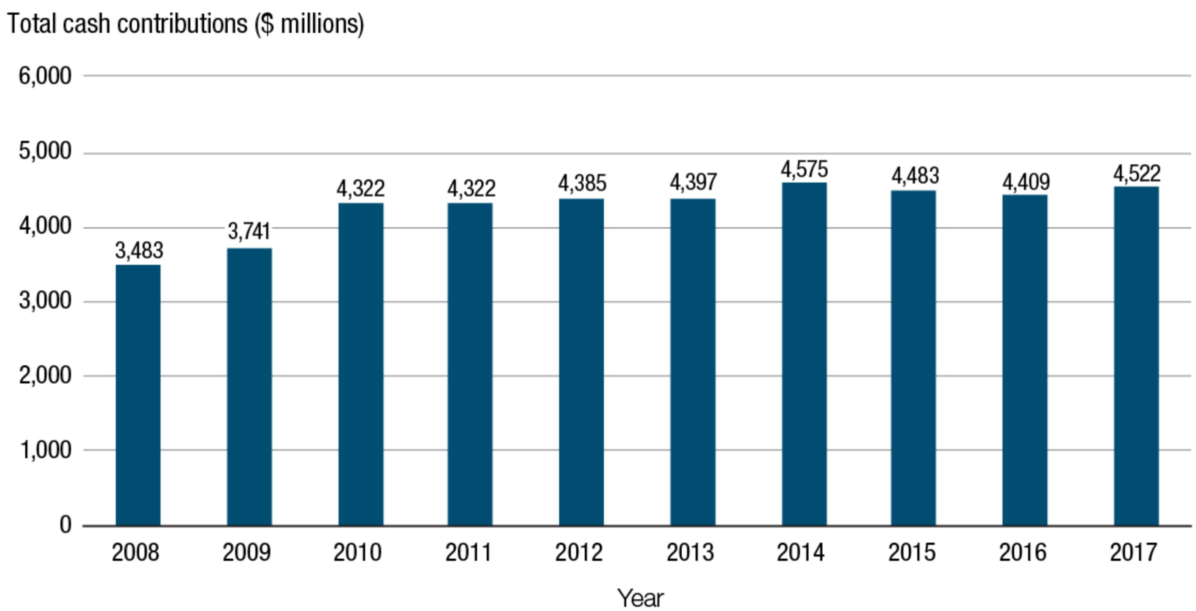
* For pension purposes, salary is the basic pay received for the performance of regular duties. It does not include overtime pay and most lump-sum payments.

** The year's maximum pensionable earnings in 2017 was $55,300; in 2016, it was $54,900.

Cash contributions

Figure 3 shows total cash contributions from both the employer and plan members for the last 10 years.

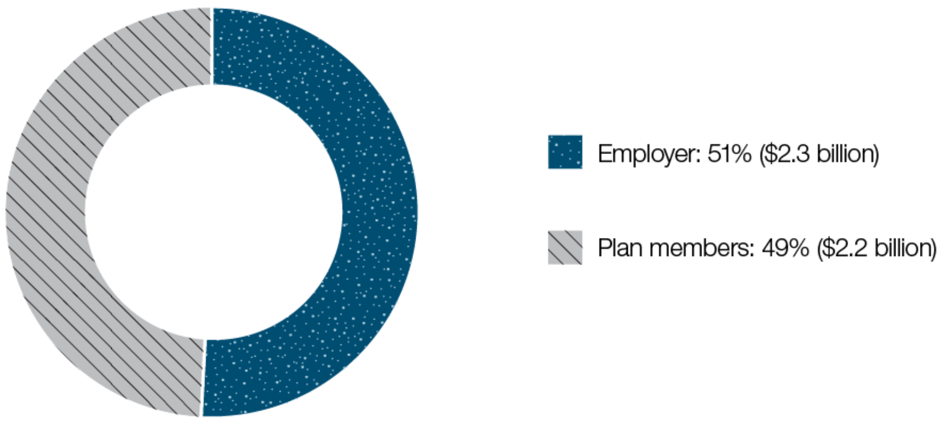
Figure 3. Total cash contributions from employer and plan members from 2008 to 2017 (fiscal year ended March 31)



The annual growth rate in cash contributions from both the employer and plan members over the past 10 years averaged 3.3%. The contributions do not include the year-end accrual adjustments, which are reported in the financial statements of this report.

Figure 4 shows the share of cash contributions by the employer and by plan members as at March 31, 2017.

Figure 4. Share of cash contributions by employer and by plan members (fiscal year ended March 31, 2017)



Cash contributions received in fiscal year ended March 31, 2017, totalled $4.5 billion ($4.4 billion in fiscal year ended March 31, 2016), excluding year-end accrual adjustments. The employer contributed $2.3 billion ($2.4 billion in fiscal year ended March 31, 2016), and plan members contributed $2.2 billion ($2.0 billion in fiscal year ended March 31, 2016).

As shown in Figure 4, the employer paid approximately 51% of total contributions in fiscal year ended March 31, 2017 (55% in fiscal year ended March 31, 2016); plan members paid approximately 49% (45% in fiscal year ended March 31, 2016). Cash contributions in Figure 4 include both current service and past service (for example, service buybacks, pension transfers).

Benefits

In fiscal year ended March 31, 2017, the public service pension plan paid out $7.2 billion in benefits, which represents an increase of $300 million over the previous year.

Benefits were paid to 276,796 retired members and survivors in fiscal year ended March 31, 2017 (279,744 in fiscal year ended March 31, 2016).

Of the 9,322 members who retired in fiscal year ended March 31, 2017:

- 6,821 were entitled to immediate annuities (7,047 in fiscal year ended March 31, 2016)
- 1,468 received annual allowances (1,572 in fiscal year ended March 31, 2016)

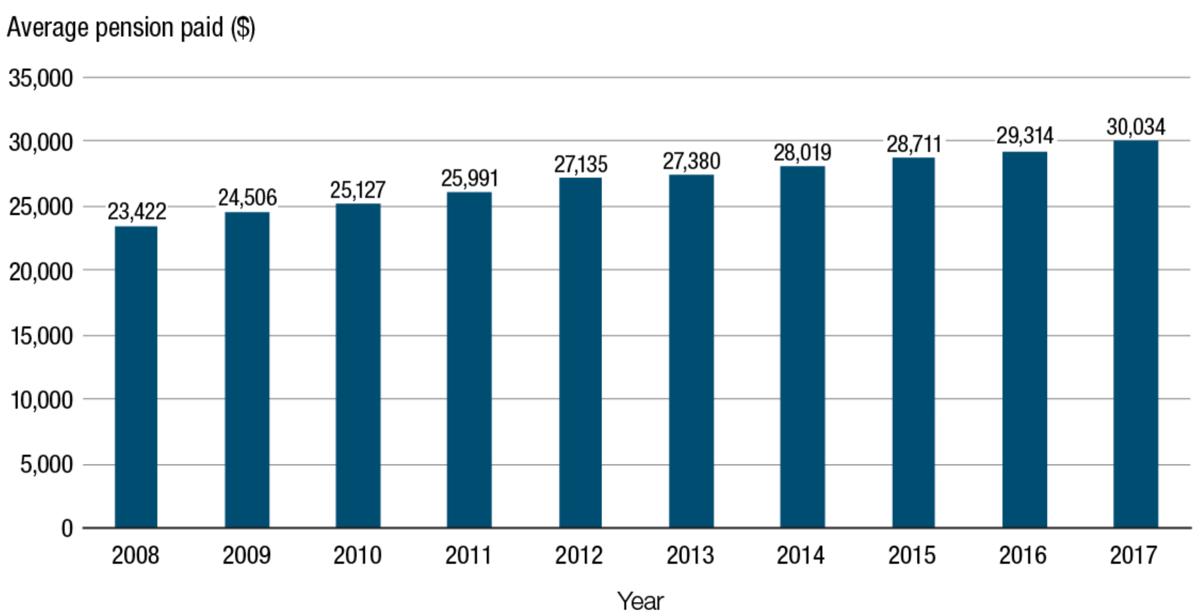
- 501 were eligible to receive disability retirement benefits (652 in fiscal year ended March 31, 2016)
- 532 were entitled to deferred annuities (489 in fiscal year ended March 31, 2016)

In fiscal year ended March 31, 2017, a total of 1,796 plan members left the public service before the age of 55 (1,978 in fiscal year ended March 31, 2016) and withdrew approximately $274 million ($347 million in fiscal year ended March 31, 2016) in lump-sum amounts (in other words, the present value of their future benefits), excluding return of contributions for non-vested members. These sums were transferred to other pension plans or to locked-in retirement vehicles.

The average annual pension for members who retired in fiscal year ended March 31, 2017, was $37,785, compared with $36,549 in fiscal year ended March 31, 2016. This represents an increase of 3.4%. The average pension paid to all retired members was $30,034 in fiscal year ended March 31, 2017 ($29,314 in fiscal year ended March 31, 2016), an increase of 2.5% over fiscal year ended March 31, 2016.

Figure 5 presents the average pension paid to retired members from 2008 to 2017.

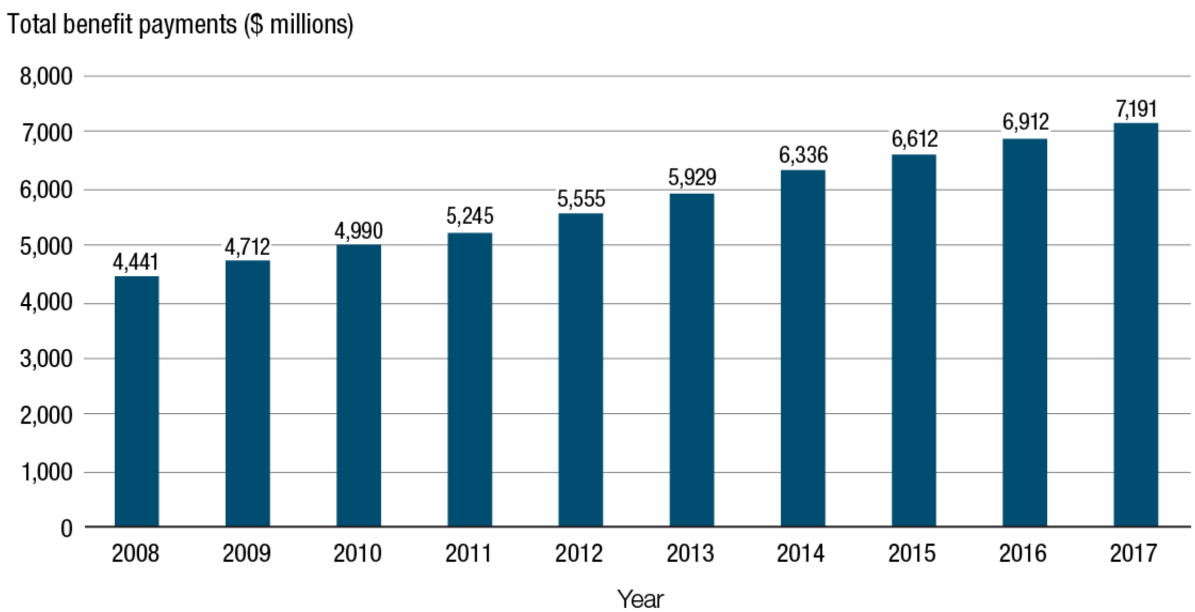
Figure 5. Average pension paid to retired members from 2008 to 2017 (fiscal year ended March 31)



Pensions under the public service pension plan are indexed annually to take into account the cost of living, which is based on increases in the Consumer Price Index. In 2017, the indexation rate was 1.3%, the same as in 2016.

Figure 6 presents the total amount of benefits paid to plan members and survivors each year from 2008 to 2017.

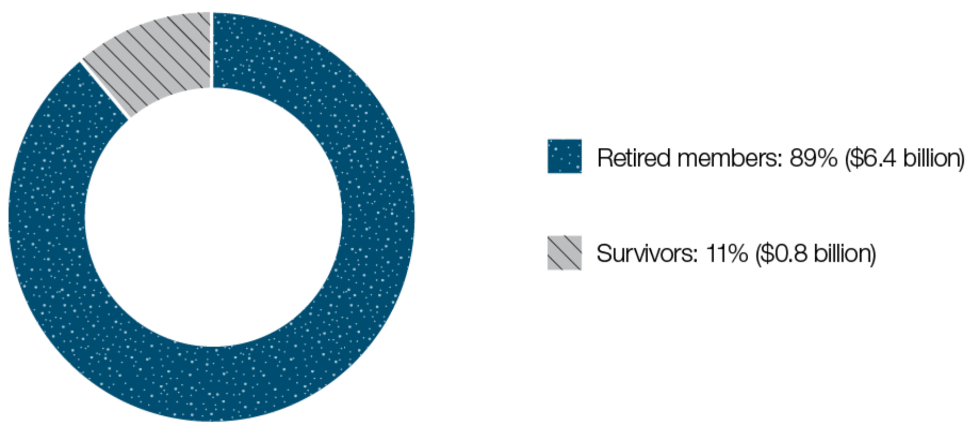
Figure 6. Total benefit payments to plan members and survivors from 2008 to 2017 (fiscal year ended March 31)



Benefit payments have increased on average by 5.6% annually over the past 10 years. Further information can be found in the “Summary of plan benefits” section.

Figure 7 presents the share of benefits paid to retired members and to survivors.

Figure 7. Share of benefit payments to retired members and to survivors (fiscal year ended March 31, 2017)



Benefits paid to retired members in fiscal year ended March 31, 2017, totalled $6.4 billion ($6.1 billion in fiscal year ended March 31, 2016), which include benefits paid to plan members who retired on grounds of disability. This amount represents 89% of fiscal year ended March 31, 2017, pension payments. In fiscal year ended March 31, 2017, benefits paid to survivors totalled $0.8 billion ($0.8 billion in fiscal year ended March 31, 2016), which represents 11% of pension payments.

Investment returns

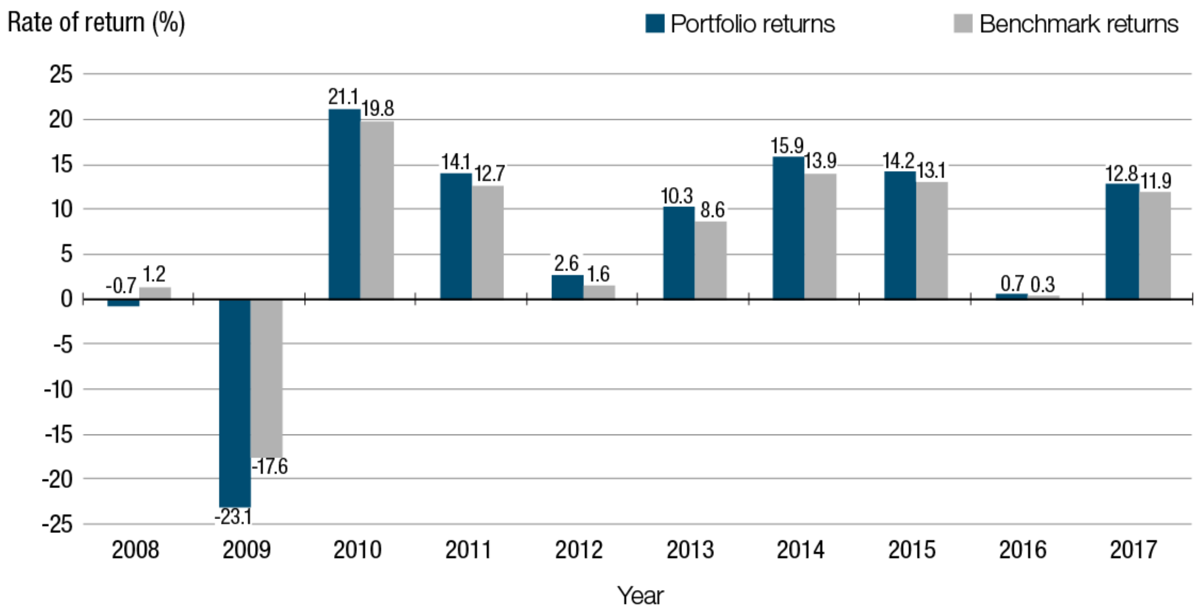
Rate of return

For fiscal year ended March 31, 2017, the Public Sector Pension Investment Board reported a net rate of return of 12.8% (0.7% in fiscal year ended March 31, 2016), compared with the benchmark rate of return of 11.9% (0.3% in fiscal year ended March 31, 2016).

Over the past 10 years, the Public Sector Pension Investment Board has recorded a net annualized rate of return of 6.0%, compared with the long-term return objective of 5.8% over the same period.

Figure 8 shows the rate of return on the assets held by the Public Sector Pension Investment Board against its comparative benchmark.

Figure 8. Rate of return on assets held by the Public Sector Pension Investment Board from 2008 to 2017 (fiscal year ended March 31)



Additional information concerning the rate of return on assets held by the Public Sector Pension Investment Board and comparative benchmarks is available on the PSP Investments website.[i]

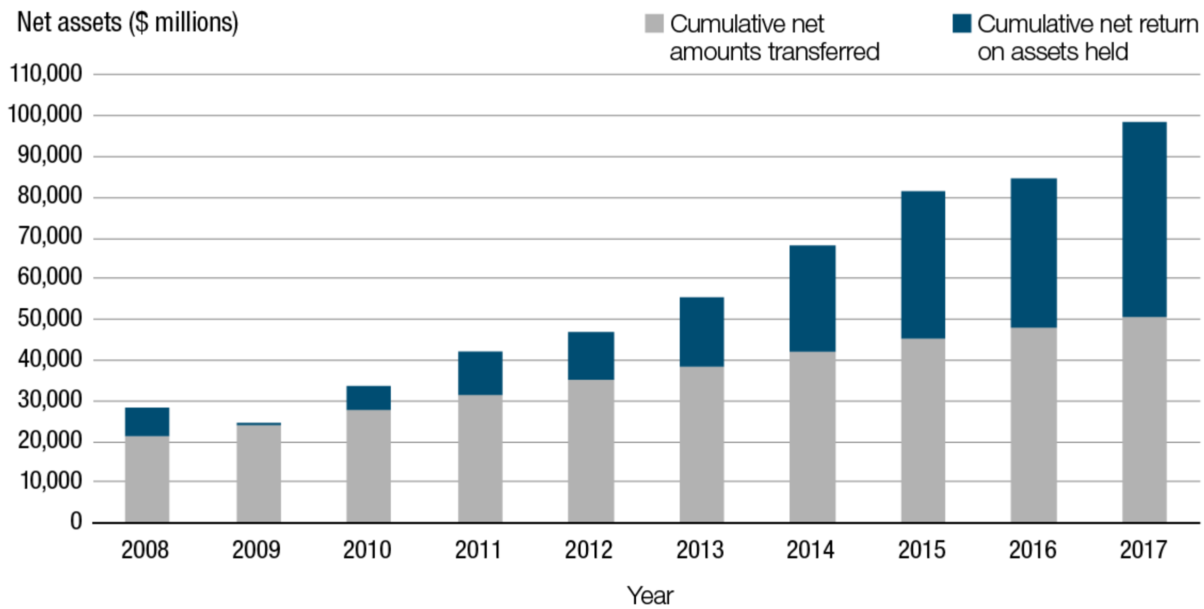
Net value of assets

In 2017, the net value of assets reached $98.5 billion, which can be broken down as follows:

- $50.7 billion (51.5%): the cumulative net amount transferred from the Government of Canada to the Public Sector Pension Investment Board since its inception in 2000
- $47.8 billion (48.5%): the cumulative net return on assets held

Figure 9 presents the net value of public service pension plan assets held by the Public Sector Pension Investment Board each year over the last 10 years for years ended March 31.

Figure 9. Net assets held by the Public Sector Pension Investment Board from 2008 to 2017 (fiscal year ended March 31)



Administrative expenses

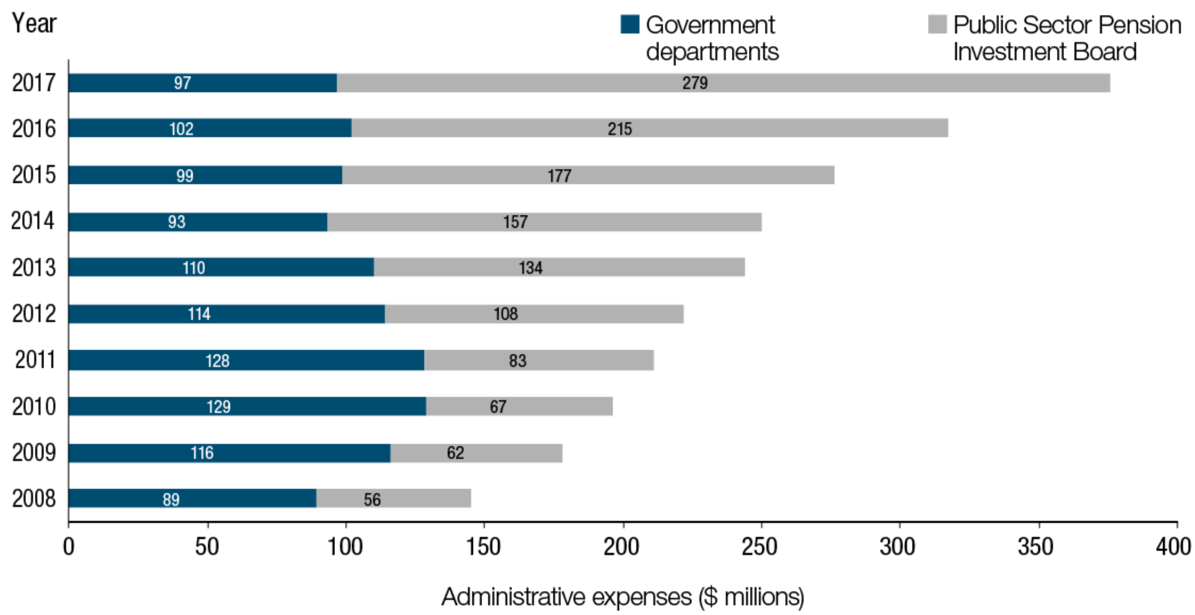
The legislation provides for the pension-related administrative expenses of certain government organizations to be charged to the public service pension plan:

- Treasury Board of Canada Secretariat
- Public Services and Procurement Canada
- Health Canada
- Office of the Chief Actuary

Administrative expenses also include Public Sector Pension Investment Board operating expenses.

Figure 10 presents the administrative expenses charged to the public service pension plan each year from 2008 to 2017, as shared between government departments and the Public Sector Pension Investment Board.

Figure 10. Administrative expenses from 2008 to 2017 (fiscal year ended March 31)



The increase in administrative expenses for government departments from 2008 to 2010 was due in large part to the capital expenditure requirements related to the pension modernization project that started in fiscal year ended March 31, 2008. This project was completed in January 2013.

The decrease in administrative expenses for government departments from 2011 to 2014 was due to the completion of the centralization of pension services that started in fiscal year ended March 31, 2007.

The increase in administrative expenses in 2015 and 2016 was due to system maintenance costs.

The increase in the Public Sector Pension Investment Board's 2016 and 2017 operating expenses stemmed primarily from the growth in the assets under its management. Specifically, the Board strengthened its internal investment management capabilities, increased staffing, opened international offices and upgraded several systems.

In fiscal year ended March 31, 2017, the Public Sector Pension Investment Board's cost ratio increased to 70.5 cents per $100 of average net investment assets, up from 63.0 cents per $100 in fiscal year ended March 31, 2016. This increase is due to the operating expenses noted above, as well as increased management fees and transaction costs related to private market investment activities. Asset management expenses include management fees paid to external asset managers and transaction costs.

Refer to Note 20 of the financial statements for more details on the administrative expenses.

Pension objective

The objective of the Public Service Superannuation Act and related statutes is to provide a source of lifetime retirement income for retired and disabled public service pension plan members. Upon a plan member's death, the pension plan provides an income for eligible survivors and dependants. Pension benefits are based on a plan member's salary and public service pensionable service.

History of the public service pension plan

1870	The first act entitling certain public service employees to retirement income came into effect.
1954	The public service pension plan took many forms until the Public Service Superannuation Act came into effect on January 1, 1954. It broadened pension coverage to include nearly all public service employees.
1966	The Canada Pension Plan and the Québec Pension Plan were introduced, leading to major amendments to the Public Service Superannuation Act to coordinate public service pension plan contribution rates and benefits with those of the 2 new plans.
1999 to 2000	Amendments were made to the Public Service Superannuation Act, including changes aimed at improving plan management and introducing the Public Sector Pension Investment Board Act. This act provided for the creation of the Public Sector Pension Investment Board in April 2000. Before that, employer and member contributions to the plan were credited to an account that was part of the Public Accounts of Canada and were not invested in capital markets (for example, in bonds and stocks). In April 2000, the government began transferring to the Public Sector Pension Investment Board amounts equal to pension contributions net of benefit payments and departmental administrative expenses for the plan.
2006	The Public Service Superannuation Act was amended to lower the factor used in the Canada Pension Plan or Québec Pension Plan coordination formula to calculate a pension at age 65. This change increased public service pension benefits for members reaching age 65 in 2008 or later.
2012	Further amendments were made to the Public Service Superannuation Act to allow pension plan member contribution rates to be gradually increased to reach a 50:50 employer-employee cost-sharing ratio by the end of 2017. Also, the age of eligibility for an unreduced pension benefit was increased from 60 to 65 for new public service employees who began participating in the plan on or after January 1, 2013.
2016	The Public Service Superannuation Regulations were amended to further align the public service pension plan with other public sector pension plans and with private sector plans. The cost to reinstate transfer value and pension transfer agreement service was amended to be based on actuarial value. Also, the time period to make payments for reinstated transfer value or pension transfer agreement service and to undergo a medical examination for service buybacks was extended.

Roles and responsibilities

Overall responsibility for the public service pension plan lies with the President of the Treasury Board, supported by the Treasury Board of Canada Secretariat, as the administrative arm of the

Treasury Board, and by Public Services and Procurement Canada, as the day-to-day administrator of the plan.

The President's responsibilities include ensuring that the plan is adequately funded to fully cover member benefits. To determine the plan's funding requirements, the President enlists the help of the Office of the Chief Actuary, to provide advice and a range of actuarial services, as well as the Public Sector Pension Investment Board, to manage the pension assets for the public sector pension plans. The Public Service Pension Advisory Committee advises the President on the administration, design and funding of the benefits and on other pension-related matters referred to it by the President.

The roles and responsibilities of each organization are as follows.

Treasury Board of Canada Secretariat

The Secretariat supports the Treasury Board's role as the employer of the public service by developing policy for the funding, design and governance of the plan and of other retirement programs and arrangements. In addition, the Secretariat provides strategic direction, program advice and interpretation; develops legislation; liaises with stakeholders; communicates with plan members; and prepares the annual Report on the Public Service Pension Plan.

Public Services and Procurement Canada

Public Services and Procurement Canada is responsible for the day-to-day administration of the public service pension plan. This includes developing and maintaining the public service pension systems, books of accounts, records, and internal controls, as well as preparing the account transaction statements for reporting in the Public Accounts of Canada.

In addition, Public Services and Procurement Canada processes payments and carries out all accounting and financial administrative functions. Through its pay and pension services, Public Services and Procurement Canada's Pay and Pension Services for Government Employees[ii] ensures that federal government employees receive their pay and that retired pension plan members receive their pension benefits payments. In total, this involves payments of approximately $27 billion annually.

Public Sector Pension Investment Board

The Public Sector Pension Investment Board is a non-agent Crown corporation established under the Public Sector Pension Investment Board Act. It is governed by an 11-member board of directors and reports to the President of the Treasury Board.

In accordance with its mandate, the Public Sector Pension Investment Board's statutory objectives are to manage the funds transferred to it in the best interests of the contributors and beneficiaries, and to invest its assets with a view to achieving a maximum rate of return without undue risk of loss, having regard to the funding, policies and requirements of the pension plan.

Since April 1, 2000, the Public Sector Pension Investment Board has been investing, on behalf of the public sector pension plans, the amounts transferred to it by the Government of Canada. The relevant financial results of the Public Sector Pension Investment Board are included in the financial statements in this report.

Office of the Chief Actuary

The Office of the Chief Actuary,[iii] an independent unit within the Office of the Superintendent of Financial Institutions Canada, provides a range of actuarial services and advice to the Government of Canada on the public service pension plan. The Office of the Chief Actuary conducts a statutory valuation of the pension plan for funding purposes at least every 3 years, and conducts a valuation for accounting purposes every year. Further details can be found in the "Financial statements content overview" section.

Public Service Pension Advisory Committee

The Public Service Pension Advisory Committee, established under the Public Service Superannuation Act, provides advice to the President of the Treasury Board on matters relating to the administration of the public service pension plan, the design of the benefit plan, and the funding of benefits.

The Committee has 13 members:

- 1 pensioner representative, appointed by the public servant pensioner association
- 6 employee representatives, appointed by the National Joint Council of the Public Service of Canada
- 6 members nominated by the President of the Treasury Board, traditionally chosen from the executive ranks of the public service

All members are appointed by the Governor in Council to hold office for a term not exceeding 3 years, and they are eligible for reappointment for one or more additional terms.

Summary of plan benefits

The following is an overview of the main benefits offered under the public service pension plan as at March 31, 2017. If there is a discrepancy between this information and information contained in the Public Service Superannuation Act,[iv] the Public Service Superannuation Regulations[v] or other applicable laws, the legislation prevails at all times.

Types of pension benefits

The benefits that pension plan members are entitled to when they leave the public service depend on their age and the number of years of pensionable service to their credit (see Tables 3 and 4).

Table 3. Members who were participating in the plan on or before December 31, 2012 (Group 1)

If a member is…	and leaves the public service with pensionable service of…	the member would be entitled to…
Age 60 or over	At least 2 years	An immediate annuity
Age 55 or over	At least 30 years	An immediate annuity
Age 50 up to age 60	At least 2 years	A deferred annuity payable at age 60 **or** An annual allowance payable as early as age 50
Under age 50	At least 2 years	A deferred annuity payable at age 60 **or** An annual allowance payable as early as age 50 **or** A transfer value
Under age 60	At least 2 years and retiring because of disability	An immediate annuity
Any age	Less than 2 years	A return of contributions with interest

Table 4. Members who were participating in the plan on or after January 1, 2013 (Group 2)

If a member is…	and leaves the public service with pensionable service of…	the member would be entitled to…
Age 65 or over	At least 2 years	An immediate annuity
Age 60 or over	At least 30 years	An immediate annuity
Age 55 up to age 65	At least 2 years	A deferred annuity payable at age 65 **or** An annual allowance payable as early as age 55
Under age 55	At least 2 years	A deferred annuity payable at age 65 **or** An annual allowance payable as early as age 55 **or** A transfer value
Under age 65	At least 2 years and retiring because of disability	An immediate annuity
Any age	Less than 2 years	A return of contributions with interest

Protection from inflation

Pensions under the public service pension plan are indexed annually to take into account the cost of living, which is based on increases in the Consumer Price Index. In 2017, the indexation rate was 1.3%, the same as in 2016.

Survivor benefits

If a member is vested (has at least 2 years of pensionable service) when he or she dies, the eligible survivor and children are entitled to the following:

- **Survivor benefit:** A monthly allowance equal to half of the member’s unreduced pension, payable immediately to the eligible survivor for the rest of the survivor’s life.
- **Child allowance:** A monthly allowance equal to 10% of the member’s unreduced pension (20% of the member’s unreduced pension if the member has no eligible survivor). The amount is payable until age 18, or until age 25 if the child is a full-time student. If there are more than 4 children, the maximum allowance payable would be equally split among all eligible children. The maximum allowance for all children is 40% of the member’s pension, or 80% if there are dependent children but no spouse eligible for a survivor benefit.
- **Supplementary death benefit:** A lump-sum benefit equal to twice the member’s annual salary, payable to the designated beneficiary or to the estate. Coverage decreases by 10% each year starting at age 66 to a minimum of $10,000 by age 75. If the member is still employed in

the public service after age 65, minimum coverage is the greater of $10,000 or one third of his or her annual salary.

If the member has no eligible survivor or children, the designated beneficiary of the supplementary death benefit or the estate will receive an amount equal to the greater of the return of contributions with interest or 5 years of pension payments less any payments already received.

If a member dies before he or she is vested (has completed 2 years of pensionable service), contributions with interest are refunded to any eligible survivor or children, or to the designated beneficiary or the estate if the member has no eligible survivors.

Communications with plan members

The Government of Canada recognizes that the public service pension plan is an integral part of the public service workforce recruitment, retention and renewal strategy, and it is committed to providing timely and accurate information about the plan to members. To fulfill this commitment, the government has focused on a number of initiatives designed to raise awareness and to educate plan members. These initiatives include providing tailored and personalized information through various publications; increasing outreach efforts; and expanding online information, via Canada.ca/pension-benefits.[vi]

Financial statements content overview

Financial and performance audits

The Office of the Auditor General of Canada audits federal government operations and provides Parliament with independent information, advice and assurance to help hold the government to account for its stewardship of public funds. The Office of the Auditor General of Canada is responsible for conducting performance audits and studies of federal departments and agencies. It conducts financial audits of the Public Accounts of Canada (the government's financial statements) and performs special examinations and annual financial audits of Crown corporations, including the Public Sector Pension Investment Board. With respect to the public service pension plan, the Office of the Auditor General of Canada acts as the independent auditor.

Actuarial valuation

Pursuant to the Public Pensions Reporting Act, the President of Treasury Board directs the Chief Actuary of Canada to conduct an actuarial valuation for funding purposes at least every 3 years. The purpose of the actuarial review is to determine the state of the pension account and pension fund, as well as to assist the President of the Treasury Board in making informed decisions regarding the financing of the government's pension obligations. The last funding valuation was conducted as at March 31, 2014.

In addition, the Office of the Chief Actuary performs an annual actuarial valuation for accounting purposes, which serves as the basis for determining the government's pension obligations and expenses reported in the Public Accounts of Canada and in the public service pension plan's financial statements included in this annual report. The economic assumptions used in the annual actuarial valuation represent management's best estimate.

Net assets available for benefits

The Statement of Financial Position shows that as at March 31, 2017, net assets were $99.9 billion compared with $86.2 billion last year. The net assets mainly consist of the assets managed by the Public Sector Pension Investment Board on behalf of the pension plan and contributions receivable for past service elections.

The Statement of Changes in Net Assets Available for Benefits shows that credits come from a number of different sources, including the following:

- contributions from pension plan members and employers
- income from investments
- transfers to the public service pension plan from other pension plans when employees leave an outside organization and join an employer covered under the Public Service Superannuation Act[vii]

Amounts are debited from the public service pension plan to cover the following:

- benefits
- administrative expenses
- transfers or refunds from the public service pension plan to other registered pension plans

Detailed information can be found in the financial statements.

Investment management

Contributions relating to service since April 1, 2000, are recorded in the Public Service Pension Fund in the Public Accounts of Canada. An amount equal to contributions net of benefit payments and government departments' administration expenses is transferred regularly to the Public Sector Pension Investment Board and is invested in capital markets.

The Public Sector Pension Investment Board's board of directors has established an investment policy with an expected real rate of return at least equal to the return assumption used to fund the plan, which is currently 4.0%. This rate is aligned with the assumption used in the most recently tabled actuarial valuation for funding purposes of the public sector pension plans (public service, Canadian Forces or Royal Canadian Mounted Police).

As noted in the Public Sector Pension Investment Board's 2017 Annual Report, the investments allocated to the public service pension plan during the year ended March 31, 2017, were in compliance with the Public Sector Pension Investment Board Act and the statement of investment policies, standards and procedures approved by its board of directors.

Pension obligations

The Statement of Changes in Pension Obligations shows the present value of benefits earned for service to date that will be payable in the future. For fiscal year ended March 31, 2017, the value of pension obligations was $184.3 billion ($176.5 billion in fiscal year ended March 31, 2016), an increase of $7.8 billion from the previous fiscal year. The increase is due primarily to an increase in accrued pension benefits.

Assets held by the Public Sector Pension Investment Board

In accordance with the investment policy, assets held by the Public Sector Pension Investment Board are invested with the following long-term target weights (as at March 31, 2017):

- 47.0% in public market and private equities
- 30.0% in real assets, such as real estate, infrastructure and natural resources
- 16.0% in government fixed income, cash and cash equivalents
- 7.0% in credit

In fiscal year ended March 31, 2017, assets earned a rate of return of 12.8%. Refer to Note 5 of the financial statements or to the PSP Investments website[viii] for more details.

Interest credited to the Public Service Superannuation Account

The Public Service Superannuation Account is credited quarterly with interest at rates calculated as though amounts recorded in this account were invested quarterly in a notional portfolio of Government of Canada 20-year bonds held to maturity. No formal debt instrument is issued to this account by the government in recognition of the amounts in it. The reduction in interest credited to the account relates to declining bond interest rates. The interest credited to the Public Service Superannuation Account is no longer recognized as "interest income" in the Statement of Changes in Net Assets Available for Benefits and is only reported in the "Account transaction statements" section of this report.

Table 5 shows the annualized interest rate credited.

Table 5. Annualized interest rate credited to the superannuation account (fiscal year ended March 31)

Year	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017
Interest rate on account (%)	7.3	7.0	6.7	6.5	6.0	5.6	5.4	5.1	4.7	**4.4**

Note: The streamed weighted average of long-term bond rates is a calculated 20-year weighted moving average of long-term bond rates projected over time. The streamed rates take into account historical long-term bond rates and, over time, reflect expected long-term bond rates.

Administrative expenses

Pension-related administrative expenses of the following government organizations are charged to the public service pension plan:

- Treasury Board of Canada Secretariat
- Public Services and Procurement Canada
- Health Canada
- Office of the Chief Actuary

Administrative expenses of the plan also include the Public Sector Pension Investment Board's (PSPIB's) operating expenses. Investment management fees are either paid directly by the PSPIB or offset against distributions received from the investments.

In fiscal year ended March 31, 2017, total expenses recorded by the pension plan were as follows:

- government departments: $97 million ($102 million in fiscal year ended March 31, 2016)
- PSPIB: $279 million ($215 million in fiscal year ended March 31, 2016)

Transfer agreements

The public service pension plan has transfer agreements with other levels of government, universities and private sector employers.

In fiscal year ended March 31, 2017, transfers in and out of the plan under these agreements were as follows:

- transfers in: $28 million ($33 million in fiscal year ended March 31, 2016)
- transfers out: $36 million ($47 million in fiscal year ended March 31, 2016)

Retirement compensation arrangements

Under the authority of the Special Retirement Arrangements Act, separate Retirement Compensation Arrangements No. 1 and No. 2 have been established to provide supplementary benefits to some employees. Since these arrangements are covered by separate legislation, the balance and corresponding value of their accrued pension benefits is not consolidated in the public service pension plan's financial statements. A summary of these arrangements is provided in the notes to the financial statements.

Retirement Compensation Arrangement No. 1 provides for benefits in excess of those permitted under the Income Tax Act for registered pension plans. In 2017, this primarily included benefits on salaries over $163,100 ($161,700 in 2016), plus some survivor benefits.

Retirement Compensation Arrangement No. 2 provides for pension benefits to public service employees declared surplus as a result of the 3-year Early Retirement Incentive Program that ended on March 31, 1998, which allowed eligible employees to retire with an unreduced pension.

Contributions and benefit payments in excess of limits permitted under the Income Tax Act for registered pension plans are recorded in the Retirement Compensation Arrangements Account in the Public Accounts of Canada. The balance in the Retirement Compensation Arrangements Account is credited with interest at the same rate as that of the Public Service Superannuation Account.

Further information

Additional information concerning the public service pension plan is available at the following sites:

- Canada.ca/pension-benefits[ix]
- Public Services and Procurement Canada, Pay and Pension Services for Government Employees[x]
- Public Service Superannuation Act[xi]
- PSP Investments[xii]
- Office of the Chief Actuary[xiii]

Account transaction statements

Public Service Superannuation Account and Public Service Pension Fund Account

Prior to April 2000, all pension transactions accumulated in relation to the pension plan were accounted for, and recorded in, the Public Service Superannuation Account in the Public Accounts of Canada (to the extent that any funds held in the Consolidated Revenue Fund had been earmarked specifically for the pension plan). The Superannuation Account does not consist of cash or marketable securities. The account is used to record transactions such as contributions, benefit payments, interest, administrative expenses and other charges that pertain to service prior to April 1, 2000. The interest is credited quarterly at rates calculated as though the amounts recorded in the account were invested quarterly in a notional portfolio of Government of Canada 20-year bonds held to maturity.

All pension transactions related to service accrued since April 1, 2000, are recorded in the Public Service Pension Fund Account in the Public Accounts of Canada. An amount equal to contributions in excess of benefit payments and government organizations' administrative expenses is transferred regularly to the Public Sector Pension Investment Board and invested in capital markets. The balance in the Public Service Pension Fund Account at year-end represents amounts awaiting imminent transfer to the Public Sector Pension Investment Board.

The treatment of any actuarial excess or surplus and shortfall or deficit for both the Superannuation Account and the Pension Fund Account is outlined in the financial statements of the Public Service Pension Plan for the Fiscal Year Ended March 31, 2017.

As a result of the latest actuarial valuation, conducted as at March 31, 2014, an annual adjustment of $340 million began in fiscal year ended March 31, 2016, and will be made to the Public Service Pension Fund Account for 15 years. The Public Service Superannuation Act requires that any actuarial deficit be dealt with by transferring equal instalments to the Pension Fund Account over a period of up to 15 years, commencing in the year in which the actuarial report is tabled in Parliament.

Public Service Superannuation Account statement

Fiscal year ended March 31

	2017	2016
Opening balance (A)	**$95,566,249,001**	$95,875,945,459
Receipts and other credits		
Employee contributions		
Government employees	**1,501,715**	2,066,031
Retired employees	**9,012,222**	11,616,885
Public service corporation employees	**154,532**	102,705
Employer contributions		
Government	**8,770,006**	11,189,841
Public service corporations	**126,595**	61,360
Actuarial liability adjustment	**0**	681,000,000
Transfers from other pension funds	**5,009**	6,789
Interest	**4,128,334,225**	4,443,345,828
Total receipts and other credits (B)	**$4,147,904,304**	$5,149,389,439
Payments and other charges		
Annuities	**$5,380,371,208**	$5,328,099,116
Minimum benefits	**18,161,964**	12,803,758
Pension division payments	**26,427,720**	22,922,806
Pension transfer value payments	**20,129,143**	29,994,197
Returns of contributions		
Government employees	**379,702**	38,788
Public service corporation employees	**41,739**	41,606
Transfers to other pension funds	**4,093,957**	5,416,461
Administrative expenses	**55,274,322**	59,769,165
Total payments and other charges (C)	**$5,504,879,755**	$5,459,085,897
Receipts less payments (B - C) = (D)	**$(1,356,975,451)**	$(309,696,458)
Closing balance (A + D)	**$94,209,273,550**	$95,566,249,001

The above account transaction statement is unaudited.

Public Service Pension Fund Account statement

Fiscal year ended March 31

	2017	2016
Opening balance (A)	**$355,052,200**	$402,290,387
Receipts and other credits		
Employee contributions		
Government employees	**1,919,728,160**	1,773,737,501
Retired employees	**45,599,636**	41,559,748
Public service corporation employees	**189,381,592**	168,640,289
Employer contributions		
Government	**2,125,185,996**	2,205,355,883
Public service corporations	**206,551,912**	206,059,867
Actuarial liability adjustment	**340,000,000**	340,000,000
Transfers from other pension funds	**26,607,302**	29,988,609
Transfer value election	**1,874,328**	3,361,626
Total receipts and other credits (B)	**$4,854,928,926**	$4,768,703,523
Payments and other charges		
Annuities	**$1,779,822,584**	$1,558,724,353
Minimum benefits	**12,206,438**	12,641,148
Pension division payments	**38,740,034**	30,273,474
Pension transfer value payments	**254,365,622**	316,963,114
Returns of contributions		
Government employees	**7,973,419**	10,507,898
Public service corporation employees	**3,960,135**	4,837,063
Transfers to other pension funds	**36,371,533**	47,446,792
Administrative expenses	**41,664,160**	42,400,198
Total payments and other charges (C)	**$2,175,103,925**	$2,023,794,040
Receipts less payments (B - C)	**$2,679,825,001**	$2,744,909,483
Transfers to Public Sector Pension Investment Board (D)	**$(2,712,347,217)**	$(2,792,147,670)
Closing balance (A + B - C + D)	**$322,529,984**	$355,052,200

The above account transaction statement is unaudited.

Retirement Compensation Arrangements

Supplementary benefits for certain federal public service employees are provided under the Retirement Compensation Arrangements Regulations, No. 1, Parts I and II (public service portion), and the Retirement Compensation Arrangements Regulations, No. 2 (Early Retirement Incentive Program). The Special Retirement Arrangements Act authorized these regulations and established the Retirement Compensation Arrangements for the payment of benefits.

Transactions pertaining to Retirement Compensation Arrangement No. 1 and Retirement Compensation Arrangement No. 2, such as contributions, benefits and interest credits, are recorded in the Retirement Compensation Arrangements Account in the Public Accounts of Canada. The Retirement Compensation Arrangements Account earns interest quarterly at the same rate as that credited to the Public Service Superannuation Account. The Retirement Compensation Arrangements Account is registered with the Canada Revenue Agency, and a transfer debit or credit is made annually between the Retirement Compensation Arrangements Account and the Canada Revenue Agency either to remit a 50% refundable tax for the net contributions and interest credits or to be credited a reimbursement based on the net benefit payments.

Actuarial shortfalls found between the balance in the Retirement Compensation Arrangements Account and the actuarial liabilities are credited to the Retirement Compensation Arrangements Account in equal instalments over a period of up to 15 years. For the fiscal year ended March 31, 2017, no credit adjustment was made to Retirement Compensation Arrangement No. 1 ($12 million in fiscal year ended March 31, 2016), and no credit adjustment was made to Retirement Compensation Arrangement No. 2 ($129 million in fiscal year ended March 31, 2016).

Retirement Compensation Arrangement No. 1

For tax purposes, financial transactions related to pension plan members' pensionable earnings over $163,100 in calendar year 2017, are recorded separately.

For fiscal year ended March 31, 2017, there were 4,896 public service employees (4,615 in 2016) and 14,214 retired members and dependants (13,019 in 2016) in this category.

Fiscal year ended March 31

	2017	2016
Opening balance (A)	**$1,163,127,305**	$1,104,326,126
Receipts and other credits		
Employee contributions		
Government employees	**6,579,649**	8,426,624
Retired employees	**384,934**	448,109
Public service corporation employees	**2,188,425**	2,349,289
Employer contributions		
Government	**44,338,063**	60,783,610
Public service corporations	**13,569,038**	16,570,859
Actuarial liability adjustment	**0**	12,000,000
Interest	**51,842,117**	53,426,014
Transfer from other pension funds	**1,846**	1,560
Transfer value election	**(974)**	
Total receipts and other credits (B)	**$118,903,098**	$154,006,065
Payments and other charges		
Annuities	**$40,723,826**	$35,959,883
Minimum benefits	**161,842**	181,518
Pension division payments	**643,887**	1,263,060
Pension transfer value payments	**555,752**	587,002
Returns of contributions		
Government employees	**15,601**	11,141
Public service corporation employees	**11,540**	9,896
Transfers to other pension plans	**39,685**	174,463
Refundable tax	**46,632,558**	57,017,923
Total payments and other charges (C)	**$88,784,691**	$95,204,886
Receipts less payments (B - C) = (D)	**$30,118,407**	$58,801,179
Closing balance (A + D)	**$1,193,245,712**	$1,163,127,305

The above account transaction statement is unaudited.

Retirement Compensation Arrangement No. 2

During the 3-year period starting April 1, 1995, a number of employees between the ages of 50 and 54 left the public service under the Early Retirement Incentive Program, which waived the pension reduction under the Public Service Superannuation Act for employees who were declared surplus.

Fiscal year ended March 31

	2017	2016
Opening balance (A)	**$807,056,879**	$708,848,795
Receipts and other credits		
Government interest	**34,240,959**	32,077,055
Actuarial liability adjustment	**0**	129,000,000
Total receipts and other credits (B)	**34,240,959**	161,077,055
Payments and other charges		
Annuities	**84,823,287**	84,806,709
Refundable tax	**38,952,365**	(21,937,738)
Total payments and other charges (C)	**123,775,652**	62,868,971
Receipts less payments (B - C) = (D)	**$(89,534,693)**	$98,208,084
Closing balance (A + D)	**$717,522,186**	$807,056,879

The above account transaction statement is unaudited.

Supplementary death benefit

As at March 31, 2017, there were 296,024 active participants (285,956 in 2016) and 180,975 retired elective participants (177,799 in 2016) entitled to a supplementary death benefit under Part II of the Public Service Superannuation Act. In fiscal year ended March 31, 2017, a total of 3,863 claims (2,854 in 2016) for supplementary death benefits were paid.

Fiscal year ended March 31

	2017	2016
Opening balance (A)	**$3,526,551,938**	$3,424,084,798
Receipts and other credits		
Contributions		
Employees (government and public service corporation)	**100,187,514**	100,329,881
Government		
General	**11,050,681**	10,859,808
Single premium for $10,000 benefit	**2,990,295**	2,936,566
Public service corporations	**1,469,385**	1,427,565
Interest	**154,846,365**	160,841,600
Total receipts and other credits (B)	**$270,544,240**	$276,395,420
Payments and other charges		
Benefit payments		
General[1]	**$132,418,038**	$130,008,537
$10,000 benefit[2]	**37,580,606**	43,610,580
Other death benefit payments	**190,137**	309,163
Total payments and other charges (C)	**$170,188,781**	$173,928,280
Receipts less payments (B - C) = (D)	**$100,355,459**	$102,467,140
Closing balance (A + D)	**$3,626,907,397**	$3,526,551,938

The above account transaction statement is unaudited.

Notes:

1. Benefits paid in respect of participants who, at the time of death, were employed in the public service or in receipt of an immediate Public Service Superannuation Act pension.
2. Benefits of $10,000 paid in respect of participants who, at the time of death, were employed in the public service or in receipt of an immediate annuity under the Public Service Superannuation Act and on whose behalf a single premium for $10,000 of death-benefit coverage for life has been made.

Statistical tables

Statistical table 1. Pensions in pay

Statistical table 1.1. Number of pensions and survivor pensions in pay (fiscal year ended March 31)

Year	Pensions[1]	Survivor pensions[2]	Total
2017	**221,673**	**55,123**	**276,796**
2016	218,028	61,716[3]	279,744[3]
2015	213,203	60,693	273,896

Statistical table 1.2. Average annual amount of pensions and survivor pensions in pay[4] (fiscal year ended March 31)

		Pensions[1]			Survivor pensions		
Year		Men	Women	Overall	Spouse / common-law partner	Children	Students
2017	**Average annual amount**	**$34,015**	**$25,351**	**$30,034**	**$14,245**	**$2,165**	**$3,376**
	Average age	**71.7**	**68.6**	**70.3**	**81.2**	**12.6**	**21.6**
	Average pensionable service (years)	**25.4**	**23.1**	**24.3**	**22.5**	**12.4**	**17.9**
2016	Average annual amount	$33,254	$24,517	$29,314	$14,145	$2,127	$3,686
	Average age	71.6	68.7	70.3	82.0	n/a	n/a
	Average pensionable service (years)	25.4	22.9	24.3	22.9	n/a	n/a
2015	Average annual amount	$32,617	$23,783	$28,711	$13,394	$2,111	$3,480
	Average age	71.5	68.6	70.2	80.5	n/a	n/a
	Average pensionable service (years)	25.3	22.8	24.2	22.3	n/a	n/a

Notes:

1. Includes immediate annuities, disability retirement benefits and annual allowances payable to former contributors only.
2. Includes spouse or common-law partner, children and students.
3. The data previously published in the Report on the Public Service Pension for Fiscal Year Ended March 31, 2016, has been updated to reflect the most current data available for March 31, 2016.
4. Amounts include indexation.

Statistical table 2. Pensions that became payable

Statistical table 2.1. Pensions that became payable to members[1, 2] (fiscal year ended March 31)

Year	Men	Women	Total	Total amount paid	Average pension
2017	**4,046**	**5,276**	**9,322**	**$352,228,283**	**$37,785**
2016	4,323	5,437	9,760	$356,718,556	$36,549
2015	4,433	5,234	9,667	$348,650,269	$36,066

Statistical table 2.2. Pensions that became payable to survivors[2] (fiscal year ended March 31)

Year	Spouse / common-law partner	Children and students	Total	Total amount paid	Average pension Spouse / common-law partner	Average pension Children and students
2017	**2,432**	**129**	**2,561**	**$42,135,714**	**$17,157**	**$3,180**
2016	2,091	578	2,669	$34,784,709	$16,556	$3,430
2015	2,258	602	2,860	$37,929,875	$15,939	$3,330

Notes:

1. In 2017, the pensions that became payable included immediate annuities (6,821), deferred annuities (532), annual allowances payable to former contributors only (1,468) and disability retirement benefits (501).
2. These amounts include indexation.

Statistical table 3. Unreduced pensions, immediate annuities[1] (fiscal year ended March 31)

Year	50 to 54[2]	55	56	57	58	59	60[3]	61	62	63	64	65	66 and over	Total	Average age[4]	Average unreduced pension[5]
	Number of pensions at age at retirement															
2017	**54**	**1,124**	**487**	**422**	**372**	**313**	**1,145**	**522**	**450**	**388**	**300**	**414**	**830**	**6,821**	**60**	**$41,832**
2016	50	1,293	510	382	327	333	1,159	514	450	381	350	457	841	7,047	60	$41,072
2015	81	1,218	454	419	370	314	1,113	570	491	358	341	440	784	6,953	60	$40,633

Notes:

1. Excludes immediate annuities resulting from disability retirement benefits (501 in 2017).
2. Includes only eligible Correctional Service Canada operational employees who qualify for an unreduced pension.
3. Excludes deferred annuities that became payable at age 60. In 2017, there were 532 deferred annuities (212 men, 320 women) that became payable at age 60.
4. In 2017, the average retirement age was 60.85 for men and 59.98 for women.
5. In 2017, the average unreduced pension was $41,293 for men and $42,295 for women.

Statistical table 4. Reduced pensions (annual allowances) and lump-sum payments that became payable (fiscal year ended March 31)

	Reduced pensions[1]				Lump-sum payments[2]	
Year	Number for men	Number for women	Total number	Average allowance	Number	Amount
2017	**541**	**927**	**1,468**	**$32,912**	**10,330**	**$392,483,005**
2016	575	997	1,572	$30,330	12,230	$468,442,200
2015	615	1,000	1,615	$28,923	7,584	$431,132,155

Notes:

1. Includes deferred annual allowances. A deferred annual allowance is a deferred annuity that is reduced because of early payment.
2. Includes transfer values, returns of contributions, amounts transferred to other pension plans under pension transfer agreements and amounts transferred under the Pension Benefits Division Act.

Statistical table 5. Changes in number of active members, retired members and survivors on pension

Statistical table 5.1. Changes in number of active members (fiscal year ended March 31, 2017)

	Men	Women	Total
Number of active members, March 31, 2016	131,142	165,129	296,271
Additions	8,454	11,016	19,470
Deletions[1]	6,607	8,806	15,413
Adjustments[2]	(1,519)	(1,052)	(2,571)
Number of active members, March 31, 2017	131,470	166,287	297,757

Notes:

1. Includes full return of contributions, immediate annuities, annual allowances paid, transfer values, deferred annuities chosen, deferred annuities locked in (if applicable), transfers out and deaths in service.
2. Adjustments for previous year correction.

Statistical table 5.2. Changes in number of retired members[1] (fiscal year ended March 31, 2017)

	Men	Women	Total
Number of retired members, March 31, 2016	119,361	98,667	218,028
Additions	4,046	5,276	9,322
Deletions	3,491	1,163	4,654
Adjustments[2]	295	(1,318)	(1,023)
Number of retired members, March 31, 2017	120,211	101,462	221,673

Notes:

1. Does not include 4,368 members who elected to become deferred annuitants during the year ended March 31, 2017.
2. Adjustments for transactions completed after year-end with an effective date before March 31.

Statistical table 5.3. Changes in number of survivors on pensions (fiscal year ended March 31, 2017)			
	Men	**Women**	**Total**
Number of survivors on pension, March 31, 2016	n/a	n/a	60,406
Additions	467	1,965	2,432
Deletions	208	1,710	1,918
Adjustments[1]	n/a	n/a	(6,944)
Number of survivors on pension, March 31, 2017	6,550	47,426	53,976

Note:

1. Adjustments for previous year correction.

Statistical table 5.4. Changes in number of children and students on pensions (fiscal year ended March 31, 2017)			
	Men	**Women**	**Total**
Number of children and students on pension, March 31, 2016	n/a	n/a	1,310
Additions	62	67	129
Deletions	134	205	339
Adjustments[1]	n/a	n/a	47
Number of children and students on pension, March 31, 2017	535	612	1,147

Note:

1. Adjustments for previous year correction.

Statistical table 6. Number of transfer-value payments by years of pensionable service and age at termination (fiscal year ended March 31, 2017)

	Age at termination						
Years of pensionable service	**Under 30**	**30 to 34**	**35 to 39**	**40 to 44**	**45 to 49**	**50 to 55**	**Total**
Under 5	203	130	112	63	68	20	596
5 to 9	96	189	151	106	104	0	646
10 to 14	1	29	84	86	80	1	281
15 to 19	0	1	28	58	92	0	179
20 to 24	0	0	0	6	46	0	52
25 to 29	0	0	0	2	33	0	35
30 to 35	0	0	0	0	6	0	6
Overall total	**300**	**349**	**375**	**321**	**429**	**21**	**1,795**
Total women	**152**	**197**	**219**	**168**	**234**	**14**	**984**
Total men	**148**	**152**	**156**	**153**	**195**	**7**	**811**

Statistical table 7. Supplementary death benefit: Number of participants and number of benefits paid (fiscal year ended March 31)

	Active participants[1]			Retired participants[2]			Death benefits paid			
Year	**Men**	**Women**	**Total**	**Men**	**Women**	**Total**	**Men**	**Women**	**Total**	**Amount paid**
2017	**129,784**	**166,240**	**296,024**	**97,480**	**83,495**	**180,975**	**2,685**	**1,178**	**3,863**	**$170,188,781**
2016	125,472	160,484	285,956	97,479	80,320	177,999	2,063	791	2,854	$173,928,280
2015	125,175	159,965	285,140	96,222	76,323	172,545	2,181	820	3,001	$166,836,177

Notes:

1. Certain Crown corporations do not offer the supplementary death benefit.
2. The supplementary death benefit is optional for retirees.

Financial statements of the public service pension plan for the fiscal year ended March 31, 2017

Statement of responsibility

Responsibility for the integrity and fairness of the financial statements of the public service pension plan (the pension plan) rests with Public Services and Procurement Canada (PSPC) and the Treasury Board of Canada Secretariat (the Secretariat). The Secretariat carries out responsibilities in respect of the overall management of the pension plan, while PSPC is responsible for the day-to-day administration of the pension plan and for maintaining the books of accounts.

The financial statements of the pension plan for the year ended March 31, 2017, have been prepared in accordance with the stated accounting policies set out in Note 2 of the financial statements, which are based on Canadian accounting standards for pension plans. The presentation and results using the stated accounting policies do not result in any significant differences from Canadian accounting standards for pension plans. The financial statements include management's best estimates and judgments where appropriate.

To fulfill its accounting and reporting responsibilities, PSPC has developed and maintains books, records, internal controls, and management practices designed to provide reasonable assurance as to the reliability of the financial information and to ensure that transactions are in accordance with the Public Service Superannuation Act (PSSA) and regulations, as well as the Financial Administration Act (FAA) and regulations.

Additional information, as required, is obtained from the Public Sector Pension Investment Board (PSPIB). PSPIB maintains its own records and systems of internal control to account for the funds managed on behalf of the pension plan in accordance with the Public Sector Pension Investment Board Act, regulations and by-laws.

These statements have been audited by the Auditor General of Canada, the independent auditor for the Government of Canada.

Approved by:

Marie Lemay
Deputy Minister and Deputy Receiver General for Canada
Public Services and Procurement Canada

Original signed
January 25, 2018

Yaprak Baltacıoğlu
Secretary of the Treasury Board
Treasury Board of Canada Secretariat

Original signed
January 25, 2018

Office of the
Auditor General
of Canada

Bureau du
vérificateur général
du Canada

INDEPENDENT AUDITOR'S REPORT

To the President of the Treasury Board and the Minister of Public Services and Procurement

Report on the Financial Statements

I have audited the accompanying financial statements of the public service pension plan, which comprise the statement of financial position as at 31 March 2017, and the statement of changes in net assets available for benefits and statement of changes in pension obligations for the year then ended, and a summary of significant accounting policies and other explanatory information.

Management's Responsibility for the Financial Statements

Management is responsible for the preparation and fair presentation of these financial statements in accordance with the stated accounting policies set out in Note 2 of the financial statements, which are based on Canadian accounting standards for pension plans, and for such internal control as management determines is necessary to enable the preparation of financial statements that are free from material misstatement, whether due to fraud or error.

Auditor's Responsibility

My responsibility is to express an opinion on these financial statements based on my audit. I conducted my audit in accordance with Canadian generally accepted auditing standards. Those standards require that I comply with ethical requirements and plan and perform the audit to obtain reasonable assurance about whether the financial statements are free from material misstatement.

An audit involves performing procedures to obtain audit evidence about the amounts and disclosures in the financial statements. The procedures selected depend on the auditor's judgment, including the assessment of the risks of material misstatement of the financial statements, whether due to fraud or error. In making those risk assessments, the auditor considers internal control relevant to the entity's preparation and fair presentation of the financial statements in order to design audit procedures that are appropriate in the circumstances, but not for the purpose of expressing an opinion on the effectiveness of the entity's internal control. An audit also includes evaluating the appropriateness of accounting policies used and the reasonableness of accounting estimates made by management, as well as evaluating the overall presentation of the financial statements.

I believe that the audit evidence I have obtained is sufficient and appropriate to provide a basis for my audit opinion.

Opinion

In my opinion, the financial statements present fairly, in all material respects, the financial position of the public service pension plan as at 31 March 2017, and the changes in its net assets available for benefits and changes in its pension obligations for the year then ended in accordance with Canadian accounting standards for pension plans.

Report on Other Legal and Regulatory Requirements

In my opinion, the transactions of the public service pension plan that have come to my notice during my audit of the financial statements have, in all significant respects, been in accordance with the *Public Service Superannuation Act* and regulations, the *Public Sector Pension Investment Board Act* and regulations and the by-laws of the Public Sector Pension Investment Board.

Margaret P.A. Haire

Margaret Haire, CPA, CA
Principal
for the Auditor General of Canada

25 January 2018
Ottawa, Canada

Financial statements

Statement of financial position

(Canadian $ millions)

	As at March 31, 2017	As at March 31, 2016
Assets		
Public Service Pension Fund (Note 4)	**$323**	$355
Investments (Note 5)	**115,296**	95,400
Contributions receivable		
From plan members (Note 8)	**583**	555
From employers (Note 8)	**508**	510
Other assets (Note 9)	**148**	131
Total assets	**$116,858**	$96,951
Liabilities		
Investment-related liabilities (Note 5)	**$8,983**	$4,251
Accounts payable and other liabilities	**168**	128
Borrowings (Note 5 and Note 10)	**7,846**	6,421
Net assets available for benefits	**$99,861**	$86,151
Pension obligations		
Unfunded (Note 13 and Note 21)	**$96,868**	$97,027
Funded (Note 13)	**87,407**	79,469
Total pension obligations	**$184,275**	$176,496
Deficit to be financed by the Government of Canada (Note 14)	**$(84,414)**	$(90,345)

Commitments (Note 24)

The accompanying notes are an integral part of these financial statements.

Financial statements (continued)

Statement of changes in net assets available for benefits

Year ended March 31 (Canadian $ millions)

	2017	2016
Net assets available for benefits, beginning of year	**$86,151**	$82,871
Increase in net assets available for benefits		
Investment income, excluding changes in fair values of investment assets and investment liabilities (Note 15)	**2,498**	2,106
Changes in fair values of investment assets and investment liabilities, realized and unrealized gains and losses (Note 15)	**9,086**	(1,115)
Contributions		
From plan members (Note 16)	**2,183**	1,997
From employers (Note 16)	**2,330**	2,353
Actuarial adjustment (Note 17)	**340**	340
Transfers from other pension plans	**28**	33
Total increase in net assets available for benefits	**$16,465**	$5,714
Decrease in net assets available for benefits		
Benefits paid with respect to service after March 31, 2000 (Note 18)	**$1,792**	$1,571
Refunds and transfers (Note 18)	**341**	410
Investment-related expenses (Note 19)	**301**	196
Administrative expenses (Note 20)	**321**	257
Total decrease in net assets available for benefits	**$2,755**	$2,434
Net increase in net assets available for benefits	**$13,710**	$3,280
Net assets available for benefits, end of year	**$99,861**	$86,151

The accompanying notes are an integral part of these financial statements.

Financial statements (continued)

Statement of changes in pension obligations

Year ended March 31 (Canadian $ millions)

	2017 Funded	**2017 Unfunded**	**2017 Total**	2016 Funded	2016 Unfunded	2016 Total
Pension obligations, beginning of year	**$79,469**	**$97,027**	**$176,496**	$73,581	$95,999	$169,580
Increase in pension obligations						
Interest on pension obligations	**3,713**	**4,148**	**7,861**	3,144	4,477	7,621
Benefits earned	**4,648**	**0**	**4,648**	4,590	0	4,590
Changes in actuarial assumptions: losses (Note 13)	**2,666**	**1,539**	**4,205**	1,066	2,662	3,728
Transfers from other pension plans	**28**	**0**	**28**	33	0	33
Total increase in pension obligations	**$11,055**	**$5,687**	**$16,742**	$8,833	$7,139	$15,972
Decrease in pension obligations						
Benefits paid (Note 18)	**$1,792**	**$5,399**	**$7,191**	$1,571	$5,341	$6,912
Experience gains (Note 13)	**942**	**341**	**1,283**	922	652	1,574
Refunds and transfers (Note 18)	**341**	**51**	**392**	410	58	468
Administrative expenses included in the service cost (Note 20 and Note 21)	**42**	**55**	**97**	42	60	102
Total decrease in pension obligations	**$3,117**	**$5,846**	**$8,963**	$2,945	$6,111	$9,056
Net increase (decrease) in pension obligations	**$7,938**	**$(159)**	**$7,779**	$5,888	$1,028	$6,916
Pension obligations, end of year	**$87,407**	**$96,868**	**$184,275**	$79,469	$97,027	$176,496

The accompanying notes are an integral part of these financial statements.

1. Description of the public service pension plan

The public service pension plan (the pension plan), governed by the Public Service Superannuation Act (PSSA), provides pension benefits for federal public service employees. While the PSSA has been in effect since January 1, 1954, federal legislation has been providing pensions for public servants since 1870.

The main provisions of the pension plan are summarized below.

(A) General

The pension plan is a contributory defined benefit plan covering substantially all of the full-time and part-time employees of the Government of Canada (the government), public service corporations as defined in the PSSA, and territorial governments. Membership in the pension plan is compulsory for all eligible employees.

The government is the sole sponsor of the pension plan. The President of the Treasury Board is the Minister responsible for the PSSA. The Treasury Board of Canada Secretariat (the Secretariat) is responsible for the management of the pension plan while Public Services and Procurement Canada (PSPC) provides the day-to-day administration of the pension plan and maintains the books of accounts. The Office of the Chief Actuary (OCA), an independent unit within the Office of the Superintendent of Financial Institutions (OSFI) performs periodic actuarial valuations of the pension plan.

Until April 1, 2000, separate invested funds were not set aside to provide for payment of pension benefits. Instead, transactions relating to the pension plan were recorded in a Public Service Superannuation Account (superannuation account) created by legislation in the accounts of Canada. Pursuant to the PSSA, as amended by the Public Sector Pension Investment Board Act, transactions relating to service since April 1, 2000, are now recorded in the Public Service Pension Fund (pension fund). An amount equal to contributions in excess of benefit payments and administrative costs is transferred regularly to the Public Sector Pension Investment Board (PSPIB) for investment. PSPIB is a Crown corporation whose statutory objectives are to manage the funds transferred to it for investment and to maximize investment returns without undue risk of loss, having regard to the funding, policies and requirements of the three main public sector pension plans (public service, Royal Canadian Mounted Police (RCMP) and Canadian Forces).

(B) Funding policy

The pension plan is funded from plan member and employer contributions, and investment earnings. For the fiscal year, public service employees who were members of the pension plan on or before December 31, 2012 (Group 1) contributed 9.05% (8.15% in 2016) for the first nine months and 9.47% (9.05% in 2016) for the last three months of pensionable earnings up to the maximum covered by the Canada Pension Plan (CPP) or Québec Pension Plan (QPP); and 11.04% (10.40% in 2016) for the first nine months and 11.68% for the last three months (11.04% in 2016) of pensionable earnings above that maximum.

The contribution rates for public service employees joining the pension plan on or after January 1, 2013 (Group 2) was set at 7.86% (7.05% in 2016) for the first nine months and 8.39% (7.86% in 2016) for the last three months of pensionable earnings up to the maximum covered by the CPP and QPP; and 9.39% (8.54% in 2016) for the first nine months and 9.94% (9.39% in 2016) for the last three months of pensionable earnings above that maximum. The government's contribution is made monthly to provide for the cost (net of plan member contributions) of the benefits that have accrued in respect of that month at a rate determined by the President of the Treasury Board. The contribution rates are determined based on actuarial valuations, which are performed triennially.

The PSSA provides that all pension obligations arising from the pension plan be met by the government. The PSSA requires that any actuarial deficit in the pension fund be dealt with by transferring equal instalments to the pension fund over a period of up to 15 years, commencing in the year in which the actuarial report is tabled in Parliament. PSSA also allows any surplus to be lowered by reducing government and pension plan member contributions. In addition, if there is an amount considered to be non-permitted surplus (refer to PSSA section 44.4(5) for definition of non-permitted surplus) related to the pension fund, no further government pension contributions are permitted while pension plan member contributions under the pension fund may be reduced and amounts from PSPIB may be transferred to the government's Consolidated Revenue Fund (CRF).

(C) Benefits

The pension plan provides pension benefits based on the number of years of pensionable service up to a maximum of 35 years. Benefits are determined by a formula set out in the legislation; they are not based on the financial status of the pension plan. The basic benefit formula is 2% per year of pensionable service multiplied by the average of the five consecutive years of highest paid service. To reflect the Income Tax Act restrictions on registered pension plan benefits, separate retirement compensation arrangements (RCAs) have been implemented to provide benefits that exceed the limits established in the Income Tax Act. Since the RCAs are covered by separate legislation, their account balances in the accounts of Canada are not consolidated in these financial statements; however, condensed information is presented in Note 22.

Pension benefits are coordinated with the CPP and QPP, and the resulting pension reduction factor for pension plan members reaching age 65, or earlier if totally and permanently disabled, has been lowered from a level of 0.7% for those turning age 65 in calendar year 2007 or earlier and to 0.625% for those turning age 65 in calendar year 2012 and later. Also, benefits are fully indexed to the increase in the Consumer Price Index.

Other benefits include survivor pensions, minimum benefits in the event of death, unreduced early retirement pensions, and disability pensions.

2. Significant accounting policies

The significant accounting policies that have been applied in the preparation of these financial statements are summarized below.

(A) Basis of presentation

These financial statements present information on the pension plan on a going-concern basis. They are prepared to assist plan members and others in reviewing the activities of the pension plan for the year, not to portray the funding requirements of the pension plan.

These financial statements are prepared in Canadian dollars, the plan’s functional currency, in accordance with the accounting policies stated below, which are based on Canadian accounting standards for pension plans in Part IV of the Chartered Professional Accountants (CPA) Canada Handbook (Section 4600). Section 4600 provides specific accounting guidance on investments and pension obligations. For accounting policies that do not relate to either investments or pension obligations, the plan complies with International Financial Reporting Standards (IFRS) in Part I of the CPA Canada Handbook. To the extent that IFRS in Part I are inconsistent with Section 4600, Section 4600 takes precedence. The presentation and results using the stated accounting policies do not result in any significant differences from Canadian accounting standards for pension plans.

PSPIB is a Crown corporation whose statutory objectives are to manage the funds transferred to it for investment. PSPIB qualifies as an investment entity as defined under IFRS 10 Consolidated Financial Statements and forms part of the pension plan reporting entity. Pursuant to Section 4600, PSPIB's subsidiaries, that are formed to hold investments or those that provide PSPIB with services that relate to its investment activities, are consolidated since these entities are not considered investment assets. PSPIB's investment in subsidiaries, associates, and joint ventures that are considered investment assets are measured at fair value in accordance with Section 4600. Financial liabilities are also measured at fair value in accordance with Section 4600.

The financial statements for the year ended March 31, 2017 were authorized for issue by the signatories on January 25, 2018.

(B) Interests in other entities

Management, through the activities of PSPIB, assesses control, joint control and significant influence with respect to the investees disclosed in Note 6 as follows:

(I) Control and significant influence

It is determined that PSPIB has control over an investee when it is exposed, or has rights, to variable returns from its investment in an entity and has the ability to affect those returns through its power over the investee.

In certain cases, PSPIB does not have control over an investee but has the power to participate in the financial and operating policy decisions of the investee. In such cases, PSPIB determines that it has significant influence over the investee.

In the context of control or significant influence, power over an investee is obtained through voting rights conveyed by PSPIB's ownership interest, other contractual arrangements, or a combination thereof.

(II) Joint control

It is determined that PSPIB is party to a joint venture arrangement when it has joint control over an investee and has rights to the net assets of the investee. Joint control is established through a contractual arrangement which requires the unanimous consent of the parties sharing control for the activities that significantly affect the returns of the arrangement.

Generally, decision making regarding such activities is governed through voting rights conveyed by the ownership interest of each party. In certain cases, it is governed solely through contractual arrangements or in conjunction with the ownership interest of each party.

(C) Financial instruments

(I) Classification

Financial assets representing investments are managed, together with related financial liabilities, according to the entity's business model to maximize the rate of return. The performance of such financial instruments is evaluated on a fair value basis and they are classified at fair value through profit or loss (FVTPL). They are described in detail in Note 5(A).

Borrowings, as described under Note 10, are financial liabilities that are designated to be measured at FVTPL since they are part of the portfolios of investments that are managed together and whose performance is evaluated on a fair value basis.

(II) Recognition

Financial assets and financial liabilities are recorded at the date upon which PSPIB becomes a party to the associated contractual provisions. In the case of traded financial assets, they are recorded as of the trade date.

(III) Initial and subsequent measurement

All financial assets and financial liabilities are recorded in the Statement of Financial Position at fair value and continue to be measured as such on a recurring basis. After initial measurement, subsequent changes in the fair value of financial assets and financial liabilities classified at FVTPL are recorded in the Statement of Changes in Net Assets Available for Benefits.

(IV) Derecognition

A financial asset (or, where applicable, a part thereof) is derecognized when the following conditions are met:

- The rights to receive cash flows from the asset have expired or
- PSPIB has transferred its rights to receive cash flows from the asset or has assumed an obligation to pay the received cash flows to a third party,
  and
- PSPIB has transferred substantially all the risks and rewards of the asset or
- In cases where PSPIB has neither transferred nor retained substantially all the risks and rewards of the asset, it has transferred control of the asset.

A financial liability is derecognized when the obligation under the liability is discharged, cancelled or expired.

(D) Determination of fair value

Fair value is the price that would be received to sell an asset or paid to transfer a liability in an orderly transaction between market participants at the measurement date.

At initial recognition, PSPIB evaluates the facts and circumstances related to a transaction to confirm that the transaction price represents the fair value of an asset or a liability. At each subsequent reporting date, market prices are used to determine fair value where an active market exists (such as a recognized securities exchange), as they reflect actual and regularly occurring market transactions on an arm's length basis. If quoted market prices are not available, then fair value is estimated using valuation techniques based on inputs existing at the end of the reporting period that are derived from observable market data.

Valuation techniques are generally applied to investments in private markets, over-the-counter (OTC) derivatives and certain fixed income securities. The values derived from applying these techniques are impacted by the choice of valuation model and the underlying assumptions made concerning factors such as the amounts and timing of future cash flows, discount rates, volatility and credit risk. In certain cases, such assumptions are not supported by market observable data.

The determination of fair value of all financial assets and financial liabilities is described in Note 5.

(E) Foreign currency translation

Foreign currency transactions during the period, including purchases and sales of securities, income and expenses are translated at the rate of exchange prevailing on the date of the transaction.

Monetary assets and liabilities that are denominated in foreign currencies are translated at the functional currency rate of exchange prevailing at the end of the reporting period.

Foreign currency transaction gains or losses on all monetary assets and liabilities are included in investment income.

(F) Securities lending and securities borrowing and related collateral

PSPIB participates in securities lending and borrowing programs whereby it lends and borrows securities in order to enhance portfolio returns. Lending and borrowing transactions including related collateral under such programs do not transfer the risks or rewards of ownership of the securities to the counterparty. Consequently, PSPIB does not derecognize securities lent or pledged as collateral, or recognize securities borrowed or received as collateral. Cash collateral received is recognized as described in Note 5(A)(VIII).

The securities lending and borrowing programs require collateral in cash, high-quality debt instruments or securities. Collateral transactions are conducted under terms that are usual and customary in standards securities lending and borrowing programs. PSPIB and its counterparties are authorized to sell, repledge or otherwise use collateral held. The same securities or equivalent securities must be returned to the counterparty at the end of the contract, unless an event of default occurs.

(G) Securities sold under repurchase agreements and purchased under reverse repurchase agreements and related collateral

PSPIB is party to repurchase and reverse repurchase agreements. Such agreements involve the sale of securities by one counterparty with a simultaneous agreement to repurchase such securities at a specified price and at a specified future date.

Securities sold or purchased under the repurchase and reverse repurchase agreements respectively, including related collateral, are not derecognized or recognized as all risks and rewards of ownership related to such securities are not transferred. As such, in the case where PSPIB is the counterparty selling securities under such agreements, all income (loss) related to such securities continues to be reported in investment income and obligations to repurchase the securities sold are accounted for as investment-related liabilities.

The difference between the fair value of the securities sold and the repurchase price is recorded as interest expense. In the case where PSPIB is the counterparty purchasing securities under such agreements, no income (loss) related to such securities is recognized and obligations to resell the securities are accounted for as investment-related receivables. The difference between the fair value of the securities purchased and resale price is recorded in investment income.

Transactions under repurchase agreements and reverse repurchase agreements involve pledging collateral consisting of cash or securities deemed acceptable by the counterparties. Collateral transactions are conducted under terms that are usual and customary in standard repurchase arrangements. Such terms require the relevant counterparty to pledge additional collateral based on the changes in the fair value of the existing collateral pledged as well as the related securities sold or purchased. The counterparties are authorized to sell, repledge or otherwise use collateral held. The securities pledged as collateral must be returned to the relevant counterparty at the end of the contract, unless an event of default occurs.

(H) Offsetting of financial instruments

Financial assets and financial liabilities are offset with the net amount reported in the Statement of Financial Position only if PSPIB has a current legally enforceable right to offset the recognized amounts and the intent to settle on a net basis, or to realize the assets and settle the liabilities simultaneously.

(I) Pension obligations

The present value of accrued pension benefits is calculated by using the projected benefit method prorated on service, based on management's best estimate assumptions.

(J) Investment income

Investment income is made up of interest, dividends, gains (losses) on the disposal of financial assets and financial liabilities as well as gains (losses) which reflect the change in unrealized appreciation (depreciation) of financial assets held and financial liabilities outstanding at the end of the reporting period. Interest is recognized, on a consistent basis, using the prescribed rates until maturity. Dividends are recognized when the right to receive them has been obtained, generally on the ex-dividend date.

(K) Contributions

Contributions for current service are recorded in the year in which the related payroll costs are incurred. Contributions for past service that are receivable over a period in excess of one year are recorded at the estimated net present value of the contributions to be received.

(L) Benefits earned, benefits paid, and refunds and transfers

Benefits earned are accrued as employees render pensionable services.

The funded and unfunded benefits paid are recognized as a reduction of pension obligations when the payments are made. The funded benefits paid are recognized as a reduction of net assets available for benefits when the payments are made.

Benefit payments, refunds to former members and transfer payments to other plans are recorded in the period in which they are paid.

(M) Investment-related expenses

Investment-related expenses are made up of interest expense, as described in Note 5(A)(VII), transaction costs, external investment management fees and other (net).

Transaction costs are incremental costs directly attributable to the acquisition, due diligence, issue, or disposal of a financial asset or financial liability, and they are expensed as incurred.

External investment management fees are directly attributable to the external management of assets on behalf of PSPIB. These fees are paid directly by PSPIB and comprise base fees accrued as a percentage of the fair value of the assets managed externally and performance fees accrued as a function of various performance indicators. This excludes amounts not paid directly by PSPIB for certain pooled fund investments classified under alternative investments and for investments in private markets and other fixed income securities as outlined in Note 19.

(N) Significant accounting judgments, estimates and assumptions

In preparing the financial statements, management makes certain judgments, estimates and assumptions which can affect the amounts reported therein. Significant judgments include those related to the determination of the investment entity status of PSPIB as described in Note 2(A).

Management also makes estimates and assumptions in the measurement, risk assessment and related disclosures surrounding investments in private markets, certain fixed income securities and the pension obligations.

The main assumptions made by management regarding measurement of financial instruments are outlined in Note 5(C)(III), those regarding the assessment of risk are outlined in Note 7.

The pension obligations are actuarially determined and the actual experience may differ significantly from the assumptions used in the calculation of pension plan’s pension obligations. As at March 31, 2017 pension obligations of $184,275 million ($176,496 million in 2016) are recorded in the financial statements. The significant actuarial assumptions used in measuring the pension obligations are found in Note 13.

Although estimates and assumptions reflect management’s best judgment, actual results may differ from such estimates due to the uncertainties involved in using them.

3. Current and future changes in accounting standards

(A) Accounting standards adopted in the current year

IFRS 11 Joint Arrangements

IFRS 11 was amended, effective for annual periods beginning on or after January 1, 2016, to add new guidance on the accounting for acquisitions of interests in a joint operation that constitutes a business. Acquirers of such interests shall apply all of the principles in business combinations accounting in IFRS 3 Business Combinations, and other IFRS, that do not conflict with the guidance in IFRS 11 and disclose the information that is required in those IFRS in relation to business combinations. On April 1, 2016, management adopted this amendment with no impact on the presentation of the financial statements.

(B) Accounting standards adopted before the effective date

IFRS 9 Financial Instruments

In 2014, the International Accounting Standards Board (IASB) completed its project to replace IAS 39 Financial Instruments: Recognition and Measurement with IFRS 9: Financial Instruments. The Standard includes requirements for recognition, derecognition, classification and measurement of financial assets and liabilities. IFRS 9 is effective for annual periods beginning on or after January 1, 2018 with early application permitted. IFRS 9 (2014) was initially adopted for the year ended March 31, 2016. Significant accounting policies in connection with IFRS 9 are described in Note 2(C).

(C) Future accounting standards

A number of new standards, amendments and interpretations have been issued by the IASB, but are not yet effective. The following relates to one or more of the significant accounting policies or disclosures:

IAS 28 Investments in Associates and Joint Ventures

IAS 28 was amended, effective for annual periods beginning on or after January 1, 2018, to add a clarification that serves to elaborate and clarify that the election to measure investees at fair value is available on an investment by investment basis and is not an election that must be applied consistently to the measurement of all associates and joint ventures. Management has determined that the amendment will not have an impact on the financial statements.

4. Public Service Pension Fund

The government has a statutory obligation to pay benefits relating to the pension plan. This pension obligation is to plan members and their beneficiaries.

In 1999, the pension legislation was amended to allow the government to invest funds in order to provide for the pension obligations. This legislation created the PSPIB to manage and invest amounts that are transferred regularly to it from the CRF related to service since April 1, 2000. The transactions are recorded in the Public Service Pension Fund. The Public Service Pension Fund is merely a flow through account. At year-end, the balance in the Public Service Pension Fund represents net contributions transferable to PSPIB. PSPIB investment assets and investment-related liabilities are reflected directly in the pension plan’s financial statements.

In order for the government to track the transactions related to contributions, benefit payments, interest and transfers, the government established the Superannuation Account in the accounts of Canada for service prior to April 1, 2000. The Superannuation Account has no capacity to pay pensions and is not considered an asset of the pension plan. All cash receipts and disbursements go to or come from the CRF. The details of the transactions of the Superannuation Account are provided in Note 21.

5. Financial assets and financial liabilities

(A) Classes of financial assets and financial liabilities

Financial assets and financial liabilities are aggregated in the following table, in classes that reflect their respective exposure as well as investment sectors. Their fair values were as follows as at March 31 ($ millions):

	2017	2016
Investments		
Public markets		
Canadian equity	**$4,616**	$4,620
Foreign equity	**21,420**	18,874
Private markets		
Real estate	**17,670**	16,306
Private equity	**9,886**	8,160
Infrastructure	**9,586**	6,893
Natural resources	**3,100**	2,200
Fixed income		
Cash and money market securities	**8,980**	4,293
Government and corporate bonds	**15,823**	14,466
Inflation-linked bonds	**5,608**	5,372
Private debt securities[1]	**6,645**	3,846
Other fixed income securities[1]	**2,408**	1,913
Alternative investments	**5,819**	4,807
Total investments	**$111,561**	$91,750
Investment-related assets		
Amounts receivable from pending trades	**$832**	$320
Interest receivable	**231**	162
Dividends receivable	**96**	75
Securities purchased under reverse repurchase agreements	**1,926**	777
Derivative-related assets	**650**	2,316
Total investment-related assets	**$3,735**	$3,650
Investments representing financial assets at FVTPL	**$115,296**	$95,400

	2017	2016
Investment-related liabilities		
Amounts payable from pending trades	**$(781)**	$(418)
Interest payable	**(28)**	(19)
Securities sold short and securities loaned	**(6,761)**	(1,930)
Securities sold under repurchase agreements	**(804)**	(1,043)
Derivative-related liabilities	**(609)**	(841)
Investment-related liabilities representing financial liabilities at FVTPL	**$(8,983)**	$(4,251)
Borrowings		
Capital market debt financing	**$(7,846)**	$(6,421)
Borrowings representing financial liabilities designated at FVTPL	**$(7,846)**	$(6,421)
Net investments	**$98,467**	$84,728

1. During the year ended March 31, 2017, private debt securities were reclassified out of other fixed income securities and into a standalone caption in order to better reflect their nature and common characteristics. Accordingly, comparative figures were adjusted to decrease other fixed income securities by $3,846 million and increase private debt securities by the same amount. Notes 5(C)(I) and 5(C)(III) were adjusted similarly.

(I) Public markets

Public markets consist of Canadian and foreign investments in the following securities: common shares, American depository receipts, global depository receipts, participation notes, preferred shares, income trust units, exchange traded funds units, pooled funds units, and securities convertible into common shares of publicly listed issuers.

Valuation techniques

Direct investments in Canadian and foreign equities are measured at fair value using quoted prices in active markets and are based on the most representative price within the bid-ask spread.

In the case of investments in pooled funds, fair value is measured using unit values obtained from each of the funds' administrators, which are derived from the fair value of the underlying investments in each pooled fund. PSPIB reviews the fair value received, and where necessary, the impact of restrictions on the sale or redemption of such investments is taken into consideration.

(II) Private markets

Private markets consist of investments in real estate, private equity, infrastructure and natural resources.

Real estate investments are comprised of direct equity positions in various private entities, fund investments, as well as properties in the real estate sector. Real estate investments focus on partnerships, companies and properties operating mainly in the retirement and residential, office, retail and industrial sectors, as well as private funds invested in real estate assets. Real estate investments are presented net of all third-party financing. As at March 31, 2017, leverage in the form of third-party financing undertaken by investment entity subsidiaries and direct real estate investments controlled by PSPIB was $5,051 million ($4,560 million as at March 31, 2016).

Private equity investments are comprised of fund investments with similar objectives, co-investments in private entities as well as direct equity positions.

Infrastructure investments are comprised of direct equity positions, fund investments and co-investments in various private entities. Infrastructure investments focus on entities engaged in the management, ownership or operation of assets in energy, transportation and other regulated businesses. Infrastructure investments are presented net of all third-party financing. As at March 31, 2017, leverage in the form of third-party financing undertaken by direct infrastructure investments controlled by PSPIB for the pension plan, was $2,865 million ($1,156 million as at March 31, 2016).

Natural resources investments are comprised of direct equity positions, fund investments and partnerships. Natural resources investments focus on entities engaged in the management, ownership or operation of assets in timberlands, agriculture and upstream oil and gas.

Valuation techniques

The process for fair value measurement of private markets investments is described in Note 5(C)(II) and the valuation techniques together with the significant inputs used are described in Note 5(C)(III).

(III) Fixed income

Fixed income consists of cash and money market securities, government and corporate bonds, inflation-linked bonds, private debt securities and other fixed income securities.

Cash and money market securities include instruments having a maximum term to maturity of one year, such as treasury bills, certificates of deposit and bankers' acceptances. A portion of such instruments has maturities of 90 days or less and is held to meet short term financial commitments. Such instruments are readily convertible into known amounts of cash and have an insignificant risk of change in value.

Government and corporate bonds include Canadian and foreign, federal, provincial, territorial and municipal bonds. Inflation-linked bonds are fixed income securities that earn inflation-adjusted returns.

Private debt securities are fixed income securities of private companies held directly or through private funds. Such debt securities take the form of senior debt, mezzanine and distressed debt and primary and secondary investments in leveraged loans. Private debt securities also include third-party loans such as junior and senior debts, construction loans, bridge loans, income-participating loans, as well as other structured finance products in the real estate sector.

Other fixed income securities consist of asset-backed securities and floating rate notes.

Asset-backed securities consist mainly of asset-backed term notes (ABTNs) and mortgage-backed securities. The ABTNs were received in exchange for third-party or non-bank sponsored asset-backed commercial paper (ABCP) that suffered a liquidity disruption in mid-August 2007 and were subsequently restructured in January 2009.

Valuation techniques

Treasury bills are valued based on prices obtained from third-party pricing sources. Such prices are determined using the most representative price within a spread of dealer quotations. Certificates of deposit and bankers' acceptances are recorded at cost plus accrued interest, which approximates their fair value given their short-term nature.

Fair values of government and most corporate bonds, inflation-linked bonds, floating rate notes and mortgage-backed securities are based on prices obtained from third-party pricing sources. Such prices are determined using either an appropriate interest rate curve with a spread associated with the credit quality of the issuer or other generally accepted pricing methodologies.

The fair values of certain corporate bonds, private debt securities and ABTNs are determined using valuation techniques. Such techniques, together with the significant inputs used, are described in Note 5(C)(III).

The fair value measurement of fund investments included as part of private debt securities is described in Note 5(C)(II).

(IV) Alternative investments

Alternative investments consist mainly of units of funds that hold a mix of equity, fixed income and derivative instruments as well as hedge funds.

Valuation techniques

The fair value of these investments is determined based on the fair values reported by the funds' administrators or general partners and reflects the fair value of the underlying equity, fixed income or derivative instruments, as applicable. PSPIB reviews the fair value received and, where necessary, the impact of restrictions on the sale or redemption of such investments is taken into consideration.

(V) Amounts receivable and payable from pending trades

Amounts receivable from pending trades consist of proceeds on sales of investments, excluding derivative financial instruments, which have been traded but remain unsettled at the end of the reporting period.

Amounts payable from pending trades consist of the cost of purchases of investments, excluding derivative financial instruments, which have been traded but remain unsettled at the end of the reporting period.

Valuation techniques

The fair value of amounts receivable and payable from pending trades reflects the value at which their underlying original sale or purchase transactions were undertaken.

(VI) Interest and dividends receivable

Interest and dividends are recorded at the amounts expected to be received at the end of the reporting period, which approximates fair value.

(VII) Interest payable

With respect to the borrowings described in Note 5(A)(X), interest is accrued at the amount expected to be paid at the end of the reporting period, which approximates fair value.

(VIII) Securities sold short and securities loaned

Securities sold short reflect PSPIB's obligation to purchase securities pursuant to short selling transactions. In such transactions, PSPIB sells securities it does not own with an obligation to purchase similar securities on the market to cover its position.

As part of securities lending and certain OTC derivative transactions, cash collateral is received and reinvested by PSPIB. PSPIB recognizes cash collateral received with a corresponding payable. The payable balance reflects the obligation of the transferee to return cash collateral to the transferor at the end of the transaction in the absence of an event of default by the transferor.

Valuation techniques

Using quoted market prices that are based on the most representative price within the bid-ask spread, the fair value of securities sold short is measured using the same method as the similar long positions presented within public markets and fixed income.

(IX) Securities sold under repurchase agreements and purchased under reverse repurchase agreements

As described in Note 2(G), PSPIB is party to repurchase and reverse repurchase agreements.

Valuation techniques

Obligations to repurchase or resell the securities sold or purchased under such agreements are recorded at cost plus accrued interest, which approximates fair value.

(X) Borrowings under the capital market debt program

PSPIB's capital market debt program is described in Note 10(B).

Valuation techniques

Short-term promissory notes are recorded at cost plus accrued interest, which approximates fair value. The fair value of PSPIB's medium-term notes is based on prices that are obtained from third-party pricing sources. Such prices are determined using an interest rate curve with a spread consistent with PSPIB's credit quality.

(B) Derivative-related assets and liabilities

Derivative financial instruments are financial contracts that are settled at a future date. The value of such instruments is derived from changes in the value of the underlying assets, interest or exchange rates. Derivative financial instruments do not, typically, require an initial net investment. In certain cases, they require an initial net investment that is less than what would be required to hold the underlying position directly. Derivative financial instruments can be listed or traded OTC. OTC instruments consist of those that are bilaterally negotiated and settled, and those that are cleared (OTC-cleared) by a central clearing party (CCP).

PSPIB uses derivative financial instruments to enhance returns or to replicate investments synthetically. Derivatives are also used to reduce the risk associated with existing investments.

PSPIB uses the following types of derivative financial instruments:

(I) Swaps

Swaps are transactions whereby two counterparties exchange cash flow streams with each other based on predetermined conditions that include a notional amount and a term. Swaps are used to increase returns or to adjust exposures of certain assets without directly purchasing or selling the underlying assets.

(II) Futures

Futures are standardized contracts to take or make delivery of an asset (buy or sell) at a predefined price and predefined future date. Futures are used to adjust exposures to specified assets without directly purchasing or selling the underlying assets.

(III) Forwards

Forwards are contracts involving the sale by one party and the purchase by another party of a predefined amount of an underlying instrument, at a predefined price and at a predefined date in the future. Forwards are used to adjust exposures to specified assets without directly purchasing or selling the underlying assets.

(IV) Options

Options are contracts where the seller gives the purchaser the right, but not the obligation, to buy or sell a given amount of an underlying security, index, or commodity, at an agreed-upon price stipulated in advance, either at a determined date or at any time before the predefined maturity date.

(V) Warrants and rights

Warrants are options to purchase an underlying asset which is in the form of a transferable security and which can be listed on an exchange.

Rights are securities giving shareholders entitlement to purchase new shares issued by a corporation at a predetermined price (normally less than the current market price) in proportion to the number of shares already owned. Rights are issued only for a short period of time, after which they expire.

(VI) Determination of fair value of derivative financial instruments

Listed derivative financial instruments are recorded at fair value using quoted market prices that are based on the most representative price within the bid-ask spread. OTC-cleared derivatives are recorded at fair value using prices obtained from the CCP. OTC derivatives are valued using appropriate valuation techniques such as discounted cash flows. These techniques use significant inputs that are observable in the market such as current market yields.

(VII) Notional values and fair values of derivative-related assets and liabilities

Notional values of derivative financial instruments are not recorded as assets or liabilities as they represent the face amount of the contract. Except for credit derivatives, notional values do not represent the potential gain or loss associated with the market or credit risk of such transactions disclosed below. Rather, they serve as the basis upon which the cash flows and the fair value of the contracts are determined.

The following table summarizes the derivatives portfolio as at March 31 ($ millions):

	2017			2016		
	Notional value	Fair value		Notional value	Fair value	
		Assets	Liabilities		Assets	Liabilities
Equity and commodity derivatives						
Listed: Futures	**$1,019**	**$0**	**$0**	$486	$0	$0
Listed: Warrants and rights	**2**	**6**	**0**	2	3	0
Listed: Options: Purchased	**2,810**	**23**	**0**	1,092	14	0
Written	**2,355**	**0**	**(20)**	1,013	0	(17)
OTC						
Total return swaps	**21,006**	**184**	**(78)**	15,146	687	(24)
Variance swaps	**3**	**3**	**(4)**	0	0	0
Options: Purchased	**1,385**	**35**	**0**	4,223	48	0
Written	**1,348**	**0**	**(32)**	4,263	0	(39)
Currency derivatives						
Listed: Futures	**99**	**0**	**0**	127	0	0
OTC						
Forwards	**20,439**	**72**	**(220)**	31,556	1,229	(170)
Swaps	**3,333**	**12**	**(32)**	2,359	14	(229)
Options: Purchased	**6,970**	**65**	**0**	6,371	75	0
Written	**7,082**	**0**	**(50)**	7,794	0	(63)
Interest rate derivatives						
Listed: Futures	**5,764**	**0**	**0**	5,421	0	0
Listed: Options: Purchased	**24,974**	**4**	**0**	1,721	1	0
Written	**27,559**	**0**	**(2)**	14,849	0	(2)
OTC						
Bond forwards	**0**	**0**	**0**	236	1	0
Interest rate swaps	**9,021**	**114**	**(69)**	8,146	117	(144)
Inflation swaps	**0**	**0**	**0**	394	3	(4)
Swaptions	**20,420**	**104**	**(67)**	21,117	110	(110)
Options: Purchased	**16,581**	**25**	**0**	6,139	7	0
Written	**22,971**	**0**	**(22)**	9,161	0	(9)
OTC-cleared:						
Interest rate swaps	**28,388**	**0**	**0**	5,766	0	0
Inflation swaps	**45**	**0**	**0**	0	0	0
Credit derivatives[1]						
OTC						
Credit default swaps: Purchased	**788**	**0**	**(13)**	1,301	5	(16)
Sold	**216**	**3**	**0**	373	2	(14)
OTC-cleared						
Credit default swaps: Purchased	**603**	**0**	**0**	455	0	0
Sold	**862**	**0**	**0**	1,046	0	0
Total		**$650**	**$(609)**		$2,316	$(841)

1. PSPIB, through sold credit derivatives, indirectly guarantees the underlying reference obligations. The maximum potential exposure is the notional amount of the sold credit derivatives as shown in the table above.

Total derivative-related assets and liabilities as at March 31 are comprised of ($ millions):

	2017			2016		
		Fair value			Fair value	
	Notional value	**Assets**	**Liabilities**	Notional value	Assets	Liabilities
Listed derivatives	**$64,582**	**$33**	**$(22)**	$24,711	$18	$(19)
OTC derivatives	**131,563**	**617**	**(587)**	118,579	2,298	(822)
OTC-cleared derivatives	**29,898**	**0**	**0**	7,267	0	0
Total		**$650**	**$(609)**		$2,316	$(841)

The term to maturity based on the notional value for the derivatives was as follows as at March 31 ($ millions):

	2017	2016
Less than 3 months	**$80,326**	$69,595
3 to 12 months	**75,079**	40,780
Over 1 year	**70,638**	40,182

(C) Fair value hierarchy

(I) Classification

Financial assets and financial liabilities described under Note 5(A) are classified within the fair value hierarchy, described as follows, based on the lowest level of input that is significant to the fair value measurement as a whole.

- Level 1 inputs are quoted prices (unadjusted) in active markets for identical assets or liabilities that PSPIB can access at the end of the reporting period.
- Level 2 inputs are inputs other than quoted prices included within Level 1 that are observable for the asset or the liability, either directly or indirectly. Level 2 inputs include:

(i) quoted prices for similar assets or liabilities in active markets

(ii) quoted prices for identical or similar assets or liabilities in markets that are not active

(iii) inputs other than quoted prices that are observable for the asset or liability

(iv) market-corroborated inputs

- Level 3 inputs are unobservable inputs for the asset or liability that are used within model-based techniques. They reflect PSPIB's assessment of the assumptions that market participants would use in pricing the assets or liabilities.

The classification within the levels of the hierarchy is established at the time of the initial determination of fair value of the asset or liability and reviewed at the end of each reporting period. PSPIB determines whether a transfer between levels has occurred and recognizes such transfer at the beginning of the reporting period.

The following table shows the fair value of financial assets and financial liabilities as at March 31, 2017 classified within the fair value hierarchy ($ millions):

	Level 1	Level 2	Level 3	Total fair value
Investments				
Public markets				
Canadian equity	**$3,975**	**$641**	**$0**	**$4,616**
Foreign equity	**18,679**	**2,526**	**215**	**21,420**
Private markets				
Real estate	**0**	**0**	**17,670**	**17,670**
Private equity	**0**	**0**	**9,886**	**9,886**
Infrastructure	**0**	**0**	**9,586**	**9,586**
Natural resources	**0**	**0**	**3,100**	**3,100**
Fixed income				
Cash and money market securities	**0**	**8,980**	**0**	**8,980**
Government and corporate bonds	**0**	**15,636**	**187**	**15,823**
Inflation-linked bonds	**0**	**5,608**	**0**	**5,608**
Private debt securities	**0**	**0**	**6,645**	**6,645**
Other fixed income securities	**0**	**2,396**	**12**	**2,408**
Alternative investments	**0**	**1,107**	**4,712**	**5,819**
Total investments	**$22,654**	**$36,894**	**$52,013**	**$111,561**
Investment-related assets				
Amounts receivable from pending trades	**$0**	**$832**	**$0**	**$832**
Interest receivable	**0**	**231**	**0**	**231**
Dividends receivable	**0**	**96**	**0**	**96**
Securities purchased under reverse repurchase agreements	**0**	**1,926**	**0**	**1,926**
Derivative-related assets	**33**	**617**	**0**	**650**
Total investment-related assets	**$33**	**$3,702**	**$0**	**$3,735**
Investments representing financial assets at FVTPL	**$22,687**	**$40,596**	**$52,013**	**$115,296**
Investment-related liabilities				
Amounts payable from pending trades	**$0**	**$(781)**	**$0**	**$(781)**
Interest payable	**0**	**(28)**	**0**	**(28)**
Securities sold short and securities loaned	**(2,082)**	**(4,679)**	**0**	**(6,761)**
Securities sold under repurchase agreements	**0**	**(804)**	**0**	**(804)**
Derivative-related liabilities	**(22)**	**(587)**	**0**	**(609)**
Investment-related liabilities representing financial liabilities at FVTPL	**$(2,104)**	**$(6,879)**	**$0**	**$(8,983)**
Borrowings				
Capital market debt financing	**$0**	**$(7,846)**	**$0**	**$(7,846)**
Borrowings representing financial liabilities designated at FVTPL	**$0**	**$(7,846)**	**$0**	**$(7,846)**
Net investments	**$20,583**	**$25,871**	**$52,013**	**$98,467**

The following table shows the fair value of financial assets and financial liabilities as at March 31, 2016 classified within the fair value hierarchy ($ millions):

	Level 1	Level 2	Level 3	Total fair value
Investments				
Public markets				
Canadian equity	$4,094	$526	$0	$4,620
Foreign equity	15,586	3,288	0	18,874
Private markets				
Real estate	0	0	16,306	16,306
Private equity	0	0	8,160	8,160
Infrastructure	0	0	6,893	6,893
Natural resources	0	0	2,200	2,200
Fixed income				
Cash and money market securities	0	4,293	0	4,293
Government and corporate bonds	0	14,261	205	14,466
Inflation-linked bonds	0	5,372	0	5,372
Private debt securities	0	0	3,846	3,846
Other fixed income securities	0	1,404	509	1,913
Alternative investments	0	891	3,916	4,807
Total investments	$19,680	$30,035	$42,035	$91,750
Investment-related assets				
Amounts receivable from pending trades	$0	$320	$0	$320
Interest receivable	0	162	0	162
Dividends receivable	0	75	0	75
Securities purchased under reverse repurchase agreements	0	777	0	777
Derivative-related assets	18	2,298	0	2,316
Total investment-related assets	$18	$3,632	$0	$3,650
Investments representing financial assets at FVTPL	$19,698	$33,667	$42,035	$95,400
Investment-related liabilities				
Amounts payable from pending trades	$0	$(418)	$0	$(418)
Interest payable	0	(19)	0	(19)
Securities sold short	(1,600)	(330)	0	(1,930)
Securities sold under repurchase agreements	0	(1,043)	0	(1,043)
Derivative-related liabilities	(19)	(822)	0	(841)
Investment-related liabilities representing financial liabilities at FVTPL	$(1,619)	$(2,632)	$0	$(4,251)
Borrowings				
Capital market debt financing	$0	$(6,421)	$0	$(6,421)
Borrowings representing financial liabilities designated at FVTPL	$0	$(6,421)	$0	$(6,421)
Net investments	$18,079	$24,614	$42,035	$84,728

(II) Process for level 3 fair value determination

The valuation process is monitored and governed by an internal valuation committee (VC). This committee is responsible for overseeing all aspects of fair value determination. This includes establishing valuation methodologies and procedures for each type of investment and ensuring they are complied with. Valuation methodologies established are based on widely recognized practices that are consistent with professional appraisal standards. Such standards include, among others, the International Private Equity and Venture Capital Valuation Guidelines, the Canadian Uniform Standards of Professional Appraisal Practice and the Uniform Standards of Professional Appraisal Practice in the United States of America.

The fair value of investments classified as Level 3 is determined at least annually. Quarterly, the fair value is reviewed and adjusted, as appropriate, to reflect the impact of any significant market or investment-specific events or circumstances. For each investment, the relevant valuation methodology is applied consistently over time as appropriate in the prevailing circumstances. The appropriateness of significant changes in valuation methodologies is reviewed by the VC.

In cases where the services of third-party appraisers are used, PSPIB ensures their independence and that valuation methods used are consistent with professional appraisal standards outlined above. In validating the work performed by appraisers, PSPIB ensures that the assumptions used correspond to financial information and forecasts of the underlying investment.

With respect to fund investments classified as Level 3, the annual fair value is generally determined based on audited financial statements received from the fund’s general partner. In certain cases fair value is obtained from information provided by the fund’s administrators and is reviewed by PSPIB to ensure reasonableness and adherence to acceptable industry valuation methods. Where necessary, the impact of restrictions on the sale or redemption of such investments is taken into consideration in determining fair value.

(III) Level 3 significant inputs

The following table outlines key information with respect to significant inputs related to financial assets and financial liabilities categorized within Level 3 as at March 31, 2017:

Financial assets and financial liabilities	Type of investment	Fair value ($ millions)	Significant valuation techniques	Significant unobservable inputs	Range (weighted average)
Public markets					
Foreign equity	Direct investments	**$215**	Net asset value method (NAV)[1]	n/a	n/a
Private markets					
Real estate	Direct and co-investments	**$16,638**	Discounted cash flow (DCF)	Discount rate[2, 3]	4.50% to 25.00% (8.06%)
				Terminal capitalization rate[2, 3]	4.25% to 10.25% (6.04%)
			Direct capitalization	Capitalization rate[2, 4]	2.75% to 8.00% (5.69%)
				Stabilized occupancy rate[4, 5]	94.00% to 100.00% (97.77%)
			Sales comparison approach	Price per square foot[4, 5]	$2.82 to $1,115.10 ($153.82)
			NAV[1]	n/a	n/a
			Transaction price	n/a	n/a
	Fund investments	**$1,032**	NAV[1]	n/a	n/a
Other private markets	Direct and co-investments	**$15,711**	DCF	Discount rate[2]	5.91% to 12.70% (9.36%)
			Market comparables	n/a	n/a
			NAV[1]	n/a	n/a
			Transaction price	n/a	n/a
	Fund investments	**$6,861**	NAV[1]	n/a	n/a
Fixed income					
Corporate bonds	Convertible bonds	**$187**	DCF	Discount rate[2]	3.90% to 14.10% (7.50%)
Private debt securities	Direct and co-investments	**$3,529**	DCF	Discount rate[2]	4.49% to 12.25% (9.07%)
			NAV[1]	n/a	n/a
			Transaction price	n/a	n/a
	Fund investments	**$3,116**	NAV[1]	n/a	n/a
Other fixed income	Asset-backed term notes	**$12**	Third-party pricing[1]	n/a	n/a
Alternative investments	Fund investments	**$4,712**	NAV[1]	n/a	n/a
Total		**$52,013**			

1. In certain cases, fair value is determined by third parties where valuation information is not available to PSPIB.
2. An increase (decrease) in this unobservable input, taken individually, generally results in a decrease (increase) in fair value.
3. An increase (decrease) in the discount rate is generally accompanied by an increase (decrease) of the terminal capitalization rate.
4. There is no predictable direct relationship between this input and any other significant unobservable input.
5. An increase (decrease) in this unobservable input, taken individually, generally results in an increase (decrease) in fair value.

The following table outlines key information with respect to significant inputs related to financial assets and financial liabilities categorized within Level 3 as at March 31, 2016:

Financial assets and financial liabilities	Type of investment	Fair value ($ millions)	Significant valuation techniques	Significant unobservable inputs	Range (weighted average)
Private markets					
Real estate	Direct and co-investments	**$15,258**	DCF	Discount rate[2, 3]	5.25% to 25.00% (8.27%)
				Terminal capitalization rate[2, 3]	4.25% to 14.00% (6.29%)
			Direct capitalization	Capitalization rate[2, 4]	3.25% to 7.50% (5.91%)
				Stabilized occupancy rate[4, 5]	93.00% to 100.00% (96.84%)
			Sales comparison approach	Price per square foot[4, 5]	$25.00 to $665.89 ($170.43)
			NAV[1]	n/a	n/a
			Transaction price	n/a	n/a
	Fund investments	**$1,048**	NAV[1]	n/a	n/a
Other private markets	Direct and co-investments	**$11,664**	DCF	Discount rate[2]	5.20% to 12.50% (9.70%)
			Market comparables	n/a	n/a
			NAV[1]	n/a	n/a
			Transaction price	n/a	n/a
	Fund investments	**$5,589**	NAV[1]	n/a	n/a
Fixed income					
Corporate bonds	Convertible bonds	**$205**	DCF	Discount rate[2]	3.70% to 13.50% (6.30%)
Private debt securities	Direct and co-investments	**$1,315**	DCF	Discount rate[2]	8.00% to 13.50% (11.09%)
			NAV[1]	n/a	n/a
			Transaction price	n/a	n/a
	Fund investments	**$2,531**	NAV[1]	n/a	n/a
Other fixed income	Asset-backed term notes	**$509**	Third-party pricing[1]	n/a	n/a
Alternative investments	Fund investments	**$3,916**	NAV[1]	n/a	n/a
Total		**$42,035**			

1. In certain cases, fair value is determined by third parties where valuation information is not available to PSPIB.
2. An increase (decrease) in this unobservable input, taken individually, generally results in a decrease (increase) in fair value.
3. An increase (decrease) in the discount rate is generally accompanied by an increase (decrease) of the terminal capitalization rate.
4. There is no predictable direct relationship between this input and any other significant unobservable input.
5. An increase (decrease) in this unobservable input, taken individually, generally results in an increase (decrease) in fair value.

(IV) Level 3 reconciliation

The following table shows a reconciliation of all movements related to financial assets and financial liabilities categorized within Level 3 for the year ended March 31, 2017 ($ millions):

	Opening balance	Purchases	Sales	Settlements	Realized gains	Unrealized gains[1]	Closing balance
Public markets	**$0**	**$190**	**$0**	**$0**	**$0**	**$25**	**$215**
Private markets	**33,559**	**7,155**	**(1,986)**	**0**	**484**	**1,030**	**40,242**
Fixed income	**4,560**	**3,795**	**(1,414)**	**(493)**	**281**	**115**	**6,844**
Alternative investments	**3,916**	**664**	**(348)**	**0**	**39**	**441**	**4,712**
Total	**$42,035**	**$11,804**	**$(3,748)**	**$(493)**	**$804**	**$1,611**	**$52,013**

1. Includes pension plan allocation adjustments.

The following table shows a reconciliation of all movements related to financial assets and financial liabilities categorized within Level 3 for the year ended March 31, 2016 ($ millions):

	Opening balance	Purchases	Sales	Settlements	Realized gains	Unrealized gains (losses)[1]	Closing balance
Private markets	$26,925	$6,933	$(2,739)	$0	$685	$1,755	$33,559
Fixed income	4,043	1,506	(375)	(504)	305	(415)	4,560
Alternative investments	2,980	1,192	(319)	0	47	16	3,916
Derivative-related assets/ liabilities (net)	(6)	0	0	(2)	2	6	0
Total	$33,942	$9,631	$(3,433)	$(506)	$1,039	$1,362	$42,035

1. Includes pension plan allocation adjustments.

(V) Level 3 sensitivity analysis

In the course of measuring fair value of financial instruments classified as Level 3, valuation techniques used incorporate assumptions that are based on non-observable data. Significant assumptions used for each asset class are described in Note 5(C)(III). Although such assumptions reflect PSPIB’s best judgment, the use of reasonably possible alternative assumptions could yield different fair value measures representing, at a minimum, a 3% increase and 3% decrease as at

March 31, 2017 (3% increase and 3% decrease as at March 31, 2016) in the fair value of financial instruments categorized as Level 3. This excludes private debt investments in the real estate sector and certain fund investments, where a sensitivity analysis is not possible given the underlying assumptions used are not available to PSPIB. With respect to private debt investments in the real estate sector, the fair value is obtained from third-party appraisers. PSPIB ensures the appropriateness of the work performed by third-party appraisers as described in Note 5(C)(II). In the case of fund investments, the fair value is determined as indicated in Note 5(C)(II).

(D) Collateral pledged and received

PSPIB is party to agreements that involve pledging and holding collateral, as outlined in Notes 2(F), 2(G) and 7(B)(I). The following table illustrates the fair values of the pension plan's allocated collateral, as well as the securities under the lending and borrowing programs and the securities under the repurchase and reverse repurchase agreements as at March 31 ($ millions):

	2017	2016
Securities lending and borrowing		
Securities lent	**$9,613**	$6,647
Collateral held[1]	**10,239**	7,096
Securities borrowed	**2,093**	1,661
Collateral pledged[2]	**2,193**	1,745
Securities repurchase and reverse repurchase agreements		
Securities sold under repurchase agreements	**806**	1,047
Collateral pledged	**805**	1,043
Securities purchased under reverse repurchase agreements	**1,932**	777
Collateral held[3]	**1,928**	777
Derivatives contracts		
Collateral pledged	**224**	208
Collateral held[4]	**165**	1,582

1. The minimum fair value of cash collateral required is equal to 102% of the fair value of the securities lent, and in the case of securities collateral 105%. As part of collateral held, cash amounted to $3,688 million for the pension plan as at March 31, 2017 ($1,511 million as at March 31, 2016) and securities amounted to $6,551 million as at March 31, 2017 ($5,585 million as at March 31, 2016). All cash collateral is reinvested.
2. The minimum fair value of collateral required is equal to 100% of the fair value of the securities borrowed.
3. The collateral received is in the form of securities of which $984 million has been used in connection with short selling transactions as at March 31, 2017 ($329 million as at March 31, 2016) and $150 million has been used in connection with securities sold under repurchase agreements (nil as at March 31, 2016).
4. As part of collateral held, cash amounted to $7 million as at March 31, 2017 (nil as at March 31, 2016) and securities amounted to $158 million as at March 31, 2017 ($1,582 million as at March 31, 2016). All cash collateral is reinvested.

6. Interest in other entities

(A) Subsidiaries, joint ventures and associates

In the normal course of business, investments in private markets are commonly held through investment entity subsidiaries formed by PSPIB. As at March 31, 2017, 103 investment entity subsidiaries were incorporated in North America, 23 in Europe, 10 in Oceania, 4 in Central and South America, 1 in Africa and 1 in Asia (102 in North America, 19 in Europe, 10 in Oceania, 4 in Central and South America, and 1 in Africa as at March 31, 2016).

In addition, PSPIB controlled 77 investees directly or through its investment entity subsidiaries as at March 31, 2017 (73 investees as at March 31, 2016).

The following tables present, in descending order, the most significant investees held directly or indirectly by PSPIB where it has control, joint control or significant influence.

As at March 31, 2017:

Entity's name	Principal place of business	Ownership interest held by PSPIB	Relationship to PSPIB
Revera Inc.	North America	100%	Controlled investee
Kaingaroa Timberlands Ltd.	Oceania	56%	Jointly controlled investee
AviAlliance GmbH	Europe	100%	Controlled investee
Roadis Transportation B.V.[1]	Global	100%	Controlled investee
FirstLight Power Resources Holding Inc.	North America	100%	Controlled investee
Roccapina Fund, L.P.	North America	100%	Controlled investee
SEGRO European Logistics Partnership S.a.r.l.	Europe	50%	Jointly controlled investee
Telesat Holdings Inc.	North America	35%	Associate
TDF S.A.S.	Europe	22%	Associate
Big Box Properties	North America	49%	Jointly controlled investee

1. Formerly Isolux Infrastructure Netherlands B.V.

As at March 31, 2016:

Entity's name	Principal place of business	Ownership interest held by PSPIB	Relationship to PSPIB
Revera Inc.	North America	100%	Controlled investee
AviAlliance GmbH	Europe	100%	Controlled investee
Kaingaroa Timberlands Ltd.	Oceania	56%	Jointly controlled investee
Telesat Holdings Inc.	North America	34%	Associate
Isolux Infrastructure Netherlands B.V.	Central and South America	19%	Jointly controlled investee
Roccapina Fund, L.P.	North America	100%	Controlled investee
SEGRO European Logistics Partnership S.a.r.l.	Europe	50%	Jointly controlled investee
Big Box Properties	North America	49%	Jointly controlled investee
Acelity Inc.	North America	21%	Associate
TDF S.A.S.	Europe	22%	Associate

In addition to the above, PSPIB holds wholly owned subsidiaries that solely provide it with services that relate to its investment activities. Such services consist of investment management and financing of private market investments within the context of PSPIB's capital market debt program described in Note 10(B).

(B) Structured entities

PSPIB holds interests in partnerships and funds mainly in the context of its investments in private markets. Given their nature, such entities commonly have the characteristics of a structured entity as defined by IFRS. These entities are held as investments and do not expose PSPIB to additional risks or returns compared to interests held in non-structured entities.

Information regarding structured entities is included, as applicable, within disclosures of investment risk management under Note 7, guarantees and indemnities under Note 23 and commitments under Note 24.

7. Investment risk management

PSPIB is required to act in the best interests of the contributors and beneficiaries under the pension plan and for maximizing returns without undue risk of loss. In pursuit of this objective, PSPIB established an Enterprise Risk Management Policy (ERM Policy). The ERM Policy provides a framework for identifying, evaluating, managing, mitigating, monitoring and reporting the investment and non-investment risks to which PSPIB is exposed.

As part of the overall ERM policy, the Investment Risk Management Policy (IRM Policy) supports the management of risk inherent to the investment decision making process. The IRM Policy outlines a framework that is designed to ensure that investment activities respect PSPIB’s risk philosophy and align with the tolerance and limits of its risk appetite. The IRM Policy also supplements the Statement of Investment Policies, Standards and Procedures (SIP&P), whose objective is to effectively manage investment risks related to the implementation of PSPIB’s various investment strategies. Investment risks include market, credit and liquidity risks.

(A) Market risk

Market risk is the risk that the value of an investment will fluctuate as a result of an adverse financial outcome due to changes in the factors that drive the value, such as changes in market prices, changes caused by factors specific to the individual investment, volatility in share and commodity prices, interest rate, foreign exchange or other factors affecting similar securities traded in the market.

(I) Measurement of market risk

Effective April 1, 2016, the absolute annualized volatility of the total portfolio was implemented as the primary measure of market risk. The absolute volatility is a statistical measure of the size of changes in investment returns of a given investment or portfolio of investments. It is used to illustrate the potential loss of value in an investment or portfolio of investments as a result of fluctuations in market prices. Prior to April 1, 2016, PSPIB used the Value at Risk (VaR) as the primary measure of market risk.

PSPIB uses seven years’ worth of market returns scaled to a twelve-month holding period to calculate the absolute volatility. For investments that are not actively traded, the calculation of the absolute volatility uses securities with similar risk attributes as a proxy.

The absolute volatility is statistically valid under normal market conditions and does not specifically consider losses from severe market events. It also assumes that the future will behave in a pattern similar to the past. Consequently, if future market conditions differ significantly from those of the past, potential losses may differ from those originally estimated.

The following table shows the absolute volatility of the total portfolio expressed as a percentage of net investments as at March 31:

	2017	2016
Absolute volatility	**7.6%**	8.5%[1]

1. Since the absolute volatility was used effective April 1, 2016, the market risk measure as at March 31, 2016 was changed in the above table for comparability purposes. Prior to April 1, 2016, PSPIB used the VaR as the primary measure of market risk. The total portfolio VaR as at March 31, 2016 was 23.6%.

Stress testing

Although the absolute volatility is a widely accepted risk measure, it is complemented by other risk measurement methodologies that provide greater insight on market risk. PSPIB uses stress testing and scenario analysis to examine the impact on financial results of abnormally large movements in risk factors. Such techniques are used to test a portfolio's sensitivity to various risk factors and key model assumptions. These methods also use historically stressed periods to evaluate how a current portfolio reacts under such circumstances. Stress testing and scenario analysis are also deployed to assess new product performance.

(II) Interest rate risk

Interest rate risk refers to the risk that fluctuations in interest rates will directly affect the fair value of the pension plan's net asset values.

The terms to maturity of the classes of financial instruments, outlined in Note 5(A), with the most significant exposure to interest rate risk were as follows as at March 31, 2017 ($ millions):

	Less than 1 year	1 to 5 years	5 to 10 years	Over 10 years	Other	Total
Cash and money market securities	**$0**	**$0**	**$0**	**$0**	**$8,980**[1]	**$8,980**
Government and corporate bonds	**1,774**	**6,846**	**4,424**	**2,779**	**0**	**15,823**
Inflation-linked bonds	**3**	**1,316**	**2,081**	**2,208**	**0**	**5,608**
Private debt securities	**57**	**650**	**2,579**	**0**	**3,359**[2]	**6,645**
Other fixed income securities	**13**	**15**	**0**	**0**	**2,380**[3]	**2,408**
Total fixed income	**$1,847**	**$8,827**	**$9,084**	**$4,987**	**$14,719**	**$39,464**

1. Due to their nature, these investments are not significantly exposed to interest rate risk.
2. Information in connection with the terms to maturity of fund and certain directly held investments included as part of private debt securities is not available.
3. Certain corporate bonds, asset-backed securities and floating rate notes are not significantly exposed to interest rate risk as their prescribed rates are variable.

The terms to maturity of the classes of financial instruments, outlined in Note 5(A), with the most significant exposure to interest rate risk were as follows as at March 31, 2016 ($ millions):

	Less than 1 year	1 to 5 years	5 to 10 years	Over 10 years	Other	Total
Cash and money market securities	$0	$0	$0	$0	$4,293[1]	$4,293
Government and corporate bonds	802	7,053	3,617	2,994	0	14,466
Inflation-linked bonds	18	1,197	1,788	2,369	0	5,372
Private debt securities	3	880	224	0	2,739[2]	3,846
Other fixed income securities	528	145	1	0	1,239[3]	1,913
Total fixed income	$1,351	$9,275	$5,630	$5,363	$8,271	$29,890

1. Due to their nature, these investments are not significantly exposed to interest rate risk.
2. Information in connection with the terms to maturity of fund and certain directly held investments included as part of private debt securities is not available.
3. Certain corporate bonds, asset-backed securities and floating rate notes are not significantly exposed to interest rate risk as their prescribed rates are variable.

The terms to maturity of PSPIB's capital market debt financing are disclosed in Note 10(B).

Alternative investments, reverse repurchase agreements, as well as derivative contracts described in Notes 5(A)(IV), 5(A)(IX) and 5(B), respectively, are also subject to interest rate risk exposures. These exposures are reflected in the absolute volatility calculation described in Note 7(A)(I).

(III) Foreign currency risk

PSPIB is exposed to currency risk through holding of investments that is, direct and indirect holdings of securities, units in pooled funds and units in limited partnerships or, investment-related liabilities in various currencies. Fluctuations in the relative value of the Canadian dollar against these foreign currencies can result in a positive or a negative effect on the fair value of the investments. To mitigate this risk, PSPIB may take, through foreign forward contracts or cross currency swaps, positions in foreign currencies.

The underlying foreign currency exposures of net investments for the pension plan were as follows as at March 31 ($ millions):

	2017		2016	
Currency	**Fair value**	**Percentage of total**	Fair value	Percentage of total
US dollar	**$46,247**	**70.5%**	$21,998	60.3%
Euro	**4,122**	**6.3**	2,598	7.1
Japanese yen	**2,397**	**3.6**	1,234	3.4
British pound	**2,019**	**3.1**	1,491	4.1
South Korean won	**1,738**	**2.6**	1,557	4.3
Brazilian real	**1,481**	**2.3**	1,128	3.1
Indian rupee	**896**	**1.4**	723	2.0
Hong Kong dollar	**867**	**1.3**	1,304	3.6
Australian dollar	**847**	**1.3**	452	1.2
Taiwanese new dollar	**723**	**1.1**	659	1.8
Swiss franc	**675**	**1.0**	720	2.0
Mexican peso	**574**	**0.9**	470	1.3
Others	**3,046**	**4.6**	2,123	5.8
Total	**$65,632**	**100.0%**	$36,457	100.0%

As at March 31, 2017, PSPIB and its investment entity subsidiaries also had commitments, denominated in foreign currencies of $14,655 million for the pension plan (US$9,099 million, €1,516 million, £138 million, 16 million South African rands, 42 million Brazilian reals, 9,840 million Colombian pesos, 168 million Mexican pesos and 91 million Australian dollars) which were not included in the foreign currency exposure table above.

As at March 31, 2016, PSPIB and its investment entity subsidiaries also had commitments, denominated in foreign currencies of $14,362 million for the pension plan (US$10,084 million, €667 million, £148 million, 132 million South African rands, 60 million Brazilian reals, 14,084 million Colombian pesos and 284 million Mexican pesos) which were not included in the foreign currency exposure table above.

(B) Credit risk

PSPIB is exposed to credit risk, which is the risk of non-performance of a debtor on whom PSPIB relies to fulfill contractual or financial obligations. That is, the risk that the issuer of a debt security or that the counterparty to a derivative contract, to a securities lending and borrowing transaction or to securities purchased under reverse repurchase agreements, is unable to meet its financial obligations.

Credit risk encompasses the risk of a deterioration of creditworthiness and the relevant concentration risk. Credit risk monitoring entails an evaluation of the credit quality of each issuer and counterparty that transacts with PSPIB. To perform this evaluation for public issuers and counterparties, PSPIB relies on four recognized credit rating agencies. A minimum of two credit ratings are used to classify each security. If the agencies disagree as to a security's credit quality, PSPIB uses the lowest of the available ratings. For private issuers, PSPIB assigns internal credit ratings to issuers and measures the combined risk profile against set targets. To assign risk ratings to issuers, PSPIB uses methodologies comparable to those used by recognized rating agencies.

As at March 31, 2017, the pension plan's maximum exposure to credit risk amounted to $40 billion ($32 billion as at March 31, 2016). This amount is presented before collateral held and netting arrangements that do not qualify for offsetting under IFRS. The maximum credit exposure excludes guarantees disclosed in Note 23 as well as investments in funds classified as alternative investments in Note 5(A). Such funds hold fixed income securities among other types of instruments.

To monitor the evolution of credit risk, PSPIB periodically produces a concentration report by credit rating of credit-sensitive securities. The concentration of credit risk by credit rating was as follows as at March 31:

Credit rating	2017	2016
AAA to AA	**54.2%**	50.7%
A	**20.0**	27.9
BBB	**4.5**	9.1
BB or below	**19.9**	10.5
No rating[1]	**1.4**	1.8
Total	**100.0%**	100.0%

1. Includes securities for public issuers and counterparties that are either not rated by credit rating agencies or rated by a single credit rating agency. ABTNs are rated by a single agency and are classified according to their rating within the table.

(I) Counterparty risk

Counterparty risk represents the credit risk from current and potential exposure related to transactions involving derivative contracts, securities lending and borrowing as well as securities repurchase and reverse repurchase agreements. In order to minimize counterparty risk, PSPIB requires that counterparties provide adequate collateral and meet its credit rating requirements. PSPIB frequently monitors the credit rating of its counterparties as determined by recognized credit rating agencies. With respect to derivative contracts, PSPIB has the ability to terminate all trades with most counterparties whose credit rating is downgraded below its requirements.

For OTC derivatives, PSPIB's policy also requires the use of the International Swaps and Derivative Association (ISDA) Master Agreement with all counterparties to derivative contracts. The ISDA Master Agreement provides the contractual framework within which dealing activities across a full range of OTC products are conducted. In the case of OTC-cleared derivatives, trading activities are regulated between parties under terms that are customary to such transactions.

As a credit mitigation technique, the ISDA Master Agreement contractually binds counterparties to close-out netting provisions in the case of default by one of the counterparties. Additionally, the Credit Support Annex (CSA) to the ISDA Master Agreement enables PSPIB to realize any collateral placed with it in the case of default of the counterparty. The CSA also requires PSPIB to contribute further collateral when requested. All collateral transactions under the CSA are in cash, high-quality debt instruments or securities. The CSA also regulates the exchange of collateral when the credit exposure to a counterparty exceeds a predetermined threshold. Counterparties are generally authorized to sell, repledge or otherwise use collateral held. Similarly, in the case of OTC-cleared derivatives, collateral is required in cash, high quality debt instruments or securities and can be sold, repledged or otherwise used. PSPIB does not sell, repledge or otherwise use any collateral held in the form of securities but does reinvest all cash collateral, with respect to derivative contracts.

With respect to transactions involving securities lending and borrowing agreements as well as securities repurchase and reverse repurchase agreements, collateral requirements are in place to mitigate counterparty risk. Notes 2(F) and 2(G) describe collateral requirements in securities lending and borrowing programs as well as securities repurchase and reverse repurchase agreements.

Information in connection with collateral pledged by PSPIB and its counterparties is disclosed in Note 5(D).

In the case of the securities lending program, PSPIB's exposure to counterparty risk is further mitigated as the custodian of the securities lent assumes the risk that a counterparty will be unable to meet its obligations associated with the collateral requirements.

PSPIB is responsible for counterparty risk monitoring and mitigation as well as maintaining a comprehensive, disciplined, and enterprise-wide process for tracking and managing counterparty risk. As such, PSPIB measures counterparty risk on an ongoing basis, evaluates and tracks the creditworthiness of current counterparties and mitigates counterparty risk through collateral management.

(II) Offsetting

PSPIB is subject to ISDA Master Agreements in relation to its OTC derivative financial instruments as described. Such agreements contain close-out netting provisions applicable only in the case of default. In certain cases, such agreements also allow for offsetting. In cases where the conditions for offsetting were met, financial instruments have been presented net in the Statement of Financial Position. Securities repurchase and reverse repurchase agreements, described in Notes 2(G) and 5(D) are subject to similar arrangements though are not offset.

The following tables present the financial assets and liabilities described above ($ millions):

Financial assets

	Gross amount of recognized financial assets	Less: gross amount of recognized financial liabilities set-off	Net amount of financial assets presented in the statement of financial position	Less: related amounts not set-off in the statement of financial position		Net
				Recognized financial liabilities	Collateral held and not recognized	
As at March 31, 2017						
Reverse repurchase agreements	**$1,926**	**$0**	**$1,926[1]**	**$150**	**$1,776**	**$0**
OTC-derivatives	**622**	**5**	**617[2]**	**442**	**126**	**49**
Total	**$2,548**	**$5**	**$2,543**	**$592**	**$1,902**	**$49**
As at March 31, 2016						
Reverse repurchase agreements	$777	$0	$777[1]	$0	$777	$0
OTC-derivatives	2,305	7	2,298[2]	691	1,524	83
Total	$3,082	$7	$3,075	$691	$2,301	$83

1. As described in Note 5(A).
2. As described in Note 5(B).

Financial liabilities

	Gross amount of recognized financial liabilities	Less: gross amount of recognized financial assets set-off	Net amount of financial liabilities presented in the statement of financial position	Less: related amounts not set-off in the statement of financial position		Net
				Recognized financial assets	Collateral pledged and not derecognized	
As at March 31, 2017						
Repurchase agreements	**$804**	**$0**	**$804**[1]	**$150**	**$654**	**$0**
OTC-derivatives	**592**	**5**	**587**[2]	**442**	**134**	**11**
Total	**$1,396**	**$5**	**$1,391**	**$592**	**$788**	**$11**
As at March 31, 2016						
Repurchase agreements	$1,043	$0	$1,043[1]	$0	$1,043	$0
OTC-derivatives	829	7	822[2]	691	129	2
Total	$1,872	$7	$1,865	$691	$1,172	$2

1. As described in Note 5(A).
2. As described in Note 5(B).

(C) Liquidity risk

Liquidity risk corresponds to the risk that PSPIB will not be able to meet its financial obligations on a timely basis, with sufficient and readily available cash resources. PSPIB's cash position is monitored on a daily basis. In general, investments in cash, money market securities, floating rate notes, bonds and public equities are expected to be highly liquid as they will be invested in securities that are actively traded. PSPIB utilizes appropriate measures and controls to monitor liquidity risk in order to ensure that there is sufficient liquidity to meet financial obligations as they come due. A liquidity report taking into consideration future forecasted cash flows is prepared and presented to senior management on a weekly basis. This ensures that sufficient cash reserves are available to meet forecasted cash outflows. Additionally, sufficient sources of liquidity are maintained for deployment in case of market disruption.

PSPIB has the ability to raise additional capital through the use of its capital market debt program. This program allows PSPIB to issue short-term promissory notes and medium-term notes. Note 10(B) provides additional information on the usage of the capital market debt program. Furthermore, PSPIB maintains credit facilities for general corporate purposes. Note 10(A) provides additional information with respect to such credit facilities.

The terms to maturity of the notional amount of derivatives are disclosed in Note 5(B).

Financial liabilities

The following tables present the fair value of non-derivative-related financial liabilities as well as derivative-related financial instruments, aggregated according to their maturities and excluding the impact of guarantees and indemnities disclosed in Note 23 ($ millions):

As at March 31, 2017:

	Less than 3 months	3 to 12 months	Over 1 year	Total
Non-derivative-related financial liabilities[1]				
Amounts payable from pending trades	**$(781)**	**$0**	**$0**	**$(781)**
Interest payable	**(26)**	**(2)**	**0**	**(28)**
Securities sold short and securities loaned	**(6,761)**	**0**	**0**	**(6,761)**
Securities sold under repurchase agreements	**(804)**	**0**	**0**	**(804)**
Capital market debt financing	**(4,190)**	**(900)**	**(2,756)**	**(7,846)**
Trade payable and other liabilities	**(112)**	**(2)**	**(54)**	**(168)**
Total	**$(12,674)**	**$(904)**	**$(2,810)**	**$(16,388)**

	Less than 3 months	3 to 12 months	Over 1 year	Total
Derivative-related financial instruments				
Derivative-related assets	**$171**	**$245**	**$234**	**$650**
Derivative-related liabilities[1]	**(285)**	**(131)**	**(193)**	**(609)**
Total	**$(114)**	**$114**	**$41**	**$41**

1. Liabilities are presented in the earliest period in which the counterparty can request payment.

As at March 31, 2016:

	Less than 3 months	3 to 12 months	Over 1 year	Total
Non-derivative-related financial liabilities[1]				
Amounts payable from pending trades	$(418)	$0	$0	$(418)
Interest payable	(17)	(2)	0	(19)
Securities sold short	(1,930)	0	0	(1,930)
Securities sold under repurchase agreements	(1,043)	0	0	(1,043)
Capital market debt financing	(3,780)	(1,463)	(1,178)	(6,421)
Trade payable and other liabilities	(89)	(2)	(45)	(136)
Total	$(7,277)	$(1,467)	$(1,223)	$(9,967)

	Less than 3 months	3 to 12 months	Over 1 year	Total
Derivative-related financial instruments				
Derivative-related assets	$1,350	$572	$394	$2,316
Derivative-related liabilities[1]	(228)	(146)	(467)	(841)
Total	$1,122	$426	$(73)	$1,475

1. Liabilities are presented in the earliest period in which the counterparty can request payment.

8. Contributions receivable

The contributions receivable as at March 31 are as follows ($ millions):

	2017	2016
Plan member contributions for past service elections	**$465**	$440
Other plan member contributions receivable	**118**	115
Total contributions receivable from plan members	**$583**	$555
Employers' share of contributions for past service elections	**$387**	$376
Other employers contributions receivable	**121**	134
Total contributions receivable from employers	**$508**	$510
Total contributions receivable	**$1,091**	$1,065

9. Other assets

The costs of operation of PSPIB are charged to the four plans for which PSPIB provides investment services, namely, the public service pension plan, the Canadian Forces pension plan, the Reserve Force pension plan and the Royal Canadian Mounted Police pension plan. PSPIB allocates the direct costs of investment activities, such as external investment management fees that are included in each pension plans' administrative expenses, based upon the net investments of each pension plan at the time the expense was incurred.

In 2017, 72.5% of PSPIB's costs of operation were allocated to the public service pension plan (72.6% in 2016) and are disclosed in the administrative expenses in Note 20. Expenses are paid by PSPIB by way of advances from the public service pension plan, which are reimbursed by the three other pension plans on a quarterly basis.

The other assets as at March 31 are as follows ($ millions):

	2017	2016
Share of expenses receivable from:		
Canadian Forces Pension Plan	**$21**	$17
Royal Canadian Mounted Police Pension Plan	**8**	6
Reserve Force Pensions Plan	**1**	0
Subtotal	**$30**	$23
Other	**118**	108
Total other assets	**$148**	$131

10. Borrowings

(A) Credit facilities

During the year ended March 31, 2017, PSPIB entered into a revolving credit facility in the amount of $2 billion and a demand line of credit in the amount of $1 billion (together "the credit facilities").

The credit facilities are for general corporate purposes and are available in either Canadian or US currencies. Subject to customary terms and conditions, these credit facilities are available at variable interest rates such as the prime rate and the US base rate.

These credit facilities were not drawn upon as at the end of the reporting period.

(B) Capital market debt financing

PSPIB's capital market debt program consists of the private placement of short-term promissory notes as well as medium-term notes issued by PSP Capital Inc., a wholly owned subsidiary of PSPIB. The capital raised is primarily used to finance private market investments. It is unconditionally and irrevocably guaranteed by PSPIB in accordance with its corporate leverage policy.

The maximum amount authorized by PSPIB's Board of Directors for the capital market debt program is 10% of the net investments plus all recourse debt outstanding of PSPIB at the time of commitment to issuance. Under this limit, the short-term promissory note component cannot exceed $3 billion for issuances in Canada and US$5 billion for issuances in the United States.

PSPIB's capital market debt financing was in compliance with the limits authorized by PSPIB's Board of Directors during the years ended March 31, 2017 and March 31, 2016.

The following outlines the terms as well as the fair value of the notes issued under the capital market debt program allocated to the pension plan as at March 31 ($ millions):

	2017		2016	
	Capital amounts payable at maturity	**Fair value**	Capital amounts payable at maturity	Fair value
Short-term Canadian dollar promissory notes, bearing interest between 0.57% and 0.78% and maturing within 26 and 273 days of issuance (56 and 185 days as at March 31, 2016)	**$979**	**$977**	$883	$881
Short-term US dollar promissory notes, bearing interest between 0.68% and 1.16% and maturing within 30 and 266 days of issuance (63 and 196 days as at March 31, 2016)	**4,118**	**4,113**	3,558	3,556
Medium-term notes Series 4, bearing interest of 2.26% per annum and matured on February 16, 2017	**0**	**0**	653	661
Medium-term notes Series 5, bearing interest of 3.03% per annum and maturing on October 22, 2020	**363**	**383**	363	389

Medium-term notes Series 6, bearing variable interest of 3-month CDOR and matured on April 4, 2016	**0**	**0**	145	145
Medium-term notes Series 7, bearing interest of 3.29% per annum and maturing on April 4, 2024	**715**	**770**	725	789
Medium-term notes Series 8, bearing interest of 1.34% per annum and maturing on August 18, 2021	**907**	**897**	0	0
Medium-term notes Series 9, bearing interest of 2.09% per annum and maturing on November 22, 2023	**704**	**706**	0	0
Total	**$7,786**	**$7,846**	$6,327	$6,421

Unrealized losses in connection with borrowings amounted to $302 million for the year ended March 31, 2017 (unrealized gains of $396 million for the year ended March 31, 2016).

Interest expense, for the year ended March 31, was as follows ($ millions):

	2017	2016
Short-term promissory notes	**$36**	$15
Medium-term notes	**61**	62
Total	**$97**	$77

11. Related party transactions

(A) Certain investees

Transactions between PSPIB and its unconsolidated subsidiaries, jointly controlled investees and associates or subsidiaries of such entities are related party transactions. PSPIB enters into investment transactions with such related parties in the normal course of its business, more specifically, as part of private markets and certain fixed income investments described under Note 5(A) as well as guarantees, indemnities and commitments described under Notes 23 and 24, respectively. Since balances in connection with all investment transactions are measured at FVTPL, those transactions undertaken with related parties have the same impact on net assets available for benefits as those with unrelated parties.

Transactions between PSPIB and its consolidated subsidiaries as well as related balances are eliminated upon consolidation and, therefore, are not disclosed in this note.

(B) Government-related entities

Since PSPIB is a Crown corporation it is considered to be related to the government. As well, other entities that are controlled, jointly controlled or significantly influenced by the government are considered government-related entities.

PSPIB may enter into investment transactions with government-related entities in the normal course of its business, more specifically, as part of private markets and certain fixed income investments described under Note 5(A). Such investment transactions are carried out on terms that are equivalent to those that may prevail in transactions with unrelated parties and are subject to the same internal processes. In this respect, transactions with such related parties have the same impact on the net assets available for benefits as those with unrelated parties. Consequently, management is availing itself of the exemption under IAS 24 Related Parties from making specific disclosures on transactions and balances with such government-related entities.

12. Capital management

PSPIB manages the pension plan's investments. PSPIB's investment objectives are:

- To invest fund transfers in the best interests of the beneficiaries and contributors under the PSSA. The funds received are invested with a view of achieving a maximum rate of return, without undue risk of loss, having regard to the funding, policies and requirements of the pension plan and the ability of the pension plan to meet its financial obligations. The funds are also invested in accordance with PSPIB's Investment Risk Management policies which are outlined in Note 7.
- To maintain an appropriate credit rating to achieve access to the capital markets at the lowest cost of capital. Through PSP Capital Inc. and its leverage policies, PSPIB has the ability to raise capital by issuing short-term promissory notes and medium-term notes. Note 10(B) provides information on the capital market debt financing and Note 7(C) provides information on PSPIB's liquidity.

The public service pension plan capital consists of the actuarial funding surplus or deficit determined regularly by the actuarial funding valuation prepared by the OCA. The purpose of this actuarial valuation is to determine the financial position of the pension plan by testing its ability to meet obligations to current plan members and their survivors. Using various assumptions, the OCA projects the future pension benefits to estimate the current value of the pension obligations on a funding basis, which is compared with the sum of: the investment assets held by PSPIB, including their projected earnings; and the discounted value of future plan member and government contributions, including future earnings on contributions. The result of this comparison is either an actuarial surplus or an actuarial deficit.

It is government policy that the obligations pertaining to service before April 1, 2000 are unfunded and are paid as they become due. For the obligations for service since April 1, 2000, the objective of managing the capital position of the pension plan is to ensure that the investments held by PSPIB are sufficient to meet the related future pension obligations.

13. Pension obligations

An actuarial valuation for accounting purposes is performed as at March 31 of each fiscal year by the OCA to measure and report the pension obligations, and to attribute the costs of the benefits to the period using the projected benefit method prorated on service. The actuarial valuation is based on the most recent triennial actuarial valuation for funding purposes in regards to the majority of the demographic assumptions. The other assumptions underlying the valuation are based on management’s best estimates of expected long-term experience and short-term forecasts. The assumptions include estimates of future inflation, interest rates, return on investments, general wage increases, workforce composition, retirement rates and mortality rates.

The discount rates used to measure the present value of the accrued pension benefits, as well as the costs of benefits earned and the interest expense for the pension plan are as follows:

- for funded pension benefits, the streamed expected rates of return on invested funds
- for unfunded pension benefits, the streamed weighted average of Government of Canada long-term bond rates

The streamed weighted average of Government of Canada long-term bond rates is a calculated 20-year weighted moving average of Government of Canada long-term bond rates projected over time. The streamed rates take into account historical Government of Canada long-term bond rates and, over time, reflect expected Government of Canada long-term bond rates.

The principal actuarial assumptions used in measuring the pension obligations were as follows as at March 31:

	2017	2016
Discount rates[1]		
Funded pension benefits	**5.7%**	5.8%
Unfunded pension benefits	**3.7%**	3.9%
Long-term rate of inflation	**2.0%**	2.0%
Long-term general wage increase	**2.6%**	2.6%

1. The streamed discount rates used to measure the pension obligations are equivalent to the flat discount rates presented in the table. The ultimate discount rates are expected to reach 6.0% by 2028 (6.1% by 2025 in 2016) for the funded pension obligations and 4.7% by 2044 (4.7% by 2041 in 2016) for the unfunded pension obligations.

For the year ended March 31, 2017, the pension plan recorded net losses of $2.9 billion ($2.2 billion in 2016) related to losses due to changes in actuarial assumptions of $4.2 billion ($3.8 billion in 2016) and experience gains of $1.3 billion ($1.6 billion in 2016).

14. Deficit to be financed by the Government of Canada

The financial statement deficit does not impact the benefit payments to plan members as the government has a statutory obligation for the payment of the pension benefits it sponsors. Pursuant to pension legislation, the transactions for funded and unfunded pension benefits are tracked in the pension accounts within the accounts of Canada.

(A) Funded pension benefits

The pension plan is financed from employee and employer contributions, as well as investment earnings. Funded pension benefits relate to post-March 2000 service that falls within the Income Tax Act limits, as an amount equal to contributions less benefit payments and other charges is invested by PSPIB. Funded pension benefits also include pre-2000 service purchased since April 1, 2000.

(B) Unfunded pension benefits

Unfunded pension benefits related to pre-April 2000 service are tracked in the pension plan superannuation account as no separate invested funds are maintained for this account (see Note 21). Employee and employer contributions for unfunded pension benefits are part of the CRF.

15. Investment income

The investment income of the pension plan is presented for each major class of financial assets and liabilities and is comprised of two categories: interest and dividends, and net unrealized and realized gains (losses). This presentation reflects the substance of the investment income generated by the underlying investments, whether directly held by PSPIB or by its investment entity subsidiaries.

The investment income of the pension plan is comprised of the following for the year ended March 31 ($ millions):

	2017			2016		
	Interest and dividends	**Change in fair value[1]**	**Total investment income[2]**	Interest and dividends	Change in fair value[1]	Total investment income[2]
Public markets	**$581**	**$3,609**	**$4,190**	$631	$(2,623)	$(1,992)
Private markets						
Real estate	**466**	**987**	**1,453**	335	1,419	1,754
Private equity	**145**	**(371)**	**(226)**	151	382	533
Infrastructure	**296**	**557**	**853**	251	570	821
Natural resources	**104**	**307**	**411**	75	107	182
Fixed income	**899**	**619**	**1,518**	659	127	786
Alternative investments	**4**	**629**	**633**	1	2	3
Total before giving effect to investment-related assets and liabilities	**$2,495**	**$6,337**	**$8,832**	$2,103	$(16)	$2,087
Investment-related assets and liabilities	**$3**	**$2,846**	**$2,849**	$3	$(1,149)	$(1,146)
Capital market debt financing	**$0**	**$(97)**	**$(97)**	$0	$50	$50
Investment income	**$2,498**	**$9,086**	**$11,584**	$2,106	$(1,115)	$991

1. Change in fair value includes realized and unrealized gains (losses) as described in Note 2(J).
2. As described in Note 19, investment-related expenses of $40 million were incurred by PSPIB's investment entity subsidiaries for the year ended March 31, 2017. They are presented as part of investment-related expenses in accordance with Section 4600, while they are presented as part of investment income in PSPIB's financial statements prepared under IFRS.

16. Contributions

The contributions related to funded benefits for the year ended March 31 are as follows ($ millions):

	2017	2016
From plan members		
Current service required contributions	**$2,158**	$2,008
Past service contributions	**25**	(11)
Total plan member contributions	**$2,183**	$1,997
From the employers		
Current service contributions	**$2,319**	$2,427
Past service contributions	**11**	(74)
Total employer contributions	**$2,330**	$2,353
Total plan member and employer contributions	**$4,513**	$4,350

17. Actuarial adjustment

Starting with the plan year ended March 31, 2016, and based on the March 31, 2014, triennial actuarial valuation of the pension plan tabled in Parliament on January 25, 2016, an annual adjustment of $340 million will be made to the pension fund for a period of 15 years ending in 2030 ($340 million in 2016). The PSSA requires that any actuarial deficit be dealt with by transferring equal instalments to the pension fund over a period of up to 15 years, commencing in the year in which the actuarial report is tabled in Parliament. The next triennial actuarial valuation of the pension plan as of March 31, 2017 is expected to be tabled in Parliament in 2018.

18. Benefit payments and refunds and transfers

(A) Benefit payments

The value of benefit payments for funded benefits, for the years ended March 31, are as follows ($ millions):

	2017	2016
Retirement benefit payments	**$1,609**	$1,402
Disability benefit pension payments	**171**	156
Death benefit payments[1]	**12**	13
Total benefit payments	**$1,792**	$1,571

1. Consist of minimum benefit payments and return of contribution payments at death.

(B) Refunds and transfers

The value of refunds and transfers for funded benefits, for the years ended March 31, are as follows ($ millions):

	2017	2016
Pension division payments	**$39**	$30
Returns of contributions and transfer value payments	**266**	333
Transfers to other pension plans	**36**	47
Total refunds and transfers	**$341**	$410

19. Investment-related expenses

Investment-related expenses allocated to the pension plan are comprised of the following for the year ended March 31 ($ millions):

	2017	2016
Interest expense	**$109**	$84
Transaction costs	**97**	74
External investment management fees[1]	**24**	26
Other (net)[2]	**71**	12
Total	**$301**	$196

1. Consists of amounts incurred for investments in public markets that are paid directly by PSPIB. Other fees are paid by certain pooled fund investments classified under alternative investments which amounted to $110 million for the year ended March 31, 2017 ($44 million for the year ended March 31, 2016). Such fees are embedded in the fair value of the funds. Similarly, management fees related to investments in private markets and private debt securities are not paid directly by PSPIB. Such fees, which generally vary between 0.1% and 2.0% of the total invested and/or committed amount, totaled $215 million for the year ended March 31, 2017 ($174 million for the year ended March 31, 2016). Such fees are embedded in the fair value of investments.
2. Investment-related expenses of $40 million were incurred by PSPIB's investment entity subsidiaries for the year ended March 31, 2017. They are presented above as part of investment-related expenses in accordance with Section 4600, while they are presented as part of investment income in PSPIB's financial statements prepared under IFRS.

20. Administrative expenses

The legislation provides for administrative expenses to be charged to the pension plan. The Treasury Board approves the administrative expenses chargeable to the plan.

PSPC, as the day-to-day administrator, recovers from the pension plan administrative expenses for the activities directly attributable to its administration. These costs include salaries and benefits, systems maintenance and development, accommodation, and other operating costs of administering the pension plan within the department.

The Secretariat, as the program manager of the pension plan, provides policy interpretation support, information to plan members, financing and funding services and support to the Pension Advisory Committee, and charges its administrative costs to the pension plan.

Health Canada is reimbursed for the costs related to medical examinations required for members that elect to purchase prior service, and for members retiring on medical grounds under the pension plan. These costs are included in the Secretariat's operations and maintenance costs charged to the pension plan.

The OCA provides actuarial valuation services. The costs related to these services are charged to the pension plan.

PSPIB charges plan-related administrative expenses such as salaries and employee benefits, operations and maintenance, professional and consulting fees, and other operating fees to the pension plan. The allocation methodology of the costs of operation of PSPIB is outlined in Note 9.

Administrative expenses, for the years ended March 31, consist of the following ($ millions):

	2017	2016
PSPC		
Salaries and employee benefits	**$55**	$57
Professional and consulting fees	**23**	27
Operation and maintenance	**7**	6
Other	**6**	6
Total	**$91**	$96
The Secretariat		
Salaries and employee benefits	**$4**	$4
Operation and maintenance	**1**	1
Total	**$5**	$5
OCA		
Actuarial fees	**$1**	$1
Total for government departments (included in the service cost)	**$97**	$102
PSPIB		
Salaries and employee benefits	**$152**	$122
Operations and maintenance	**56**	47
Professional and consulting fees	**45**	33
Other	**26**	13
Total	**$279**	$215
Total administrative expenses[1]	**$376**	$317

1. Administrative expenses related to the funded service for 2017 totaled $321 million ($257 million in 2016).

21. Superannuation Account

A separate public service superannuation account (Superannuation Account) has been established in the accounts of Canada in accordance with the PSSA and is not consolidated in the pension plan financial statements. In order for the government to track transactions made through the CRF, the Superannuation Account records contributions, benefit payments, interest and transfers that pertain to service before April 1, 2000. The Superannuation Account does not contain separate invested funds, rather, it is credited with notional interest as though net cash flows were invested quarterly in 20-year Government of Canada bonds issued at prescribed rates and held to maturity.

The following summarizes the financial position of the Superannuation Account and contributions receivable for service before April 1, 2000 as at March 31 ($ millions):

	2017	2016
Balance of account		
Superannuation Account	**$94,209**	$95,566
Plan member contribution receivable for past service	**41**	49
Employers contributions receivable for past service	**33**	40
Subtotal	**$94,283**	$95,655
Pension obligations[1]	**$96,868**	$97,027
Deficit of the balance of the account over the pension obligations	**$(2,585)**	$(1,372)

1. Pension obligations are consolidated in the pension plan's financial statements. The actuarial assumptions used to value the pension obligations of the Superannuation Account are included in Note 13.

The PSSA requires that any actuarial deficit resulting from a lower balance in the Superannuation Account than the actuarial liability be addressed by increasing the Superannuation Account in equal instalments over a period of up to 15 years. It also allows the surplus to be reduced by decreasing the Superannuation Account over a period of up to 15 years; however, if the balance of the Superannuation Account exceeds 110% of the amount required to meet the cost of the benefits payable, the surplus amount must be reduced by decreasing the Superannuation Account annually over a period of up to 15 years.

The following summarizes the transactions in the Superannuation Account and contributions receivable for unfunded pension benefits for the year ended March 31 ($ millions):

	2017	2016
Opening balance	**$95,566**	$95,876
Increase		
Contributions by employers	**$9**	$11
Contributions by plan members	**11**	14
Actuarial adjustment	**0**	681
Interest income	**4,128**	4,443
Total increase	**$4,148**	$5,149
Decrease		
Benefits paid	**$5,399**	$5,341
Refunds and transfers	**51**	58
Administrative expenses	**55**	60
Total decrease	**$5,505**	$5,459
Closing balance	**$94,209**	$95,566

22. Retirement compensation arrangements

Retirement compensation arrangements (RCAs) have been established under the authority of the Special Retirement Arrangements Act to provide supplementary pension benefits to certain plan members. Since these arrangements are covered by separate legislation, the balance of the RCAs and the related pension obligations are not consolidated in the financial statements of the pension plan.

RCA No. 1 provides for benefits in excess of those permitted under the Income Tax Act restrictions for registered pension plans.

RCA No. 2 provides pension benefits to federal public service employees who were declared surplus as a result of a three-year Early Retirement Incentive program that ended on March 31, 1998. The cost of RCA No. 2 is assumed entirely by the government.

Pursuant to the legislation, transactions pertaining to both RCA No. 1 and RCA No. 2, such as contributions, benefits, and interest credits, are recorded in the RCA Accounts, which are maintained in the accounts of Canada. The legislation also requires that the RCA Accounts be credited with interest quarterly at the same rates as those credited to the Superannuation Account.

The RCAs are registered with the Canada Revenue Agency (CRA), and a transfer is made annually between the RCA Accounts and the CRA either to remit a 50% refundable tax in respect of the net contributions and interest credits or to be credited a reimbursement based on the net benefit payments.

The following summarizes the financial position of RCA No. 1 and RCA No. 2 as at March 31 ($ millions):

	2017	2016
Balance of the accounts		
RCA Accounts	**$1,911**	$1,970
Refundable tax receivable	**1,915**	1,829
Plan members contributions receivable for past service	**7**	7
Employers contributions receivable for past service	**32**	32
Subtotal	**$3,865**	$3,838
Pension obligations	**$3,766**	$3,661
Excess of the balance of the accounts over the pension obligations	**$99**	$177

The actuarial assumptions used to value the pension obligations pertaining to the RCA Accounts are consistent with those used for the pension plan in all respects, except that they take into consideration the impact of the refundable tax on the notional rate of return expected for the RCA Accounts.

The following summarizes the transactions in RCA No. 1 and RCA No. 2 for the year ended March 31 ($ millions):

	2017	2016
Opening balance	**$3,838**	$3,631
Increase		
Contributions by employers	**$58**	$77
Contributions by plan members	**9**	11
Interest income	**86**	86
Net change in prior service contributions receivable	**0**	14
Actuarial adjustment	**0**	141
Increase in refundable tax receivable	**86**	36
Total increase	**$239**	$365
Decrease		
Benefits paid	**$125**	$121
Refunds and transfers	**1**	2
Refundable tax remittance	**86**	35
Total decrease	**$212**	$158
Closing balance	**$3,865**	$3,838

Actuarial deficits found between the balance in the RCA Accounts and the actuarial liabilities are credited to the RCA Accounts in equal instalments over a period of up to 15 years. Adjustments to fund deficiencies are based on triennial actuarial valuations. For the year ended March 31, 2017, no adjustment was made to RCA No. 1 ($12 million in 2016), and no adjustment was made to RCA No. 2 ($129 million in 2016) to cover actuarial deficiencies.

23. Guarantees and indemnities

PSPIB provides indemnification to its directors, its officers, its vice-presidents and to certain PSPIB representatives who are asked to serve on boards of directors (or like bodies) or investment advisory boards (or like bodies) of entities in which PSPIB or its investment entity subsidiaries have made an investment or have a financial interest. As a result, but subject to the Public Service Pension Investment Board Act, PSPIB may be required to indemnify these representatives for costs incurred, such as claims, actions or litigation in connection with the exercise of their duties, unless the liability of such a representative relates to a failure to act honestly and in good faith. To date, PSPIB has not received any claims or made any payment for such indemnities.

In certain cases, PSPIB also provides indemnification to third parties in the normal course of business. As a result, PSPIB may be required to indemnify such third parties in connection with the performance of their contractual obligations. To date, PSPIB has not received any claims nor made any payments for such indemnities.

PSPIB unconditionally and irrevocably guarantees all credit facilities, as well as short-term promissory notes and medium-term notes issued by PSP Capital Inc., as described in Note 10.

In certain investment transactions, PSPIB and its investment entity subsidiaries provided guarantees, indemnifications or issued letters of credit to third parties, the most significant of which are as follows:

- As at March 31, 2017, PSPIB and its investment entity subsidiaries agreed to guarantee and, in some cases, provide indemnification for the performance of certain investees under contractual agreements. The majority of these arrangements are borrowing arrangements. In the event a default occurs under such agreements, which is of limited recourse in certain cases, PSPIB or its investment entity subsidiaries could assume obligations of up to $2,077 million as at March 31, 2017 ($1,891 million as at March 31, 2016), of which $1,508 million has been allocated to the pension plan ($1,372 million as at March 31, 2016) plus applicable interest and other related costs. The arrangements mature between May 2017 and September 2028.
- Additionally, PSPIB and its investment entity subsidiaries issued letters of credit totalling $35 million as at March 31, 2017 ($29 million as at March 31, 2016), of which $25 million has been allocated to the pension plan ($21 million in 2016) in relation to investment transactions.

24. Commitments

PSPIB and its investment entity subsidiaries have committed to enter into investment transactions, which will be funded over the next several years in accordance with agreed terms and conditions. The portion of PSPIB's commitments that would be assumed by the pension plan is as follows as at March 31 ($ millions):

	2017	2016
Real estate	**$2,052**	$1,749
Private equity	**6,580**	5,142
Infrastructure	**2,723**	2,895
Natural resources	**548**	615
Private debt securities	**2,258**	3,274
Alternative investments	**901**	1,378
Total	**$15,062**	$15,053

Funding in connection with the above commitments can be called upon at various dates extending until 2035 as at March 31, 2017 (until 2032 as at March 31, 2016).

Glossary of terms

accrued pension benefits

Benefits earned for pensionable service to date by a member of the public service pension plan.

actuarial assumptions

Economic and demographic assumptions, such as future expected rates of return, inflation, salary levels, retirement ages and mortality rates, that are used by actuaries when carrying out an actuarial valuation or calculation.

actuarial valuation

An actuarial analysis that provides information on the financial condition of a pension plan.

administrative expenses

Expenses by government departments for the administration of the public service pension plan and for operating expenses incurred by the Public Sector Pension Investment Board to invest pension assets. Investment management fees are either paid directly by the Public Sector Pension Investment Board or offset against distributions received from the investments.

annual allowance

A benefit available to public service pension plan members who have more than 2 years of pensionable service, who retire before age 60 (Group 1) or before age 65 (Group 2), and who are not entitled to an immediate annuity. This benefit is a reduced pension that takes into account the early payment of a retirement pension. The earliest it becomes payable is at age 50 (Group 1) or at age 55 (Group 2).

benchmark rate of return

A standard against which rates of return can be measured, such as stock and bond market indexes developed by stock exchanges and investment managers.

benefits earned

Benefits credited to public service pension plan members for service provided during the fiscal year.

Canada Pension Plan

A mandatory earnings-related pension plan, implemented on January 1, 1966, to provide basic retirement income to Canadians who work in all the provinces and territories except the province of Quebec. Quebec operates the Québec Pension Plan, which is similar to the Canada Pension Plan, for persons who work in that province.

child

A dependant who may be entitled to a children's allowance under the public service pension plan in the event of a plan member's death. To be eligible for an allowance, a child must be under 18 years of age. Children between 18 and 25 may receive allowances if they are enrolled in school or another educational institution full-time and have attended continuously since the age of 18 or the date of the member's death, whichever occurs later.

Consumer Price Index

A measure of price changes published by Statistics Canada on a monthly basis. The Consumer Price Index measures the retail prices of a "shopping basket" of about 300 goods and services, including food, housing, transportation, clothing and recreation. The index is weighted, meaning that it gives greater importance to price changes for some products than others (for example, more to housing than to entertainment), in an effort to reflect typical spending patterns. Increases in the Consumer Price Index are also referred to as increases in the cost of living.

cost ratio

The Public Sector Pension Investment Board's operating expenses plus asset management expenses as a percentage of average net investment assets.

deferred annuity

A benefit that is available to most public service plan members who leave the public service before age 60 (Group 1) or before age 65 (Group 2) and who have at least 2 years of pensionable service. This benefit is calculated using the same formula as an immediate annuity, but payment is deferred until age 60 (Group 1) or until age 65 (Group 2). A plan member who is entitled to a deferred annuity may request an annual allowance at any time after he or she reaches age 50 (Group 1) or age 55 (Group 2).

defined benefit pension plan

A type of pension plan that promises a certain level of pension, which is usually based on the plan member's salary and years of service. The public service pension plan is a defined benefit pension plan.

disability

A physical or mental impairment that prevents an individual from engaging in any employment for which the individual is reasonably suited by virtue of his or her education, training or experience and that can reasonably be expected to last for the rest of the individual's life.

Group 1

Members of the public service pension plan who were participating in the plan on or before December 31, 2012.

Group 2

Members of the public service pension plan who began participating in the plan on or after January 1, 2013.

immediate annuity

A benefit payable to public service plan members who retire at any time after reaching age 60 (Group 1) or age 65 (Group 2) with at least 2 years of pensionable service, or after reaching age 55 (Group 1) or age 60 (Group 2) with at least 30 years of pensionable service. An immediate annuity is also payable at any age to plan members who have at least 2 years of pensionable service and are retiring because of disability.

indexation

The automatic adjustment of pensions in pay or accrued pension benefits (deferred annuities) in accordance with changes in the Consumer Price Index. Under the public service pension plan, pensions are indexed in January of each year in order to maintain their purchasing power.

minimum benefit

A benefit that is equal to the payment of a public service pension plan member's basic pension for a period of 5 years. If the plan member or his or her eligible surviving spouse or children have not received, in total, pension payments equal to 5 times the amount of the plan member's annual basic pension, the balance in the form of a lump-sum amount becomes payable to his or her designated beneficiary for the supplementary death benefit or, if there is no beneficiary, to his or her estate.

net assets available for benefits

Assets that include receivables and other assets, and the fair value of the assets held by the Public Sector Pension Investment Board on behalf of the pension plan, net of Public Sector Pension Investment Board liabilities.

non-vested member

A member who does not have at least 2 years of pensionable service to his or her credit.

past service election

A legally binding agreement to purchase a period of past service to increase a member's pensionable service under the federal public service pension plan. Past service can include eligible periods of employment, either in the public service or with another employer. Members can elect to purchase any eligible past service before they terminate employment.

pension benefits

Benefits based on a public service pension plan member's number of years of pensionable service, to a maximum of 35 years. The benefits are determined by a formula set out in the Public Service Superannuation Act; they are not based on the financial status of the pension plan. The basic benefit formula is 2% per year of pensionable service times the average of the 5 consecutive years of highest paid service. Using a legislated formula, benefits are coordinated with the Canada Pension Plan and the Québec Pension Plan and are fully indexed to increases in the Consumer Price Index.

pension contributions

Sums credited or paid by the employer (Government of Canada, some Crown corporations and the territorial governments) and public service pension plan members to finance future pension benefits. Each year, the employer contributes amounts sufficient to fund the future benefits earned by employees in respect of that year, as determined by the President of the Treasury Board.

pension transfer agreement

An agreement negotiated between the Government of Canada and an eligible employer to provide portability of accrued pension credits from one pension plan to another.

pensionable service

Periods of service to the credit of a public service pension plan member. This service includes any complete or partial periods of purchased service (for example, service buyback or elective service).

Public Sector Pension Investment Board

A Crown corporation established on April 1, 2000, under the Public Sector Pension Investment Board Act. The corporation's mandate is to invest in capital markets the amounts transferred to it since April 1, 2000, by the Government of Canada with respect to the public service pension plan. The Public Sector Pension Investment Board operates under the commercial name of PSP Investments. Both names are used interchangeably throughout this report.

Public Service Pension Fund Account

An account established to record pension transactions relating to service provided by members since April 1, 2000.

public service pension plan

A pension plan implemented on January 1, 1954, that provides benefits to public service employees payable on retirement, termination of service, or disability and to their survivors payable after death. This plan is defined by the Public Service Superannuation Act, the Pension Benefits Division Act and the benefits relating to the public service that are provided under the Special Retirement Arrangements Act.

Public Service Superannuation Account

An account established by the Public Service Superannuation Act to record pension transactions relating to service provided by members before April 1, 2000.

Public Service Superannuation Act

An act to provide pension benefits to eligible federal public servants and their dependants.

Québec Pension Plan

A pension plan similar to the Canada Pension Plan that covers individuals working in the province of Quebec. It is administered by the Régie des rentes du Québec.

return of contributions

A benefit that is available to contributors who leave the public service with less than 2 years of pensionable service under the public service pension plan. It includes employee contributions plus interest, if applicable.

supplementary death benefit

A decreasing life insurance benefit equal to twice the annual salary of a public service plan member. Coverage decreases by 10% per year starting at age 66. A minimum amount of coverage ($10,000) is provided at no cost to the plan member at age 65 for plan members entitled to an immediate annuity or an annual allowance payable within 30 days after termination of employment in the public service. This minimum coverage is maintained for life.

survivor

The person who, at the time of plan member's death, was married to the plan member before his or her retirement, or who was cohabiting with the plan member in a relationship of a conjugal nature prior to retirement and for at least one year prior to the date of death.

survivor benefit

A pension benefit paid to the survivor of a plan member who has died.

transfer value

A benefit option available to public service pension plan members who leave the public service before age 50 (Group 1) or before age 55 (Group 2) with at least 2 years of pensionable service. This benefit is the actuarial value of the plan member's accrued pension benefits. It must be transferred to another registered pension plan, to a retirement savings vehicle, or to a financial institution to purchase an annuity.

vested member

An employee who has at least 2 years of pensionable service, in other words, who has been a member of the public service pension plan for an uninterrupted period of 2 years. Once vested, the member is entitled to receive the value of the employee's own contributions plus those of the employer, along with the investment returns earned on both contributions.

year's maximum pensionable earnings

The maximum earnings on which contributions are made to the Canada Pension Plan and the Québec Pension Plan during the year. The year's maximum pensionable earnings were $55,300 in 2017 ($54,900 in 2016).

Endnotes

i. PSP Investments, http://www.investpsp.ca/en/index.html
ii. Public Services and Procurement Canada, Pay and Pension Services for Government Employees, http://www.tpsgc-pwgsc.gc.ca/remuneration-compensation/txt/index-eng.html
iii. Office of the Chief Actuary, http://www.osfi-bsif.gc.ca/Eng/oca-bac/Pages/default.aspx
iv. Public Service Superannuation Act, http://laws-lois.justice.gc.ca/eng/acts/p-36/
v. Public Service Superannuation Regulations, http://laws-lois.justice.gc.ca/eng/regulations/C.R.C.,_c._1358/
vi. Canada.ca/pension-benefits, https://www.canada.ca/en/treasury-board-secretariat/topics/pension-benefits.html
vii. Public Service Superannuation Act, http://laws-lois.justice.gc.ca/eng/acts/p-36/
viii. PSP Investments, http://www.investpsp.ca/en/index.html
ix. Canada.ca/pension-benefits, https://www.canada.ca/en/treasury-board-secretariat/topics/pension-benefits.html
x. Public Services and Procurement Canada, Pay and Pension Services for Government Employees, http://www.tpsgc-pwgsc.gc.ca/remuneration-compensation/txt/index-eng.html
xi. Public Service Superannuation Act, http://laws-lois.justice.gc.ca/eng/acts/p-36/
xii. PSP Investments, http://www.investpsp.ca/en/index.html
xiii. Office of the Chief Actuary, http://www.osfi-bsif.gc.ca/Eng/oca-bac/Pages/default.aspx