<u>Registered Retirement Income Funds and Minimum Withdrawal Requirements –</u> <u>Report to Parliament</u>

Introduction

The Government of Canada is pleased to table this report, which responds to the Private Member's Motion M-45, introduced by the Hon. Kirsty Duncan (Etobicoke North, LPC), and passed in the House of Commons on June 15, 2022, stating that:

- a) the House recognizes that:
 - i. seniors deserve a dignified retirement free from financial worry,
 - ii. many seniors are worried about their retirement savings running out,
 - iii. many seniors are concerned about being able to live independently in their own homes; and
- b) in the opinion of the House, the government should undertake a study examining population aging, longevity, interest rates, and registered retirement income funds, and report its findings and recommendations to the House within 12 months of the adoption of this motion.

This report is focused on Registered Retirement Income Funds (RRIFs), including the conversion age, minimum withdrawal rates and whether the underlying assumptions regarding rates of return, inflation and longevity continue to be appropriate.

Background

Registered Retirement Savings Plans (RRSPs) were introduced in 1957, in order to encourage and assist Canadians to save for retirement. Contributions to RRSPs are deductible from income, the investment income is not taxed as it accrues in the plan, and withdrawals are included in income for tax purposes. At the time that RRSPs were introduced, individuals were required to invest their RRSP proceeds in a life annuity with an insurance company prior to their 71st birthday or to withdraw the funds in a lump sum on a taxable basis. In 1978, RRIFs were introduced in order to increase flexibility while retaining the basic principle that RRSP funds are intended to be used for retirement income.

In the early 1990s, a major reform of the RRSP and Registered Pension Plan (RPP) limits was introduced to address inequities among the tax-assisted savings opportunities available to individuals. The current contribution and benefit limits for RPPs and RRSPs are integrated and are designed to permit most individuals to save enough, over a 35-year career, to obtain a pension equal to 70% of pre-retirement earnings, whether they save in a defined benefit RPP, a defined contribution RPP, an RRSP or a combination.

Under the tax rules in place before 1993, the RRIF minimum withdrawal factors for all ages were calculated by the formula 1÷ (90 - age), where 'age' is the age of the individual at the beginning of the year. This meant that RRIFs had to be fully paid out by age 90. In 1992, new RRIF factors were introduced for ages 71 and over to address concerns about increasing life expectancy, thereby allowing RRIFs to be extended past age 90, up to the remaining lifetime of the individual. These RRIF factors remained in place until 2015. In 2015, the RRIF withdrawal factors were substantially reduced to better reflect more recent long-term historical real rates of return and expected inflation.

Since the modern RRIF framework was put in place, the government has twice temporarily reduced RRIF minimum withdrawals in response to exceptional circumstances. For the years 2008 and 2020, RRIF minimum withdrawal amounts were reduced by 25% in recognition of exceptional market conditions caused by the financial crisis and by the COVID-19 pandemic, respectively, and their effect on retirees' savings.

In Budget 2019, in response to stakeholder requests and to address longevity risk and provide greater flexibility, the tax rules were amended to allow for the purchase of an advanced life deferred annuity with funds from an RRSP, RRIF, Pooled Retirement Pension Plan or defined contribution RPP. An advanced life deferred annuity is a life annuity the commencement of which can be deferred until the end of the year in which the annuitant attains 85 years of age. Annuities account for a very small share of retirement income in Canada.

Current Framework

RRSPs and RRIFs combined are one of the largest tax expenditures, projected to represent \$25.8 billion in forgone federal revenues in 2023.¹ The basic purpose of the tax deferral provided on savings in RRSPs and RRIFs is to help Canadians save for retirement. By requiring that contributions to these plans cease and a portion of these savings be drawn each year as income after an individual reaches a specified age, the tax rules ensure that the savings are used for their intended purpose, which is to provide retirement income, and prevent the preservation of tax-deferred retirement savings for estate purposes.

Under the current rules, individuals must convert an RRSP to a RRIF by the end of the year they attain 71 years of age. Alternatively, an individual can purchase an eligible annuity or withdraw their RRSP funds on a taxable basis. Contributions to a RRIF are not permitted and a minimum amount must be withdrawn from a RRIF beginning the year after it is established (e.g., the year in which the RRIF holder attains 72 years of age if the RRIF was established at age 71). An RRSP may be converted to a RRIF prior to age 71. Minimum withdrawal requirements also apply to such RRIFs. RRIF holders also have the option to base the minimum withdrawals on the age of a spouse or

¹ Report on Federal Tax Expenditures - Concepts, Estimates and Evaluations 2023

common-law partner. This option recognizes the fact that savings decisions are often made at a household level and a younger spouse or partner can reasonably expect to rely on the RRIF savings for a longer period than the RRIF holder.

To determine the minimum annual RRIF withdrawal, a percentage factor corresponding to the RRIF holder's age (or their spouse's or common-law partner's age) at the beginning of the year is applied to the value of the RRIF assets at the beginning of the year. For example, for a RRIF with \$100,000 of assets at the beginning of the year, the minimum withdrawal would be \$5,280 for a RRIF holder who is age 72 at the end of that year (5.28% x \$100,000 = \$5,280). Table 1 provides the current RRIF minimum withdrawal factors.²

Age	Factor	Age	Factor
under 72	1÷(90-age ¹)	84	7.71
72	5.28	85	8.08
73	5.40	86	8.51
74	5.53	87	8.99
75	5.67	88	9.55
76	5.82	89	10.21
77	5.98	90	10.99
78	6.17	91	11.92
79	6.36	92	13.06
80	6.58	93	14.49
81	6.82	94	16.34
82	7.08	95	18.79
83	7.38	96 or older	20.00

Table 1. RRIF minimum withdrawal factors, age at end of the year (%)

Notes: 1. For the purpose of determining the minimum withdrawal factors for those under the conversion age, age refers to age at the beginning of the year. In all other cases, age refers to age at the end of the year.

For individuals past the conversion age of 71, the current RRIF factors were determined on the basis of allowing an individual to preserve enough savings to provide a constant income stream, indexed to inflation, from age 72 to 100. This constant income target reflects what an individual would receive if they purchased an eligible annuity. To ensure that the RRIF may continue for the life of the individual, the maximum factor is capped at 20% for age 96 and beyond. The policy objective of providing a constant income stream relies on the assumptions that the individual earns a real return of 3% on their savings portfolio and inflation is 2% on average.

² These RRIF factors apply in most cases. In some cases, different factors may apply for RRIFs established before 1993 that have not received transfers of new funds.

For individuals who have not reached the mandatory conversion age (i.e., those 71 and younger) and who choose to convert their RRSP to a RRIF, the minimum withdrawal factor is based on the formula $1 \div (90 - age)$, where age is the individual's age at the beginning of the year. For example, an individual who was 60 years of age at the beginning of the year would have a minimum withdrawal factor of $1 \div (90 - 60) = 3.33\%$.

If older Canadians do not immediately need their minimum RRIF withdrawal for consumption, they can save the after-tax amount in an unregistered savings account or in a Tax-Free Savings Account (TFSA), up to their available TFSA contribution limit. Saving in a TFSA can allow individuals to achieve a similar result as if they were able to leave the equivalent pre-tax amount in an RRIF (while TFSA contributions are not deductible, TFSA investment income and withdrawals are not subject to income tax). The annual TFSA dollar limit for 2023 is \$6,500. Since unused TFSA contribution room is carried forward and accumulates in future years, for most people, the sum of TFSA annual contribution limits is \$88,000 as of January 1, 2023.

Profile of RRSP contributors and RRIF Annuitants

Individuals that contribute to their RRSP during their working years will generally become RRIF annuitants (excluding the small portion that withdraw their RRSP funds prior to converting to a RRIF or use all their funds to purchase an eligible annuity). Examining the characteristics of RRSP contributors can give us some insight as to the characteristics that RRIF annuitants had at earlier stages in their life.

Table 2 shows selected demographic characteristics of tax filers that made RRSP contributions in 2019. In 2019, 30% of tax filers between the ages of 25 and 54 made an RRSP contribution. This share increases with income, with over 71% of tax filers with income of more than \$200,000 making an RRSP contribution in 2019.³ The average RRSP contribution for individuals also increases with income, from \$1,400 for individuals with income up to \$15,000 to \$23,500 for individuals with income of over \$200,000. Men are somewhat more likely than women to make RRSP contributions, and contribute, on average, higher amounts. Individuals who derive most of their income from employment are more likely to make RRSP contributions compared to self-employed individuals, but contribute, on average, smaller amounts.

³ For the purpose of this report, when relying on tax data, 2019 is used. At the time of writing, the most recent year of complete tax data available is 2020. However, due to the COVID-19 pandemic and the temporary reduction in RRIF minimum withdrawals for 2020 in response, 2020 is an outlier year.

	Proportion of individuals making RRSP contributions	Average RRSP contribution (\$)
Total income		
Less or equal to \$15,000	1.8%	1,400
From \$15,001 to \$50,000	18.8%	2,300
From \$50,001 to \$100,000	45.2%	4,500
From \$100,001 to \$150,000	59.9%	8,800
From \$150,001 to \$200,000	68.6%	15,000
From \$200,001 and over	70.7%	23,500
Gender		
Women	27.6%	5,100
Men	31.9%	7,200
Primary income source ¹		
Employment	35.0%	6,100
Self-Employment	18.9%	9,900
All individuals	29.7%	6,200

Table 2. RRSP statistics for tax filers ages 25-54, by income gender and primary income source, 2019

Notes: 1. Primary income source is determined to be employment if employment income exceeds selfemployment income (i.e., the total of business income, professional income, commission income, farming income, and fishing Income).

Source: T1 Data, Department of Finance calculations

Table 3 shows that the proportion of tax filers making an RRSP contribution falls from 29.7% for individuals ages 25 to 64, i.e., those in their core working years, to only 6.8% for individuals approaching the conversion age.

	Proportion of individuals making RRSP contributions	Average RRSP contribution (\$)
18 to 24	5.4%	2,800
25 to 54	29.7%	6,200
55 to 64	29.7%	8,300
65 to 69	13.5%	8,900
70 to 71	6.8%	9,100
72+	0.8%	6,100
All individuals	21.3%	6,800

Table 3. RRSP statistics for tax filers by age, 2019

Note: Although individuals cannot contribute to their own RRSP after the year they turn 71, they can still contribute to a spouse's or common-law partner's RRSP until the year that their spouse turns 71.

Table 4 shows selected demographic characteristics of tax filers aged 55 and over in 2019, including those of RRIF annuitants (i.e., those making a RRIF withdrawal in the year) and RRIF annuitants that are making only minimum withdrawals. In 2019, among 11.4 million individuals ages 55 and over who filed a tax return, 2.6 million (23%) made a RRIF withdrawal and 1.4 million (12%) made only the minimum withdrawal. In other words, individuals making the minimum withdrawal represented 51% of all RRIF annuitants.

Individuals ages 72 to 79 are most likely to be making RRIF withdrawals (54% of all individuals in that age group), and the most likely to be making minimum withdrawals (33% of all individuals in the age group). Unsurprisingly, the share of RRIF annuitants making only minimum withdrawals jumps sharply at age 72 when individuals are required to have converted their RRSP to a RRIF (if determined by their own age rather than the age of a spouse or common-law partner). However, even among those above the conversion age, the share making minimum withdrawals increases from 62% for individuals ages 72 to 79, to 82% for individuals ages 90 and above. This suggests that RRIF annuitants are more likely to withdraw more than the minimum early in retirement, and trend towards making only minimum withdrawals as they age.

Table 4. Demographics of tax filers, RRIF annuitants, and RRIF annuitants making minimum withdrawals, number of tax filers ages 55 and over, 2019

	a. All tax filers ages 55 and over	b. RRIF annuitants	b÷a	c. RRIF annuitants making minimum withdrawals	c÷a	c÷b
Overall	11,383,000	2,649,000	23%	1,360,000	12%	51%
Gender						
Women	6,016,000	1,420,000	24%	765,000	13%	54%
Men	5,367,000	1,228,000	23%	595,000	11%	48%
Age						
55 to 59	2,519,000	75,000	3.0%	10,000	0.4%	13%
60 to 64	2,367,000	191,000	8.1%	26,000	1.1%	13%
65 to 71	2,780,000	519,000	19%	98,000	3.5%	19%
72 to 79	2,139,000	1,159,000	54%	716,000	33%	62%
80 to 89	1,273,000	596,000	47%	424,000	33%	71%
90 and over	304,000	106,000	35%	87,000	29%	82%
Marital Status ¹						
Married or common-law	7,230,000	1,686,000	23%	828,000	11%	49%
Divorced, separated, or single	2,729,000	419,000	15%	205,000	8%	49%
Widowed	1,398,000	538,000	38%	325,000	23%	60%

Note: 1. Marital status categories will not add to total as the category of individuals that did not state their marital status was not reported (about 0.2% of all tax filers ages 55 and over). Source: T1 Data, Department of Finance calculations

Divorced, separated or single seniors are somewhat less likely than married, commonlaw or widowed seniors to be RRIF annuitants. Widowed RRIF annuitants are the most likely to be making only the minimum withdrawal. Men and women are roughly equally likely to be RRIF annuitants and to make minimum withdrawals. While women represent a higher share of RRIF annuitants (1.4 million women, compared to 1.2 million men in 2019), this largely reflects longer lifespans. Women make up 53% of tax filers over age 55 and 54% of RRIF annuitants over age 55 (Table 5).

Age	Women as a share of all tax filers ages 55 and over	Women as a share of RRIF annuitants	Women as a share of tax filers making minimum withdrawals
55 to 59	51	55	53
60 to 64	51	54	55
65 to 71	52	51	57
72 to 79	53	53	55
80 to 89	57	56	57
90 and over	70	65	65
Total	53	54	56

Table 5. Distribution of tax filers and RRIF annuitants by age and gender (%)

Source: T1 Data, Department of Finance calculations

Table 6 shows the income distribution of all tax filers ages 55 and over, those making any RRIF withdrawal and those making minimum RRIF withdrawals. The lowest income individuals, those with income of less than \$15,000, are much less likely than other income groups to be RRIF annuitants, with only 4.2% of this group making RRIF withdrawals. Overall, middle income individuals, those with income between \$15,000 and \$100,000, are most likely to be making RRIF withdrawals. Looking only at RRIF annuitants, the share of RRIF annuitants that are making only the minimum withdrawals generally increases with income, from 50% for those with income between \$15,000 and \$50,000, to 62% for those with incomes over \$200,000.

	a. All tax filers ages 55 and over	b. RRIF annuitants	b÷a	c. RRIF annuitants making minimum withdrawals	с÷а	c÷b
Average Total Income	\$54,200	\$59,900	-	\$63,700	-	-
Total Income						
Up to \$15,000	1,568,000	66,000	4.2%	36,000	2.3%	54%
\$15,001 to \$50,000	5,861,000	1,542,000	26%	774,000	13%	50%
\$50,001 to \$100,000	2,839,000	796,000	28%	407,000	14%	51%
\$100,001 to \$150,000	645,000	132,000	21%	76,000	12%	58%
\$150,001 to \$200,000	210,000	46,000	22%	28,000	13%	60%
\$200,001 and over	261,000	65,000	25%	40,000	15%	62%

Table 6. Income distribution of tax filers, RRIF annuitants, and RRIF annuitants making minimum withdrawals, number of individuals ages 55 and over, 2019

Note: Total income includes split pension income for both the transferring and receiving spouse or common-law partner.

Source: T1 Data, Department of Finance calculations

Table 7 shows the average RRIF withdrawal, at different income levels, for all tax filers making RRIF withdrawals and for tax filers making only the minimum withdrawal. Though data on balances held in RRIFs in not currently available, looking at average minimum withdrawals, which are a fixed share of assets, can give us an idea of the value of assets held in RRIFs by different income groups.⁴ Table 7 shows that while Canadians at every income level are using RRIFs, higher income individuals have, on average, much higher levels of assets in their RRIFs. As high-income individuals face higher marginal tax rates they also receive a larger benefit by deferring their tax liability. Notably, in the absence of minimum withdrawal requirements, individuals that require their RRIF funds to meet their current consumption needs would continue to make withdrawals, while only those that do not require their withdrawals for current consumption would have the ability to benefit from a further tax deferral.

⁴ Budget 2022 introduced new requirements for financial institutions to annually report to the Canada Revenue Agency the total fair market value, determined at the end of the calendar year, of property held in each RRSP and RRIF that they administer. This requirement applies to 2023 and subsequent taxation years.

	Average RRIF withdrawal				
Total income	RRIF annuitants RRIF annuitants mainimum withdrawa				
Less or equal to \$15,000	3,200	1,400			
\$15,001 to \$50,000	6,500	3,900			
\$50,001 to \$100,000	14,400	9,600			
\$100,001 to \$150,000	27,100	18,500			
\$150,001 to \$200,000	40,300	26,300			
\$200,001 and over	87,200	40,500			
All	12,400	7,900			

Table 7. Average RRIF withdrawal of RRIF annuitants and RRIF annuitants making minimum withdrawals (dollars), ages 55 and over, by income, 2019

Note: Other sources of income for RRIF annuitants ages 55 and over in 2019 included CPP/QPP (14% of all income), Old Age Security and the Guaranteed Income Supplement (11%), employment income (8%), self-employment income (1%), and property income (20%). Source: T1 Data, Department of Finance calculations

Assessment

Conversion Age

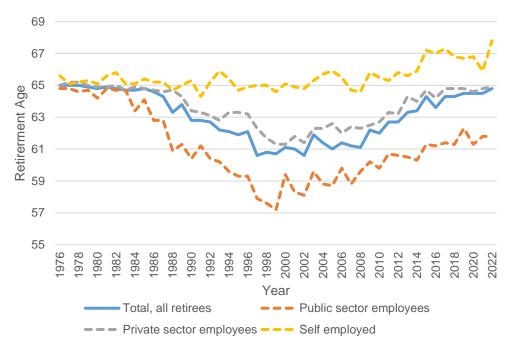
As noted, when RRSPs were introduced in 1957, individuals were required to withdraw their RRSP proceeds or invest them in a life annuity prior to their 71st birthday. In 1978, when RRIFs were introduced, individuals were required to make the conversion by age 71. Later, the 1996 federal budget reduced the age limit to 69, in order to move the age at which individuals must mature their retirement savings closer into line with ages at which most Canadians were retiring at the time. Finally, Budget 2007 increased the conversion age to 71 years of age, in order to allow older Canadians to continue working and saving. The age has remained the same since.

The age 71 conversion requirement also applies to RPPs. This means that no further contributions or benefit accruals are permitted and that pension benefits must generally begin to be paid by the end of the year an RPP member attains 71 years of age.

In 2022, the median retirement age in Canada was 64.8 years, very close to the median retirement age of 65 in 1978, when RRIFs were introduced (Figure 1). In the interim, retirement age declined steadily from the late seventies to the mid-nineties. The trend stabilized for about a decade, and then the retirement age began to increase again. Since 2007, the median retirement age has increased from 61.1 to 64.8 in 2022.

Public and private sector employees followed these trends, though the drop was more pronounced for public sector employees, with retirement age dipping as low as 57.2 in 1999. This is consistent with a decline driven by the prevalence of defined benefit pensions and early retirement incentives in this era. The private sector saw a complete

reversal of this trend, with a retirement age of 65.2 in 1978 and 64.9 in 2022, while the public sector remains below average at 61.8 years in 2022. There are expected to be a range of factors behind the increase since the late nineties, including increased longevity, the decline in workplace pension coverage, and the changing nature of work.⁵ Self-employed individuals were the only group that saw retirement age increase over the period, from 65.2 in 1978, to 67.8 in 2022.





At the same time, there is evidence that a growing portion of the population is working into their seventies. Labour force participation for individuals 70 and over has grown from 4.9% in 1978 to 8% in 2022, an increase of 63% (Table 8). Notably, labour force participation in all age groups has grown over this period as women entered the labour force in large numbers. The labour force participation rate for women ages 25 to 54 grew from 56.2% in 1978 to 85.1% in 2022. Looking only at men, labour force participation has declined slightly in most age groups over the 1978 to 2022 period, with only seniors seeing increases. For men ages 65 to 69, the participation rate increased from 21.5% in 1978 to 33.8% in 2022. For those ages 70 and over, the participation rate increased from 8.5% in 1978 to 11.2% in 2022, an increase of 32%.

Source: Statistics Canada, Table: 14-10-0060-01

⁵ Angella MacEwen, "Working After Age 65, What is at Stake?" 2012.

	Both sexes		Men		Women	
	1978	2022	1978	2022	1978	2022
25 to 54 years	75.5	88.6	94.6	92.0	56.2	85.1
55 to 59 years	59.4	76.9	83.0	82.1	37.4	71.9
60 to 64 years	43.4	56.9	65.1	62.8	23.6	51.2
65 to 69 years	13.9	28.5	21.5	33.8	7.1	23.6
70 years and over	4.9	8.0	8.5	11.2	2.3	5.2

Table 8. Labour force participation rate by gender and age (%)

Source: Statistics Canada, Table 14-10-0327-01

Minimum Withdrawal Rates

As noted, there are three fundamental parameters that underlie the RRIF minimum withdrawal rates: a life expectancy of 100 years, a 3% real rate of return and 2% indexing to account for inflation.

Life Expectancy

As noted, the current RRIF factors were determined on the basis of providing a regular stream of income from age 72 to 100. However, to ensure that funds are not depleted, the factors are capped at 20% for age 96 and beyond. This means that under the assumed rate of return and inflation, the factors would provide a constant stream of payments up until age 95, after which an individual would have to begin taking more than the minimum withdrawal to maintain a constant real income. Notably, the factors provide that the individual would have sufficient assets at age 95 to maintain their income until age 100, at which point their assets would be completely depleted. To illustrate these concepts, the Annex 1 provides an example of the stream of payments for a retiree provided by the model and by the actual minimum withdrawal schedule.

In the early nineties, when the modern RRIF calculation was put in place, life expectancy at age 71 was 13.7 years (Table 9). This number has increased steadily to 16.2 years for 2018-2020, the most recent available data. Further, while average life expectancy remains in the eighties for men and women, we see that individuals are increasingly likely to live into their late nineties and beyond. The overall survival rate at age 95 has increased from 5.6% in the early eighties to 14% in the 2018-2020 period. A total of 18% of women survive until age 95. The survival rate at age 100 has increased by 91% since the early nineties, from 1.8% to 3.4% (Table 10). For women, 4.7% are surviving until age 100.

	Both sexes	Males	Females
1980 to 1982	12.9	11.0	14.6
1990 to 1992	13.7	11.9	15.3
2000 to 2002	14.4	12.8	15.7
2010 to 2012	15.8	14.4	17.0
2018 to 2020	16.2	15.0	17.3

Table 9. Life expectancy in years at age 71, by gender

Source: Statistics Canada, Table 13-10-0114-01

Table 10. Survival rates, by gender and age (%)

	95 years		100 years			105 years			
	All	Men	Women	All	Men	Women	All	Men	Women
1980 to 1982	5.6	2.6	9.2	1.3	0.5	2.2	0.17	0.06	0.29
1990 to 1992	7.5	3.8	11.3	1.8	0.7	2.8	0.23	0.08	0.34
2000 to 2002	8.6	4.6	12.1	1.8	0.7	2.6	0.18	0.05	0.26
2010 to 2012	12.8	8.1	16.8	3.1	1.5	4.3	0.35	0.13	0.50
2018 to 2020	14.0	9.6	18.1	3.4	1.9	4.7	0.39	0.16	0.56

Source: Statistics Canada, Table 13-10-0114-01

Rates of return

As noted, the current withdrawal schedule is based on an assumption of a 3.0% real rate of return and was set in 2015. Every individual will make different investment decisions and earn a different rate of return on their portfolio. In general, it is expected that an individual's portfolio would evolve over the course of their working life and their retirement, as they shift from a higher risk, higher return portfolio during their working years, to a lower return, lower risk portfolio as they age and begin to draw down.

Table 11 shows historical real rates of return over different periods ending in 2021 for portfolios with 10%, 30% and 50% of assets invested in equities, as well as a portfolio of Government of Canada bonds with diversified maturities.

Period		Portfolio Rates of Return (%)					
		50% Equities	30% Equities	10% Equities	0% Equities		
10 years	(2012-2021)	5.93	3.46	0.99	-0.24		
15 years	(2007-2021)	3.82	2.59	1.36	0.74		
25 years	(1997-2021)	4.21	3.25	2.30	1.82		
50 years	(1972-2021)	4.50	3.71	2.92	2.52		

Table 11. Average Annual Real Rates of Return

Notes: The non-equity portion of each portfolio is made up of Government of Canada bonds, with maturities equal parts 91 days, 1-3 years, 3-5 years, 5-10 years, and 10+ years. Source: Canadian Institute of Actuaries' *Report on Canadian Economic Statistics (2021);* Department of Finance Calculations

Table 11 indicates that, on a long-term historical basis (i.e., considering the average annual real rate of return for the 25- and 50-year periods ending in 2021), a 3% real rate of return is a reasonable assumption for an average rate of return, as individuals could expect to realize a higher return on a riskier portfolio in the earlier years of their retirement, between 3.25% and 4.5%, and a lower return later in their retirement if holding a very conservative portfolio (between 1.82% and 2.92%). For the more recent historical periods (i.e., the 10- and 15-year periods ending in 2021), average annual real rates of return were lower, particularly for more conservative portfolios. For the portfolios with 30% or 10% of assets invested in equities, the average annual real rate of return ranged from 0.99% to 3.46%. Over the past 10 years, a period of historically low interest rates, the real return on a portfolio of Government of Canada bonds was negative.

A portfolio containing equities provides a higher rate of return because the investor is taking on risk. Under the assumption of a 3% real rate of return each year, an individual who began making minimum withdrawal in the year that they turned 72 and made only minimum withdrawals would have 68.6% of the nominal value of their assets remaining at the start of the year they turn 90, and 44.3% remaining at the start of the year they turn 95 (Table 12). This is sufficient to maintain a constant real income. Table 11 shows that historically 30% equity has been sufficient to obtain an average real rate of return of 3%. Table 12 shows the value of a simulated portfolio and the resulting real income, assuming a 3% real rate of return and with a distribution based on the 30% equity portfolio for all years of data available (1952-2021). The simulation shows that in the 25th percentile outcome, the individual's assets are reduced to 55.5% of their original value at age 90 and to 34.5% at age 95. In this scenario, the individual's real income at age 90 falls from 5.28% of the initial portfolio value to 4.27%, a decrease of 19% and real income at age 95 is reduced to 4.11% of the initial portfolio value, a reduction of 22%.

Age at end of year	Age 71		Age 90		Age 95	
	Portfolio value ²	Real Income ³	Portfolio value ²	Real Income ³	Portfolio value ²	Real Income ³
Constant 3% rate of return	100	5.28	68.6	5.28	44.3	5.28
Equity portfolio with 3% average rate of return ⁴						
Mean	100	5.28	68.6	5.28	44.3	5.28
Median	100	5.28	66.4	5.11	42.4	5.05
25 th percentile	100	5.28	55.5	4.27	34.5	4.11

Table 12. Simulated portfolio values and real income¹

Notes: 1. Assumes withdrawals are made December 31. 2. Portfolio value at the start of the year. 3. Real income is value of the individual's minimum withdrawal in the year, net of inflation. 4. Equity portfolio is simulated using Monte Carlo simulation (500,000 trials), with a 3% average rate of return, 2% inflation and standard deviations of individual assets and covariances among assets calculated from all years of historical data available (1952-2021).

Source: Canadian Institute of Actuaries' Report on Canadian Economic Statistics (2021); Department of Finance Calculations

Indexation

The Bank of Canada aims to keep inflation at the 2% midpoint of an inflation-control target range of 1 to 3%. The inflation target is expressed as the year-over-year increase in the total consumer price index (CPI). The CPI is the most relevant measure of the cost of living for most Canadians because it is made up of goods and services that Canadians typically buy, such as food, housing, transportation, furniture, clothing, recreation, and other items.

The CPI rose 6.8% on an annual average basis in 2022, following gains of 3.4% in 2021 and of 0.7% in 2020. The increase in 2022 was a 40-year high, the largest increase since 1982. At the same time, the Bank of Canada expects that with the declines in energy prices, improved global supply chains and a slowdown in demand, consumer price index (CPI) inflation is expected to decline significantly this year. CPI inflation is projected to fall to around 3% in the middle of 2023 and reach the 2% target in 2024.⁶ Looking at long term trends, inflation of around 2% remains the norm (Table 13).

Period		CPI – All items (%)			
10 year	(2013-2022)	2.21			
15 year	(2008-2022)	2.06			
25 year	(1998-2022)	2.09			
50 year	(1973-2022)	3.99			
Sources Statistics Canada Table 18 10 000E 01					

Source: Statistics Canada, Table 18-10-0005-01.

⁶ Bank of Canada Monetary Policy Report, January 2023

Stakeholder Consultations

The Department of Finance conducted targeted outreach to selected experts in seniors' issues and retirement savings and received and considered submissions from other interested parties and individuals. The government would like to thank the following individuals and organizations for their valued contributions:

- Amin Mawani, MA PhD FCPA CPA, Associate Professor of Taxation, Schulich School of Business, York University
- Bonnie-Jeanne MacDonald, PhD FSA FCIA, Director of Financial Security Research, National Institute on Ageing (Toronto Metropolitan University), Resident Scholar, Eckler Ltd.
- The Canadian Life and Health Insurance Association (CLHIA)
- CanAge
- C.A.R.P.
- C.D. Howe Institute
- Conference for Advanced Life Underwriting (CALU)
- Council on Aging of Ottawa's Expert Panel on Income Security
- John and Daniela Rempel, Canadian retirees and RRIF annuitants
- Leslie Reed, Canadian senior
- Luc Godbout, Doctorat, M. Fisc., Professeur titulaire de la chaire de recherche en fiscalité et en finances publiques, Université de Sherbrooke
- Michael R. Veall, PhD, Professor of Economics, McMaster University
- National Institute on Ageing, Toronto Metropolitan University
- Tammy Schirle, PhD, Professor, Department of Economics Wilfrid Laurier University
- Investment Industry Association of Canada (IIAC)

Stakeholders shared their views, and in the case of seniors' associations, shared what they were hearing from Canadian seniors. Many issues were raised by several stakeholders.

- The government heard that RRIFs, specifically RRIF minimum withdrawals, are a top-of-mind issue for seniors.
- Many seniors feel that RRIF minimum withdrawals, and their interaction with other income-tested government benefits such as the Guaranteed Income Supplement, limit their ability to optimize their financial planning through their retirement years.
- Seniors are often afraid of outliving their savings.
- Stakeholders asked for more transparency in how RRIF minimum withdrawal rates are set and a more frequent, systematic review of the underlying assumptions.
- Several stakeholders put forth that demographic changes, including longer life spans and longer careers, and economic factors that have reduced seniors' expected rate of return on their investments, support changes to the RRIF conversion age and RRIF minimum withdrawal factors.
- Some stakeholders argued that a riskless rate of return is the most appropriate assumption for calculating the minimum withdrawal factors. As the primary

alternative to managing their assets through a RRIF, individuals have the option of purchasing an eligible annuity, which provides a riskless lifetime income.

- Some stakeholders raised concerns about the impact that a large lump-sum RRIF withdrawal, made for instance, to cover an unexpected expense, can have on a senior's tax liability and benefit entitlement.
- Some stakeholders suggested changes to RRIF minimum withdrawal rules could support seniors who wish to stay in the workforce longer.
- Stakeholders raised perceived fairness issues between those that can count on a defined benefit pension and those that must rely on their own savings.
- Several stakeholders raised concerns about the equity effects of potentially reducing, delaying, or eliminating RRIF withdrawals, where the benefits would accrue disproportionality to high-income seniors.
- Several stakeholders discussed the importance of considering the complete demographic picture of individuals who would be affected by changes to the RRIF framework, including age, gender, sexual orientation, race, and marital status.
- Stakeholders suggested that the examination of RRIFs should be conducted in the context of a comprehensive study of other tax and non-tax benefits for seniors and the current trends in population ageing and longevity.

Multiple stakeholders suggested the RRIF framework would be improved by the elimination of minimum withdrawals. In addition, certain stakeholders offered detailed proposals for changes to the RRIF framework. These proposals are summarized in Table 14.

Stakeholder	Proposal		
Dr. Amin Mawani, Schulich School of Business	Permanently exempt from minimum RRIF withdrawals retirees with RRIF balances that do not exceed \$150,000.		
CanAge	Increase the RRIF conversion age.		
C.D. Howe	 Increases the age at which saving must stop and withdrawals must start, and lower the minimum withdrawal rate, if not abolishing it altogether. 		
Canadian Life and Health Insurance Association	RRIF minimum withdrawals should be set to allow retirees to have a lifetime income, assuming a 75th percentile life expectancy and a 25 th (or lower) percentile rate of return on a standard portfolio of a retiree.		
Conference for Advanced Life Underwriting	 Reduce the RRIF minimum payout formula. Allow RRIF holders to exclude up to \$160,000 (indexed) from the application of the RRIF minimum payment formula until the RRIF holder attains age 85 (similar to the result achieved by purchasing an Advanced Life Deferred Annuity). Defer immediately or over time the requirement to convert an RRSP to a RRIF to age 75. Allow RRSP contributions to continue past age 71. 		

Table 14. Detailed Stakeholder Proposals

Expert Panel on Income Security	 Examine increasing the age parameters of RRIF withdrawals and indexing them to average life expectancy. Allow the portion of any RRIF withdrawal in excess of the minimum to be carried forward for income tax purposes, to allow individuals to manage the tax consequence of lump-sum withdrawals for unexpected expenses.
Investment Industry Association of Canada	 Raise the age at which contributions to tax-deferred retirement saving vehicles must end and which RRIF withdrawals must start. Reduce the RRIF annual withdrawal rates mandated for each age, with the goal of abolishing mandatory withdrawals entirely.
Dr. Luc Godbout, Université de Sherbrooke	Move the age limit for converting an RRSP into a RRIF from 71 to 75.

Conclusions

Seniors deserve a dignified retirement free from financial worry. RRIFs are an important part of the financial plan of many Canadian seniors. The government will consider the findings of this study and continue to work to ensure that the RRIF framework is meeting its objective of supporting seniors' retirement income and is doing so in a way that is as fair and effective as possible.

	Model					Actual			
Age ¹	Starting Assets	Withdrawal Rate	Withdrawal	Real value of withdrawal	Starting Assets	Withdrawal Rate	Withdrawal	Real value of withdrawal	
72	100,000	5.2764%	5,276	5,276	100,000	5.28%	5,280	5,280	
73	99,724	5.3969%	5,382	5,276	99,720	5.40%	5,385	5,279	
74	99,328	5.5268%	5,490	5,276	99,321	5.53%	5,492	5,279	
75	98,805	5.6671%	5,599	5,276	98,795	5.67%	5,602	5,279	
76	98,145	5.8193%	5,711	5,276	98,133	5.82%	5,711	5,276	
77	97,341	5.9847%	5,826	5,276	97,328	5.98%	5,820	5,272	
78	96,383	6.1651%	5,942	5,276	96,374	6.17%	5,946	5,280	
79	95,260	6.3626%	6,061	5,276	95,247	6.36%	6,058	5,274	
80	93,962	6.5795%	6,182	5,276	93,951	6.58%	6,182	5,276	
81	92,478	6.8188%	6,306	5,276	92,467	6.82%	6,306	5,277	
82	90,796	7.0840%	6,432	5,276	90,784	7.08%	6,428	5,273	
83	88,903	7.3795%	6,561	5,276	88,896	7.38%	6,561	5,276	
84	86,788	7.7105%	6,692	5,276	86,780	7.71%	6,691	5,276	
85	84,436	8.0838%	6,826	5,276	84,428	8.08%	6,822	5,273	
86	81,832	8.5079%	6,962	5,276	81,828	8.51%	6,964	5,278	
87	78,961	8.9935%	7,101	5,276	78,956	8.99%	7,098	5,274	
88	75,808	9.5550%	7,243	5,276	75,805	9.55%	7,239	5,274	
89	72,355	10.2112%	7,388	5,276	72,356	10.21%	7,388	5,276	
90	68,584	10.9880%	7,536	5,276	68,586	10.99%	7,538	5,278	
91	64,478	11.9216%	7,687	5,276	64,478	11.92%	7,686	5,276	
92	60,015	13.0643%	7,841	5,276	60,016	13.06%	7,838	5,275	
93	55,175	14.4945%	7,997	5,276	55,179	14.49%	7,995	5,275	
94	49,936	16.3354%	8,157	5,276	49,942	16.34%	8,161	5,279	
95	44,276	18.7923%	8,320	5,276	44,279	18.79%	8,320	5,276	
96	38,169	22.2348%	8,487	5,276	38,173	20.00%	7,635	4,747	
97	31,591	27.4022%	8,657	5,276	32,447	20.00%	6,489	3,955	
98	24,514	36.0193%	8,830	5,276	27,580	20.00%	5,516	3,296	
99	16,910	53.2609%	9,006	5,276	23,443	20.00%	4,689	2,747	
100	8,749	105.000%	9,186	5,276	19,927	20.00%	3,985	2,289	
101	0	-	0		16,938	20.00%	3,388	1,908	
102	0	-	0		14,397	20.00%	2,879	1,590	
103	0	-	0		12,237	20.00%	2,447	1,325	
104	0	-	0		10,402	20.00%	2,080	1,104	
105	0	-	0		8,841	20.00%	1,768	920	

Annex 1 - RRIF Withdrawals, model and actual, individual with \$100,000 savings

Note: 1. Age at the end of the year