Public Consultation on the
Québec Pension Plan

Observations
on Retirement in Québec

Support Document

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Introduction

Since the early 2010s, retirement-related issues have been front and centre in the Canadian media. Participants in a number of forums, along with many specialists studying the situation, have provided reports and observations on the state of our retirement system, the key challenges facing it and how it can be improved.

The purpose of this document—which accompanies the consultation document entitled *Strengthening the Plan to Promote Greater Intergenerational Fairness*—is to compile the consultation's main observations on retirement in Québec and Canada. It also aims to foster debate on retirement in Québec while discussing our system's main features and the issues it must address.

The observations concern the following:

- the socio-economic and demographic environment and how they influence retirement in general (Chapter 1);
- the Canadian and Québec retirement financial security system as a whole (Chapter 2);
- public pension plans (Chapter 3);
- the Québec Pension Plan (the Plan or the QPP), which is under the Gouvernement du Québec's responsibility (Chapter 4).

The proposals in the public consultation document are based on these observations.

Chapter 1 Observations on socio-economic and demographic factors affecting retirement

1.1 Longer life expectancy

Since the early twentieth century, life expectancy (longevity) has increased significantly in Québec. In 1965, life expectancy at birth was 71 years, but increased by 11 years between 1965 and 2013. In contrast, the "normal" retirement age (the age when one can receive a retirement pension under a public pension plan) was gradually lowered from 70 to 65 by the end of the 1960s.[1] Table 1 provides further information on these trends.

Table 1 Life expectancy in Québec, 1927 to 2013

Indicators	Year				
	1927	1952	1965	1970	2013
Life expectancy at birth	54 years	67 years	71 years	72 years	82 years
"Normal" retirement age under public plans	70 years	70 years	70 years	65 years	65 years
Probability that a 30-year-old individual reaches the "normal" retirement age	57%	63%	67%	78%	91%
Duration of benefits payments from the "normal" retirement age	10 years	11 years	11 years	15 years	21 years

These changes have influenced the length of retirement and, consequently, the length of time benefits are paid. The latter grew by 83% (the equivalent of 10 years) from 1965 to 2013, thereby increasing from 11 to 21 years. Retirement benefits are now paid for longer than 20 years, which is placing financial strain on the retirement system. The period can be even longer in cases of early retirement. Moreover, life expectancy should continue to increase in coming decades.

1.2 Better conditions for experienced workers

As shown below, older members of the labour force are now not only in better health than in previous generations, but they are also better educated. They also enjoy better working conditions. At the same time, the working-age population (people aged 20 to 64) is shrinking in Québec compared with the population in the rest of Canada and in the United States.

Improved health

Today, experienced workers are healthier than in preceding generations. For example, the life expectancy in good health (with no disability) for a person aged 65 grew by around one year (from 10.0 to 10.9 years[2]) throughout Québec from 2001 to 2006. Old age, which is defined as a loss of work capacity owing to advancing years, is occurring later and later, often well after the "normal" retirement age.

1. In Canada, the universal Old Age Security (OAS) program is considered the reference for the normal retirement age, which is set at age 65. This age is also used under the Québec Pension Plan. For more in-depth information, see section 4.2.
2. The increase was around 7 months for women (from 10.4 to 11 years) and one year for men (9.7 to 10.7 years). This information comes from a study published in 2011 by the Ministère de la Santé et des Services sociaux, entitled *Pour guider l'action – Portrait de santé du Québec et de ses régions: les statistiques*.

More education

Because of their substantial demographic weight, baby boomers now make up the bulk of experienced workers. In an increasingly knowledge-based society, experienced workers are more highly educated than preceding generations. This has enhanced their labour mobility.[3]

The proportion of the population aged 55 to 64 with a post-secondary diploma or degree rose from 13% in 1990 to 40% in 2014. Inversely, the proportion without a diploma or degree sank from 67% in 1990 to 19% in 2014.[4] People in this age group are thus better able to seize employment opportunities than their predecessors.

General improvement in working conditions

Whether workers are able to extend their working lives depends largely on job quality. For example, older people are more likely to work longer if those jobs offer flexible or part-time working hours, or involve working conditions that are not dangerous to their health.

Recent statistics from the Institut de la statistique du Québec (ISQ) show that between 1997 and 2010, job quality improved significantly for workers aged 50 to 64. In particular, during this period, there was a significant drop (from 45% to 36%) in the proportion of female workers aged 55 to 64 in low-quality jobs. While there is still a male-female gap to be bridged, the percentage of high-quality jobs now done by experienced women is growing.[5]

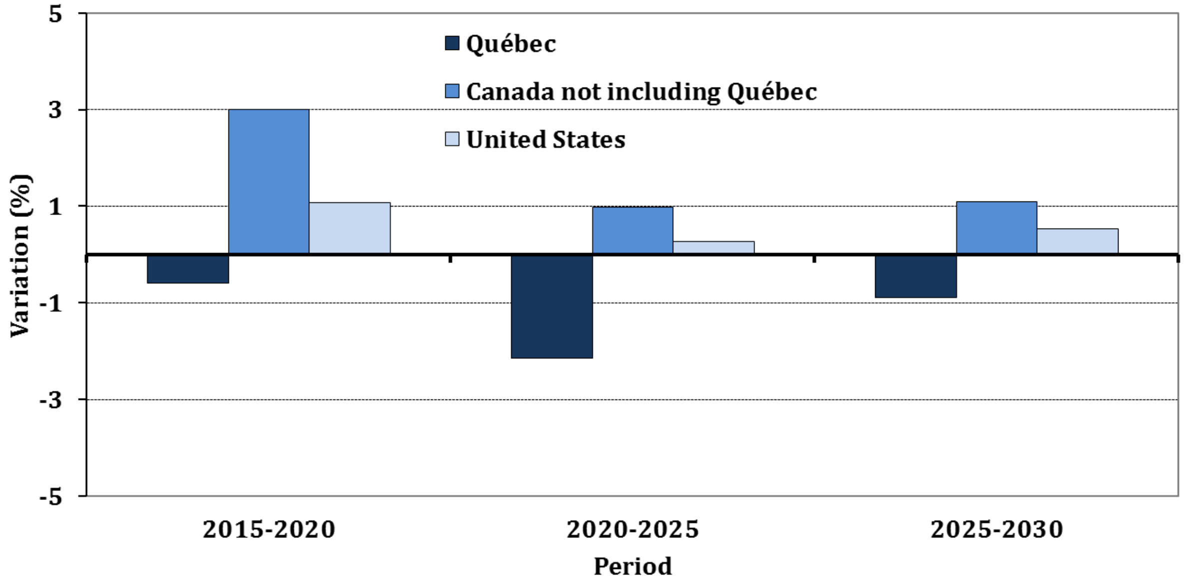
A decline in the population aged 20 to 64

In Québec, there has been a substantial increase in the number of people aged 65 or over in relation to the number of people aged 20 to 64. When the Québec Pension Plan was set up in 1966, there were 8.2 people aged 20 to 64 for each person aged 65 or over. In 2015, there were only 3.5. This number is predicted to drop to only 2 by 2030, which is comparable to the change forecast for European countries such as France (2.3) and Germany (1.9). However, it is lower than the change forecast for the other Canadian provinces (2.6) and the United States (2.7).

The economic growth of a society depends in part on increases in the working-age population and the labour force. Québec is also different from its neighbours with respect to changes in the population aged 20 to 64. Between 2015 and 2030, that group will increase by 5.1% in the rest of Canada and by 1.9% in the United States, but it will decrease by 3.6% in Québec,[6] as shown in Chart 1. Beginning in 2015, the over a million people then aged 50 to 59 are expected to leave the Québec labour force.

3. Corporate continuing education programs also play a valuable role in ensuring workers maintain and improve their skills.
4. The statistics on level of education by age and sex in Québec come from the Institut de la statistique du Québec (2015). The statistics vary little by gender.
5. The quality of jobs done by women aged 50 to 64 (born between 1946 and 1960) was better in 2010 than for their predecessors in the same age group (born between 1933 and 1947) in 1997. The statistics come from a 2012 study by the Institut de la statistique du Québec entitled *La qualité de l'emploi des travailleurs plus âgés au Québec: regard sur l'évolution de la situation des femmes et des hommes*.
6. According to the most recent actuarial valuation of the Plan as at 31 December 2015, the working-age population will plateau in 2017 and then start to decline.

Chart 1 Variations in the population aged 20 to 64 in Québec, in the other provinces of Canada and in the United States, by period



Sources: UNITED NATIONS, DEPARTMENT OF ECONOMIC AND SOCIAL AFFAIRS, POPULATION DIVISION (2015), *World Population Prospects: The 2015 Revision*, personalized data taken from the website (United States)
Actuarial Report (27th) on the Canada Pension Plan as at 31 December 2015 (Canada not including Québec)
Actuarial Valuation of the Québec Pension Plan as at 31 December 2015 (Québec)

As workers become scarcer, job market opportunities should nonetheless be created, in particular for experienced workers who wish to continue working.

1.3 Greater diversity in the process of retirement

Since the late 1990s, how people withdraw from the labour force has changed in Québec society. More and more people are opting for a gradual transition towards full retirement. The forms this transition takes are especially diverse. Some people choose to continue the same job, while others change careers. Others may maintain the same duties or opt for different tasks. They may also decide to reduce their workload or work hours, or organize them differently.

The roads people take to retirement have diverged. A growing number of people aged 60 or over now draw income from both employment and their retirement pension. More and more people receiving retirement benefits continue working and earning an income for some time. Consequently, the age when payment of retirement benefits begins is increasingly diverging from the age when workers withdraw completely from the labour force.

Today, people who apply for a retirement pension under the Plan do not necessarily stop working. For this reason, unlike the situation in the 1960s, there is no longer a clear separation between work and retirement.

1.4 Stronger labour force participation by experienced workers

In Québec, the activity rates of workers over age 60 have been growing rapidly, especially since the late 1990s. After a period when rates were low,[7] labour force participation by people aged 50 to 69—women in particular—has increased considerably, as Table 2 illustrates.

Table 2 Activity rates of men and women aged 50 to 69, and overall rates for persons aged 20 to 64, in 1998 and 2015 (Québec)

Year	Men				
	Age 50-54	Age 55-59	Age 60-64	Age 65-69	Age 20-64
1998	84.8%	66.0%	40.9%	15.5%	83.5%
2015	88.0%	79.0%	56.3%	24.6%	84.1%
1998-2015	**+3.2%**	**+13.0%**	**+15.4%**	**+9.1%**	**+0.6%**

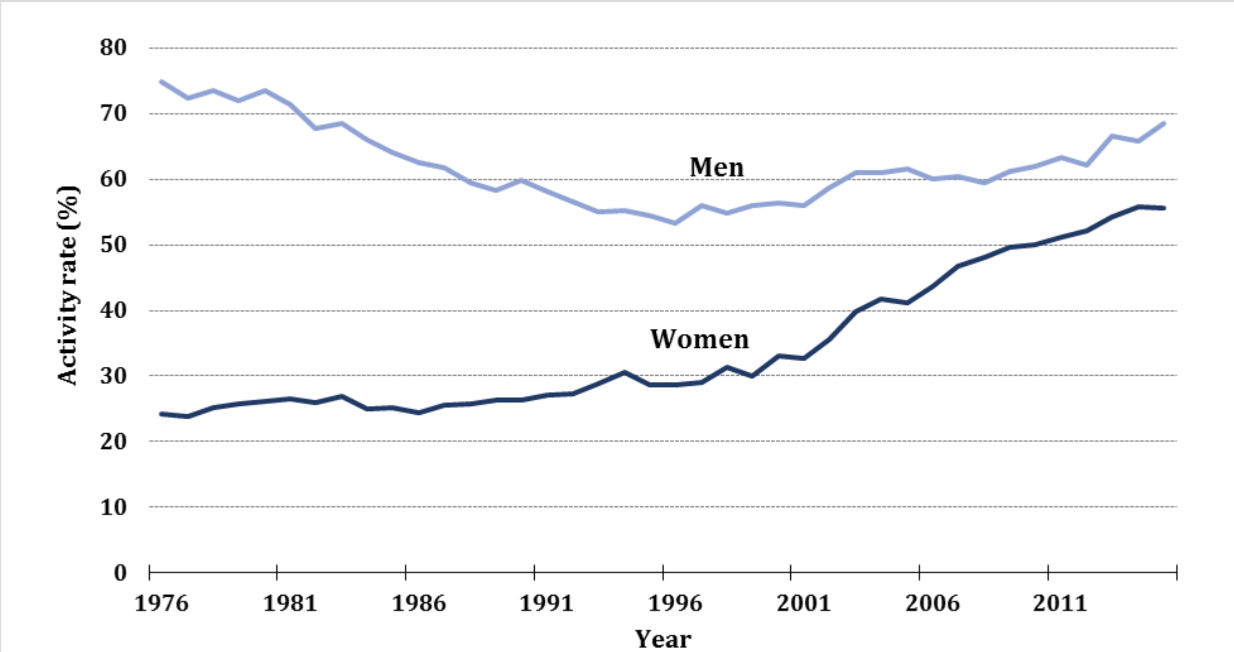
Year	Women				
	Age 50-54	Age 55-59	Age 60-64	Age 65-69	Age 20-64
1998	63.6%	42.5%	18.0%	4.9%	67.7%
2015	84.4%	67.3%	42.1%	13.2%	77.7%
1998-2015	**+20.8%**	**+24.8%**	**+24.1%**	**+8.3%**	**+10.0%**

Source: Statistics Canada, *Labour Force Survey*

Looking more closely at men aged 55 to 64 in Table 2, we find that while their activity rate declined between 1980 and 1996, it has increased constantly since then. Moreover, the activity rate of women with more work experience has grown almost continually since 1976 and began accelerating in the late 1990s. This upswing is largely due to greater labour force participation by women baby boomers and the significant gains made in catching up to men.

7. André GRENIER, "Les changements démographiques et le marché du travail – D'hier à aujourd'hui… et à demain," in Diane-Gabrielle TREMBLAY (2014), Ed., *Management de la retraite, de l'emploi et des temps sociaux*, (Québec: Presses de l'Université du Québec), 319 p.

Chart 2 Activity rate of men and women aged 55 to 64 in Québec, 1976 to 2015



1.5 Retirement from the labour force earlier than elsewhere in the world

Although the labour force participation of older workers is increasing, Quebeckers continue to withdraw from the labour force earlier. Table 3 shows that, in 2014, the activity rates of people aged 60 to 69 were generally lower in Québec than in the rest of Canada and the United States. It also shows that the rates were lower in Québec than in Organisation for Economic Co-operation and Development (OECD) countries overall. The 50-to-59 age group was the exception compared with OECD countries.

Table 3 Activity rates of men and women aged 50 to 69 in 2014

Location	Men			
	Age 50-54	Age 55-59	Age 60-64	Age 65-69
Québec	89.1%	75.8%	53.9%	25.1%
Canada	88.0%	78.2%	59.5%	32.4%
United States	83.7%	76.8%	61.9%	36.1%
OECD	87.4%	80.1%	58.7%	31.7%

Location	Women			
	Age 50-54	Age 55-59	Age 60-64	Age 65-69
Québec	82.0%	66.0%	44.0%	16.0%
Canada	80.9%	69.2%	47.5%	20.2%
United States	72.8%	66.4%	50.2%	27.5%
OECD	70.5%	61.8%	40.2%	19.0%

Sources: Statistics Canada, *Labour Force Survey*, and OECD, 2014

In 2014, the effective average retirement age (the actual age of exit from the labour force[8]) was just over 62 years in Québec. It was 63 years in Canada as a whole.

A number of factors can influence the age at which a person stops working, in particular his or her health, access to employment after the age of 60, working conditions and, above all, sources of retirement income. For example, whether a person participates in a private pension plan plays a major role in the decision to leave the labour force, since retirement benefits can be paid under such plans at the age of 55. People covered by a private pension plan are therefore more likely to leave the labour force early or definitively. People not covered by a plan tend to work longer.

MAIN OBSERVATIONS FROM CHAPTER 1

1. The transition towards complete retirement from the labour force is taking many different forms in Québec as life expectancy grows.

2. The labour force participation rate for people aged 50 or over is rising. However, the rate for people aged 60 to 69 in Québec is lower than in the rest of Canada, the United States and elsewhere in the world.

8. The average ages are taken from Statistics Canada's *Labour Force Survey*. In that survey, retirement does not necessarily mean complete cessation of work. The average ages are also mentioned in the "Vitrine sur le vieillissement" of the Banque de données des statistiques officielles sur le Québec (2015).

Chapter 2 Observations on the retirement income security system in Québec and Canada

2.1 Overview of the retirement income security system

The retirement income security system has three levels. The first level includes measures administered by the federal government, the second level includes compulsory public plans and the third level includes private retirement savings plans and personal savings.

The Québec system for retirement income security

LEVEL III • Supplemental pension plans (SPPs) • Voluntary retirement savings plans (VRSPs) • Registered retirement savings plans (RRSPs) and tax-free savings accounts (TFSAs) • Personal savings	Individual or group plans and savings, which complement public plans
LEVEL II • Québec Pension Plan (QPP) • Canada Pension Plan (CPP)	Basic compulsory plans that replace 25% of average career earnings
LEVEL I • Universal public plan: – Old Age Security (OAS) • Assistance measures: – Guaranteed Income Supplement (GIS) – Allowance – Allowance for the survivor	Federal plan and assistance measures

A basic social safety net provided by the federal government

Level I concerns the Old Age Security (OAS) program, which came into being in 1952 and is now funded by the taxes of everyone in Canada. Its main components are the OAS pension and, since 1967, the Guaranteed Income Supplement (GIS). The OAS pension provides seniors with a basic income (a maximum of $579[9] per month[10]).

The GIS is intended for seniors with low incomes. It complements the OAS pension and is a monthly benefit that varies depending on the family income and situation. It decreases as soon as the

9. The OAS pension is paid to everyone who meets certain Canadian residency requirements. In 2016, the amount is reduced by 15% of the amount by which an individual's annual income exceeds $73 756. Thus, the monthly pension of $579 is not paid if one's income exceeds $119 615.
10. OAS benefits are indexed quarterly to the increase in the cost of living, as measured by the Consumer Price Index (CPI). The amounts indicated are for October through December 2016. QPP and CPP benefits are indexed yearly to the CPI.

individual or couple has income other than the OAS pension.[11] In October 2016, the maximum monthly GIS is $864 for a person living alone and $520 per person when both spouses are receiving the OAS pension. Around 40% of Québec seniors receive the full or a partial GIS.

Before the QPP and CPP came into effect on 1 January 1966, the minimum age of eligibility for the OAS pension was 70 years. Over a 5-year period (from 1966 to 1970), the minimum age was lowered one year at a time to reach 65 in 1970. This has been the age of eligibility ever since.

The QPP: 25% of pensionable earnings at age 65

Level II includes the QPP and the CPP (the equivalent federal plan), which are funded through contributions and provide financial protection to all individuals with annual employment earnings over $3500. The employment earnings on which workers can contribute has a ceiling, which is known as the maximum pensionable earnings (MPE). In 2016, the MPE is $54 900, and the contribution rate is 10.65% for the QPP and 9.9% for the CPP. Contributions are divided equally between employers and workers. Self-employed workers pay both portions (employer and employee). The QPP is designed to replace 25% of a worker's average career earnings when he or she turns 65, adjusted according to the average MPE for the last five years.

Private plans for additional financial security

Level III includes private pension plans, primarily supplemental pension plans (SPPs), public-sector pension plans, registered retirement savings plans (RRSPs), tax-free savings accounts (TFSAs) and voluntary retirement savings plans (VRSPs). After payment of retirement benefits begins, individuals can also receive income from other sources, such as investments or other assets (for example, income-generating property). They can also work on a full or part-time basis, either for an employer or for themselves.

Individual and group RRSPs are the primary private retirement savings instruments for people not covered by a SPP. The amounts contributed to an RRSP or SPP can be deducted from taxable income, up to a deduction limit of 18% of the annual income earned in the preceding year. RRSP contribution room also takes into account the value of any amounts accruing in a SPP. Investment income is usually not taxed if it remains in the plan, but any amounts withdrawn are taxable.

VRSPs provide the same tax advantages as RRSPs. Once they are implemented, by decree or by 2018, employers with at least five eligible employees who are not already covered by an SPP or a group retirement savings plan sponsored by the company will be required to choose a VRSP and automatically enroll eligible employees. Employers are not required to contribute to VRSPs. If they do, they must set their contribution rate.

People who are not automatically enrolled—such as the self-employed, business owners and individuals who wish to save—can enroll in the VRSP of their choice by contacting a plan administrator directly.

Although tax-free savings accounts (TFSAs) are not registered savings instruments intended solely for retirement, they provide a way to earn tax-free investment income in order to meet one's needs in retirement more easily. Adults living in Canada can contribute up to $5500 to a TFSA in 2016.[12] Contributions cannot be deducted from one's income, but any investment income and amounts withdrawn are not taxable.

11. The first $3500 in employment earnings is excluded.
12. The limit was $5000 from 2009 to 2012, $5500 in 2013 and 2014, and $10 000 in 2015. Unused contribution room from previous years can be applied to later years and accumulates.

Components of the Québec retirement income security system

In Canada, the first level is the federal universal public plan (OAS) and assistance measures, and the second level is the compulsory basic plan (QPP or CPP). These are the public components of the retirement income security system. The third level—composed of employer-sponsored pension plans and individual retirement savings plans (RRSPs and TFSAs)—is the private component.

Government involvement in the pension system has two main goals. From a social perspective, it aims to reduce senior poverty as much as possible. From an economic perspective, it aims to distribute individuals' income over their entire lives through contributions and taxes to ensure a certain level of replacement income after their retirement from the labour force.

Relationship between assistance measures and other components of the system

The amount of federal assistance paid varies depending on the income from levels II and III.[13] If the total benefits under public plans is insufficient (generally where career earnings were low), a person becomes eligible for the GIS. A person with higher career earnings may also be entitled to the GIS if he or she has not saved for retirement or is not receiving (or stops receiving) income other than income under public plans.[14] Whatever the situation, the GIS is there to provide financial assistance.

In reality, a period of low income may be followed by a period of higher income. In addition, it is not a given that a person who has average career earnings under $25 000 will be entitled to the GIS upon retirement since the sum of his or her income and his or her spouse's income may disqualify the person for the GIS. Recent research by Retraite Québec has shown that a high proportion (40%) of people born in 1945 whose average earnings were under $15 000 when they were in their early 50s did not receive the GIS at age 67 because of their household income or other sources of income. If there are no additional savings, the rate of income replacement for people in this situation could be insufficient in retirement. For example, for a household of two people aged 65 or over in 2016, the GIS is not paid if the couple's income from sources other than the OAS pension exceeds $23 184.

2.2 Replacing income in retirement: a general objective

According to the usual criteria, people need to replace around 70% of the average gross annual income they earned in their last years of work in order to maintain their standard of living in retirement. For example, if an individual's average annual income is $50 000, he or she would need replacement income of $35 000. This "70% rule" is not universal, however, and varies according to employment income and household makeup.

The findings from a study on financial independence in retirement[15] shed further light on this objective. If we take into account the maintenance of disposable income[16] concept used in the study, the income replacement objective necessary to maintain the pre-retirement standard of living varies according to gross income. Thus:

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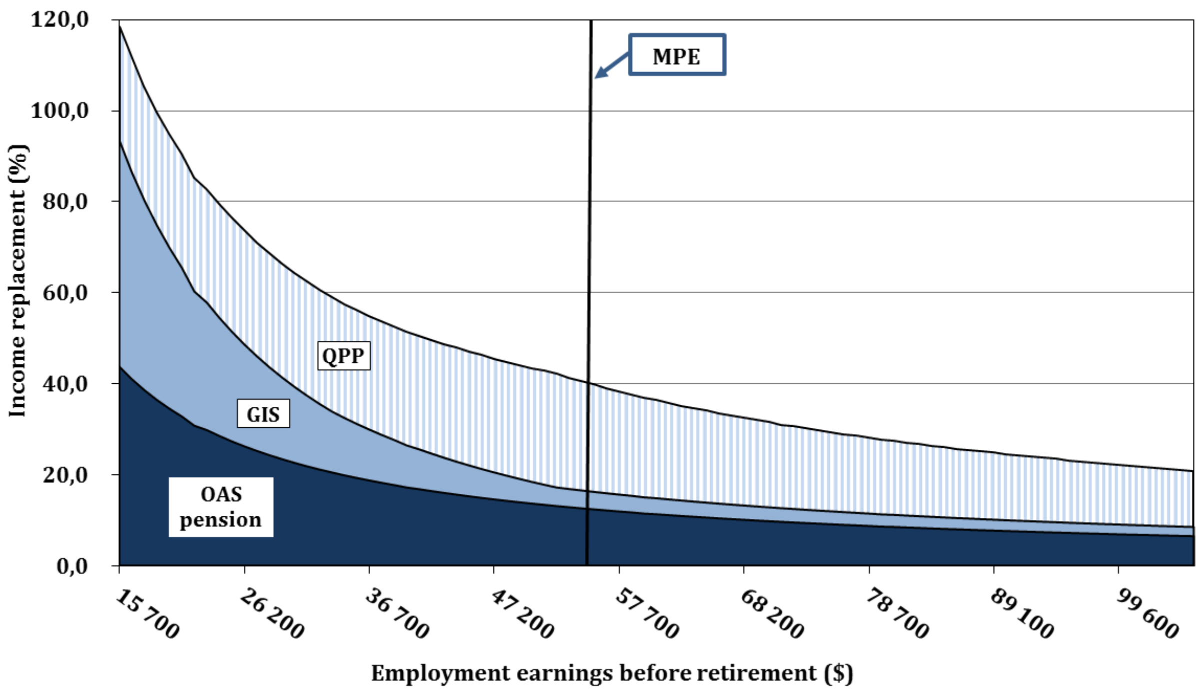
13. The general rule is that each $1 of additional taxable income reduces the GIS by $0.50 to $0.75.
14. As Chart 3 shows, a person with high earnings could still receive the GIS if he or she has no savings.
15. RÉGIE DES RENTES DU QUÉBEC (2009), *L'autonomie financière à la retraite: définition et comportements en matière d'épargne*, 33 p. (Financial independence in retirement: definition and savings habits; French only)
16. According to this study, disposable income includes all private income (wages, benefits, fees, investments, dividends, rental income, etc.), public income (OAS, GIS, QPP, etc.), and credits (Québec sales tax [QST], goods and services tax [GST], etc.), and excludes taxes, social security contributions (QPP, employment insurance, health services fund, etc.) and retirement savings.

- around 70% of gross income would be sufficient for a person whose earnings were equivalent to the MPE over the course of his or her career (MPE = $54 900 in 2016);[17]
- since the required percentage declines as income rises, various studies have confirmed that 60% of gross pre-retirement income would be sufficient for a person whose earnings were higher than 150% of the MPE (around $82 000 in 2016).

Income replacement rate under the public component of the system

Chart 3 shows the distribution of public coverage[18] in 2016, by pre-retirement employment income, when pension benefits begin at age 65.

Chart 3 Distribution of the public component of the retirement system at age 65 in 2016 (for a person living alone)



The extent of the role played by each level of the financial security system varies from one individual to the next, depending on his or her income. The lower one's average employment earnings before retirement, the greater the role played by public plans. In such a case, the public component of the retirement system can replace 70% of the income of workers who live alone and earn less than $27 500 per year (on average) before retirement, providing the worker is eligible for the GIS.

Waning value of OAS benefits

Over time, the public component of the financial security system will play an increasingly smaller role in the retirement income of Quebeckers. The amount of OAS benefits is gradually dropping in relation to wages.

17. This rate could be slightly higher for individuals whose earnings were less than $41 000. Such individuals often have limited sources of retirement income and greater difficulty reducing expenses in retirement.
18. The GIS increase announced in the federal budget in March 2016 is taken into account in the calculation of benefits.

The ongoing decrease in the amount of OAS benefits stems from the fact that the benefits are indexed to inflation instead of salary increases. However, wages generally increase more quickly than inflation.

In 1966, the OAS pension was 18% of the MPE, whereas it is only 12.5% of the MPE in 2016.[19] To partially offset the inflation-related decrease, the federal government intends to implement a new price index for seniors based on the cost of goods purchased.

2.3 Strengths and areas for improvement in the Québec retirement income security system

In 2012, a study compared Québec's retirement income system with the systems of other industrialized countries.[20] Table 4 summarizes the main strengths of Québec's system and the areas for improvement.

Table 4 Main strengths and areas for improvement in the Québec retirement income system

Strengths	Areas for Improvement
• For people with low income, the gross income replacement rate under public pension plans is higher in Québec than in the other countries studied. ○ Consequently, the risk of poverty among people aged 65 or over is lower than the average in the other countries thanks to the minimum income guaranteed by the OAS pension and the GIS. • The overall cost of the public pension plans, as a percentage of the GDP, is among the lowest. • The disposable income of people aged 65 or over (expressed as a percentage of the population's income) is higher than average, compared with the other countries studied. • In Canada, income inequality is lower for people aged 65 or over than for people aged 18 to 64.	• For people with middle to high income, the gross income replacement rate under public pension plans drops quickly as income increases, and is lower than the average for OECD countries. • The average rate of household savings is lower than in the other countries studied.

For the generation approaching retirement today, the retirement income security system generally meets the government's goals respecting income replacement. Since the public component of the retirement system (QPP/CPP and OAS) provides basic financial protection only, other sources of retirement income are needed. In this respect, the private component plays an important role for Canadians with middle to high income.

According to the Melbourne Mercer Global Pension Index, Canada benefits from the diversification of retirement income sources. The Index states a number of times that Canada should maintain this diversification because it is one of the strengths of the Canadian retirement system. This system is one of the best in the world mainly because income from the three different levels is combined.

19. According to the assumptions in the *Actuarial Valuation of the Québec Pension Plan as at 31 December 2015*, the OAS pension will be 11% of the MPE in 2030, and 8% in 2055.

20. The other countries studied were Germany, the United States, France, Italy, Japan, the Netherlands, the United Kingdom and Sweden. For further information, see RÉGIE DES RENTES DU QUÉBEC (2012), *Évaluation du système québécois de sécurité financière à la retraite par rapport à celui d'autres pays industrialisés*, Québec, 93 p. (Evaluation of the Québec system of financial security at retirement in relation to that of other industrialized countries - 2012; French only.)

Some of the Index findings for several industrialized countries are summarized below.

An Efficient Retirement Income System

The Melbourne Mercer Global Pension Index assesses the savings and retirement income systems in 27 countries accounting for more than 60% of the world population. According to the various sub-index values, Canada ranked 8th in 2016.[21] It was higher than average for each of the sub-indexes (adequacy, sustainability and integrity). Table 5 shows the Index findings for the top 10 countries and the average for the 27 countries studied. Each index value is a score between 0 and 100.

Table 5 Melbourne Mercer Index findings for the top ten countries in 2016

Country	Melbourne Mercer Index
Denmark	80.5
Netherlands	80.1
Australia	77.9
Finland	72.9
Sweden	71.4
Switzerland	68.6
Singapore	67.0
Canada	**66.4**
Chile	66.4
Ireland	62.0
Average	**58.1**

Although the system is performing very well, the Index pointed out that since life expectancy continues to grow in Canada, the system could be strengthened by increasing the labour force participation of older workers. This would help to better balance the duration of benefits payments with contributions. Other aspects of the Québec system were also singled out for improvement, for example:

- increasing the number of workers covered by private pension plans by creating attractive products, especially for people not covered by a supplemental pension plan;
- increasing the retirement savings of middle-income households.

While private savings are essential for such households, recent tax data show that many workers do not save enough for retirement. As Table 6 shows, only 24% of those earning less than $50 000 per year contributed to an SPP in 2013, compared with 60% for workers earning $50 000 or more. As mentioned above, the income of single people who earned less than $27 500 (on average) is replaced at a rate of at least 70% under public plans.

21. The index is produced every year. Canada was fifth (out of 16 countries) in 2011, sixth (out of 18 countries) in 2012, sixth (out of 20 countries) in 2013, and seventh (out of 25 countries) in 2014 and 2015.

*Table 6 Distribution of Québec workers according to participation in a retirement plan and employment income in 2013**

	Less than $50 000			$50 000 or more			Total		
	Number	%	Average contribution	Number	%	Average contribution	Number	%	Average contribution
Zero contributions	1 520 148	58%	–	141 705	11%	–	1 661 853	43%	–
RRSP only	451 696	17%	$3109	364 971	29%	$9632	816 667	21%	$6024
SPP only	416 966	16%	$1350	298 064	24%	$4436	715 030	19%	$2637
RRSP and SPP	212 834	8%	$4330	449 284	36%	$9032	662 118	17%	$7521
Total	**2 601 644**	**100%**	**$1110**	**1 254 024**	**100%**	**$7094**	**3 855 668**	**100%**	**$3056**

* This table includes all people who filed an income tax return and had positive employment income, including self-employed workers. The average contributions take into account workers' contributions only.

Source: Revenu Québec data compiled by Retraite Québec

Access to an employer-sponsored pension plan is especially important for people with annual employment income under $50 000. When employers do not offer such a plan, the vast majority of people in this income bracket do not contribute to any form of retirement savings plan. In 2013, only 42% of people earning less than $50 000 had put aside money for retirement other than through contributions to the QPP. In comparison, 89% of workers earning $50 000 or more had done so.

MAIN OBSERVATION FROM CHAPTER 2

3. The Québec retirement financial security system generally meets its objectives with respect to the income of seniors. However, the situation could change in the future, especially since the value of the federal OAS pension will continue to erode. In addition, nearly half of low-income workers will not have access to the GIS because their wages or other household income will increase.

Chapter 3 Observations on public pension plans

Public pension plans include the universal Old Age Security (OAS) pension and the retirement pension under the QPP (or the CPP). The Guaranteed Income Supplement (GIS), which is an assistance measure under the federal program, is excluded from the observations in this chapter.

3.1 Age of retirement under public plans

The age of entitlement to a pension is central to public debate worldwide on retirement financial security. The "normal" retirement age is usually 65 years in countries that offer old age security benefits. However, there can be valid reasons for setting the age higher than 65, such as when the working capacity of older people increases or when demographic and socio-economic statistics reveal new information concerning life expectancy.

Reforms of the "normal" retirement age in OECD member countries

Since the 1990s, many countries have reformed their retirement system. The reforms have mainly been intended to improve system funding, ensure the sustainability of public plans and better balance the length of one's working life with the length of one's retirement. Since life expectancy at birth should continue to rise significantly over the next 50 years, the duration of retirement and the benefits payment period will lengthen accordingly. By raising the ages of eligibility for government benefits, plans will be better able to address the challenges associated with increased life expectancy.

Since life expectancy is increasing, the vast majority of OECD member countries[22] (28 out of 34 countries) have undertaken reforms to raise the "normal" age of retirement under their system, or intend to do so by 2050. In particular, the United States and a number of European countries have increased the age to 67, and even to 68 or 69 in some cases. When the reforms are complete, 11 of the 16 countries usually compared with Canada[23] will have set the "normal" retirement age at 67 or later, as Table 7 shows.

22. For many of these public plans, the retirement income replacement rate is much higher than the rate under the QPP or CPP.
23. The countries in question are Germany, Australia, Denmark, the United States, France (where the age to receive a full pension is 67), Ireland, Italy, the Netherlands and the United Kingdom. In Norway and Iceland, the age of eligibility for a retirement pension is already 67.

Table 7 “Normal” retirement age by sex under public-sector plans in OECD countries with which Canada is usually compared

Country	Before the reform	After the reform
Austria	60 (women) and 65 (men)	65
Canada	**65**	**65**
Japan	60	65
New Zealand	65	65
Sweden	65	65
Switzerland	63 (women) and 65 (men)	65
Germany	65	67
Australia	64 (women) and 65 (men)	67
United States	66	67
France[1]	65	67
Iceland	67	67
Norway	67	67
Denmark[2]	65	67+
Italy[2]	59 (women) and 66 (men)	67+
Netherlands[2]	65	67+
Ireland	65 (women) and 66 (men)	68
United Kingdom	60 (women) and 65 (men)	68

1. In France, people tend to apply for a retirement pension once they have reached the minimum age, which is 62. This leads to the pension amount being reduced.
2. Since the reform, the age of retirement of these countries will be adjusted according to an adjustment mechanism related to life expectancy.

Once the ongoing or planned reforms are completed, the retirement age will vary from country to country, and according to gender in certain countries. Only a minority of countries have chosen to maintain the status quo.[24] It can therefore be said that 67 is increasingly becoming the “normal” retirement age.

24. This includes Chile (age 60 for women and age 65 for men), Finland (age 65 for men and women), Luxembourg (age 65 for men and women) and Mexico (age 65 for men and women). For Iceland and Norway, the “normal” retirement age is already 67 for men and women.

3.2 Income replacement by public pension plans

In the early 1960s, the Interdepartmental Study Committee on the Québec Pension Plan, which was appointed by the government and chaired by Mr. Wheeler Dupont, made several recommendations concerning the implementation of a basic social security program.[25] The committee's report made recommendations—particularly with regard to the retirement pension—that were inspired by the social security standards of the day.

When the QPP was set up in 1966, the sum of the OAS pension and the QPP retirement pension replaced 43% of the MPE (18% for the OAS pension and 25% for the retirement pension under the QPP[26]). As Table 8 shows, in 2016 public pension plans replace less than the initial rate of 43% in several situations (see shaded areas in table).

Table 8 Percentage of earnings replaced, in 2016, by public pension plans (OAS pension as of age 65 and QPP benefits), by starting age of QPP retirement pension

	Age at which QPP pension begins				
Average career earnings	**60**	**62**	**65**	**67**	**70**
$20 000	51.2%	54.4%	59.2%	63.4%	69.7%
$35 000	36.1%	39.5%	44.6%	48.8%	55.1%
$50 000	29.8%	33.3%	38.7%	42.9%	49.2%
$65 000	23.4%	26.3%	30.7%	34.1%	39.2%

A number of factors explain the figures above. For most QPP contributors, the income replacement rate under public pension plans decreases because they apply for their pension before age 65. In addition, the relative size of the OAS pension is decreasing and will continue to do so in the future.

MAIN OBSERVATIONS FROM CHAPTER 3

4. The "normal" retirement age is increasing in most OECD countries. Once all pension reforms are completed, the retirement age will be 67 or higher.

5. The income replacement rate under public pension plans has decreased since the QPP came into effect, mainly due to early retirement and the erosion of the value of the OAS pension.

25. INTERDEPARTMENTAL STUDY COMMITTEE ON THE QUÉBEC PENSION PLAN, *Report of the Interdepartmental Study Committee on the Quebec Pension Plan*, 2 volumes, Québec, 1964.

26. This rate takes into account public pension plans only (the QPP and the OAS program). The GIS is not taken into consideration because its purpose is to provide low-income seniors with a minimum income and therefore constitutes an assistance measure under the retirement system.

Chapter 4 Observations on the Québec Pension Plan

Since its creation, the QPP has provided basic financial protection to contributors at the "normal" retirement age (65) that is equal to 25% of average career earnings. Throughout the payment period, the retirement pension is indexed to inflation. In 2015, 1 729 000 Québec beneficiaries received a total of $10.3 billion in retirement pension payments. In 2016, the maximum monthly amount of a retirement pension at age 65 is $1092.

Since the last public consultation on the QPP, which was held in 2009, a number of measures have been implemented concerning the retirement pension under the QPP for workers aged 60 or over. The focus has been to use incentives to encourage these workers to work longer. First, since 2009 a retirement pension supplement has been paid to retirement pension beneficiaries who continue to work.[27] Second, since 2013 the adjustment factors used to calculate the retirement pension have been increased for contributors aged 60 to 65 (pension reduced if taken early) and for contributors aged 65 to 70 (pension increased if taken later). Third, since 2014, beneficiaries age 60 or over have no longer been required to stop working in order to receive their retirement pension.

4.1 Working while receiving a retirement pension: a more frequent scenario

Although the number of people applying for a retirement pension at age 60 has remained relatively stable for several years,[28] the number of people aged 60 or over in the labour force has increased considerably. The number of retirement pension beneficiaries who work is also growing. As Table 9 shows, the increase in the number of beneficiaries receiving a new retirement pension supplement in a given year is a hallmark of this new trend.[29]

Table 9 Beneficiaries receiving a new retirement pension supplement

Year	Men	Women	Total
2010	98 970	59 101	**158 071**
2011	107 496	65 542	**173 038**
2012	115 890	73 121	**189 011**
2013	132 552	89 930	**222 482**
2014	131 217	89 961	**221 178**

4.2 Early retirement under the QPP[30]

The reference or pivotal age used to calculate retirement pensions is 65 (the "normal" retirement age), which is the age at which no adjustment factor applies. This means that if an individual applies for a retirement pension before age 65 (early retirement pension), the amount is decreased. If an

27. In order for the earnings to be considered pensionable earnings under the Plan, they must exceed the basic exemption of $3500.
28. For information on the popularity of early retirement pensions under the QPP, see section 4.2.
29. The retirement pension supplement is equal to 0.5% of the earnings on which the person contributed for the previous year.
30. A number of observations in this section come from the evaluation of QPP retirement benefits that the Régie des rentes du Québec (now Retraite Québec) carried out in 2013-2014. The Régie also surveyed clients to learn more about early retirement habits. A 2012 survey examined factors that encouraged beneficiaries to apply for their retirement pension at age 60, and a 2013 survey focused on the intentions of workers aged 45 to 54 with regard to their future retirement pension applications.

individual applies after 65 (postponed retirement pension), the amount is increased. The adjustment factors were introduced in 1984.

Early retirement and a more flexible definition of disability for workers aged 60 to 64 were implemented under the QPP at the same time to encourage experienced workers to leave the workforce. These measures also recognized the difficult nature of and conditions associated with certain jobs.[31]

The economic conditions in Canada in the early 1980s were characterized by abundant labour and high unemployment in the younger age groups. These conditions were the main driver of the new Plan measures, which were to allow many workers aged 60 or over to retire early, while enabling younger workers to join the labour force by taking over the positions vacated by those workers.

Statistics on early retirement under the QPP

The age of eligibility for a retirement pension (the age at which you can apply) is between 60 (minimum eligibility age) and 70 years of age. In Québec in 2013,[32] nearly three out of every four contributors applied for their retirement pension before age 65 (77% of women and over 69% of men). Less than 3% of new beneficiaries applied for their pension after age 65.

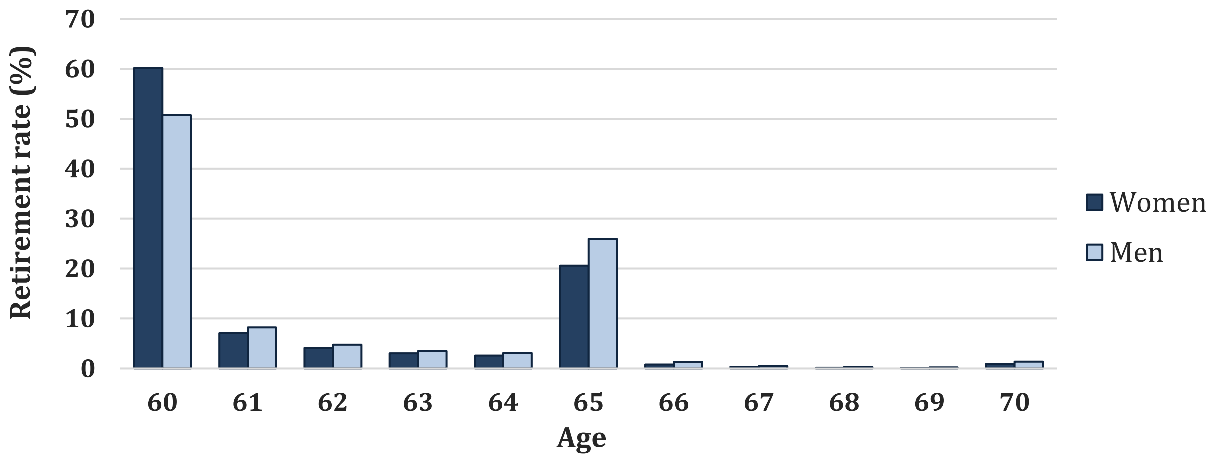
Since early retirement was introduced in 1984, its popularity has increased significantly. Since 1997, around 60% of women and over 50% of men have applied for their retirement pension when they reach the minimum age of eligibility. In addition, on average, Québec women apply for their pension a bit earlier (at age 61.6 in 2013) than Québec men (age 61.9).

31. In 1984, the loosening of disability requirements under the QPP enabled individuals aged 60 to 64 to receive a disability pension if they had stopped doing their regular work due to health problems.

32. The statistics for 2014 are exceptional since that was the first year that contributors could apply for their pension without having stopped working. Many contributors did in fact apply because eligibility was expanded for five cohorts at once (individuals aged 60 to 64 in 2014). Payment of more than 135 000 retirement pensions began in 2014, whereas that number varied between 95 000 and 98 000 from 2009 to 2013. This type of situation has a one-off effect on certain statistics, such as the average age of new beneficiaries.

Chart 4 further illustrates the rates of retirement by gender under the QPP.

*Chart 4 Retirement rate (QPP) by age and sex, for the cohort aged 60 in 2009**



* Also included in this data are the retirement rates for beneficiaries whose disability pensions were automatically converted into retirement pensions at age 65 (6% of women and 8% of men). The retirement rates after age 66 are not yet known. These assumptions correspond to the retirement rates observed for the previous cohorts and are taken from the latest actuarial valuation of the Plan.

Therefore, taking into account average career earnings and the reduction resulting from the adjustment factors, the average retirement pension paid to men at age 60 was equal, in 2015, to 46% of the maximum monthly pension payable at age 65 (around $490 per month). Women received an average pension equal to 37% of the maximum monthly pension payable at age 65, (around $400 per month). In 2015, the maximum monthly pension payable at age 65 was $1065.

According to a 2012 survey by the Régie des rentes du Québec (now Retraite Québec), the vast majority of beneficiaries who applied for an early retirement pension knew how their choice would affect the amount of their retirement pension. Many people apply for their pension once they reach the minimum age of eligibility in order to meet short-term needs and because they are strongly influenced by their financial obligations. Many people also believe that early retirement is generally more advantageous.

Impact of early retirement under the QPP

Given the adjustment factors that have been in effect since 1 January, 2016[33] the retirement pension under the QPP only represents 16% to 17.5% of the average career earnings for individuals who become beneficiaries at age 60. Thus the majority of beneficiaries accept a one-third decrease for the rest of their lives.

Most people who chose to apply for early retirement underestimated the financial risks associated with their decision, particularly those related to life expectancy and inflation. In addition, early retirement at age 60 has greater financial repercussions on women than men because women live longer. Women who opt for early retirement receive a reduced pension over a longer period of time

33. Between 2014 and 2016, the adjustment factor of 0.5% a month, which applies before age 65 in the case of early retirement, was gradually increased. The increase varies according to the amount of the pension. The adjustment factor remains 0.5% in cases where a beneficiary receives a very small pension, but increases to 0.6% where a beneficiary receives the maximum pension. These changes do not apply to contributors who turned 60 before 1 January 2014. In addition, in 2013, the adjustment factor was increased from 0.5% to 0.7% a month for pensions postponed until after age 65.

than do men. In many cases, it would have been a better financial decision to have postponed applying for a pension.

Furthermore, the 2012 survey showed that, among those who chose to apply for a retirement pension under the QPP at age 60, some regretted their decision as they got older. The survey also revealed that, if those individuals could choose again, they would apply at a later age. In 2012, a quarter (25%) of beneficiaries aged 70 questioned the decision they made at age 60.

Early retirement under public plans in certain OECD countries

Québec is not the only location where the minimum age of eligibility for a retirement pension under compulsory basic plans has decreased from age 65 to age 60. However, this change has increased financial pressure on public plans by lengthening the period during which benefits are paid.

In order to ensure the sustainability of their retirement systems, several countries have increased the "normal" retirement age, whereas a few others have changed the minimum age of eligibility for early retirement.[34] Table 10 shows the types of early retirement reforms by country.

Table 10 Reform of early retirement under public plans in certain OECD countries

Country	Early retirement in select countries (age and years of contribution)	
	Before the reform	**After the reform**
Austria	Age 63.5 for men	Age 65
	Age 58.5 for women	Age 60
Belgium	Age 60 with 25 years of contribution	Age 62 with 40 years of contribution
Denmark	Age 60	Age 62
France	Age 60	Age 62
Spain	Age 61 with 30 years of contribution	Age 61 with 33 years of contribution
Estonia	Age 60 for men	Age 62 for men and women
	Age 59 for women	
Greece	Age 57	Age 60
Hungary	Age 60 for men	Limited access to early retirement for certain groups of citizens
	Age 59 for women	
Czech Republic	Age 59 for men with 28 years of contribution	Age 62 for men and women with 35 years of contribution
	Age 57 for women with no children and 28 years of contribution	
	Age 56 for women with children and 28 years of contribution	
Slovenia	Age 58 for men with 40 years of contribution	
	Age 57 for women with 37 years of contribution	Age 58 for women with 38 years of contribution

34. Some OECD countries do not allow early retirement (Australia, Ireland, Israel, New Zealand, the Netherlands, the United Kingdom and Switzerland).

Current or pending early retirement reforms concern either the minimum age of eligibility or the years of contribution. The objective remains the same: increase the minimum age of eligibility for retirement benefits. In the countries studied, the age has generally been raised by at least two years and set at 62.

4.3 Financial situation[35] of the QPP

In addition to retirement pensions, the QPP also pays benefits in the event of disability or death. Since the retirement pension currently accounts for 80% of the total benefits paid and will account for more than 87% of that total in 20 years, the observations on retirement pensions must be understood in the context of the Plan's financial situation.

The information in this section comes mainly from the last actuarial valuation, which provides a thorough overview of the Plan's financial health and informs the government, contributors and beneficiaries about how the Plan is doing so that funding methods or characteristics can be reviewed as needed.

The three main components of the actuarial valuation are as follows:

- a projection of cash inflows (contributions and investment income) and cash outflows (benefits and administration costs) over a 50-year period;
- an analysis of long-term changes in the reserve (accrued assets) resulting from the projection (see Chart 5);
- an estimate of the contribution rate required to ensure the Plan's long-term financial stability. The steady-state contribution rate is the rate that, over a very long period of time, would keep accrued assets (the Plan's reserve) stable in relation to benefits paid.

Changes in contributions and the QPP reserve

The government has raised the contribution rate a number of times over the years, in concert with the singularities of the Plan's history. Since 1987, Plan funding has been adjusted five times, as shown in Table 11.

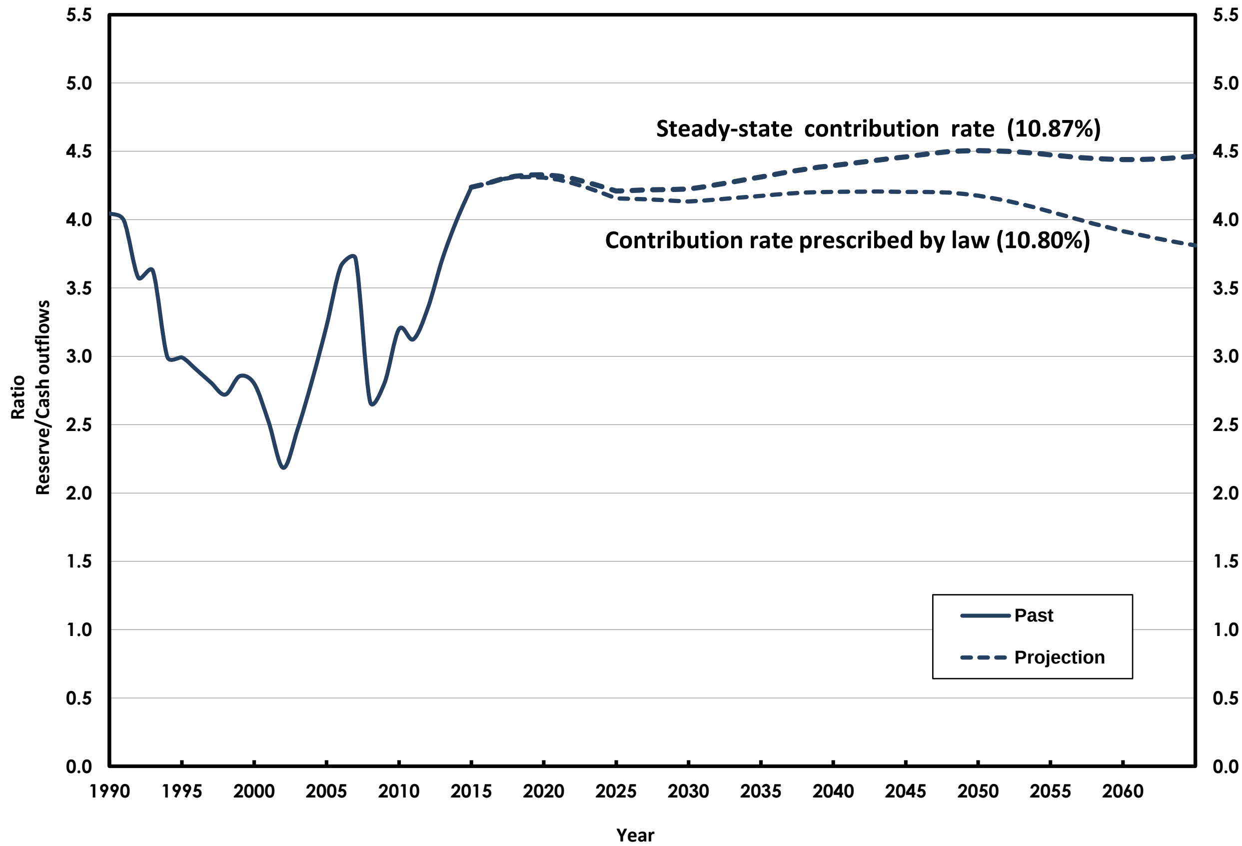
35. For more information, see RETRAITE QUÉBEC (2016), *Actuarial Valuation of the Québec Pension Plan as at 31 December 2015,* Québec.

Table 11 Increase in the statutory contribution rate under the QPP, by year

Changes to statutory rate	Years	Statutory rate
Stable	1966 to 1986	3.6%
1st series of increases	1987 1988 1989 1990 1991	3.8% 4.0% 4.2% 4.4% 4.6%
2nd series of increases	1992 1993 1994 1995 1996	4.8% 5.0% 5.2% 5.4% 5.6%
3rd increase	1997	6.0%
4th series of increases	1998 1999 2000 2001 2002 2003	6.4% 7.0% 7.8% 8.6% 9.4% 9.9%
Stable	2004 to 2011	9.9%
5th series of increases	2012 2013 2014 2015 2016 2017	10.05% 10.20% 10.35% 10.50% 10.65% 10.80%
Application of automatic adjustment mechanism	2018	To be determined

Chart 5 is taken from the most recent actuarial valuation of the Plan. It shows the long-term changes in the Plan reserve and, as a result, the Plan's current and projected financial situation.

Chart 5 Ratio of the reserve at the end of a given year to cash outflows for the following year, based on the actuarial valuation as at 31 December 2015



Two measures that are mainly related to QPP funding and which were announced in March 2011 in the Québec government's 2011-2012 Budget have taken effect:

- the progressive increase in the contribution rate by 0.15% per year from 2012 to 2017 (from 9.9% in 2011 to 10.8% in 2017);
- an automatic contribution rate adjustment mechanism that can be applied as needed from 2018 on to ensure the long-term stability of the Plan reserve.

The steady-state contribution rate adjusts contributions to maintain a stable reserve over a very long period of time. If the steady-state contribution rate is higher than the contribution rate by 0.1% per year for the year in question, the automatic adjustment mechanism will increase the contribution rate by 0.1% per year (as of 2018), unless the government decides against the increase.

Chart 5 shows that a contribution rate of 10.87% would stabilize funding as of 2018. This is a difference of 0.07 percentage points compared with the rate of 10.80% prescribed by the *Act respecting the Québec Pension Plan* for 2017. According to the actuarial valuation as at 31 December 2015, the gap between the steady-state contribution rate under the Plan and the statutory rate is less than 0.1%. The automatic adjustment mechanism will not be triggered in 2018.

– Rates of return for different generations

Individuals from the same generation or from different generations can shoulder the costs of benefits paid under a social security plan. As a result, the measures under the QPP aim to redistribute contributions among individuals from the same generation. The measures include taking into account in the calculation of benefits the basic exemption and the period during which a contributor received family benefits for a child under the age of 7, or considering the fixed portion of disability or survivors' benefits. Since the contribution rate is the same for all contributors in any given year, those who are not concerned by the measures still help fund them for beneficiaries.

Most of the QPP's funding comes from contributions from people who are currently working. Their contributions make it possible to pay benefits to the older generations of beneficiaries. This intergenerational transfer stems from the decisions made at the Plan's inception and in the decade that followed.

Individuals near retirement when the Plan began in 1966 had experienced the Great Depression and both world wars. Their savings were therefore limited. Under the initial transition rules, the first generations of contributors were entitled to a pension equal to 25% of their average earnings, even though they contributed to the Plan for fewer years and at a rate lower than the current rate.

In addition, the lower contribution rates between 1966 and 2002 gave contributors during that period an advantage compared with contributors after 2002. Lastly, the generations that will retire before 2020 enjoy an advantage because of substantial increases to their benefits resulting from a significant increase in the MPE between 1976 and 1985. All these factors mean the return on contributions for generations born in or after 1990 will be less than the return for previous generations.

Table 12 shows the real internal rates of return by sex under the Plan for seven cohorts of contributors born between 1940 and 2000.[36] The rates do not include inflation.

Table 12 Real internal rates of return under the Plan, by sex and year of birth

Year of birth	Internal rates of return		
	Women	**Men**	**Combined**
1940	6.5%	5.7%	5.9%
1950	4.3%	3.9%	4.0%
1960	3.2%	2.8%	3.0%
1970	2.4%	2.1%	2.2%
1980	2.1%	1.8%	1.9%
1990	1.9%	1.7%	1.8%
2000	1.9%	1.7%	1.8%

The actuarial valuation as at 31 December 2012 shows that the QPP delivers a return of at least 1.8% for all cohorts of contributors. Taking into consideration the annual rate of return on contributions throughout a contributor's entire working life, the Plan will maintain its long-term viability for all generations. However, if the contribution rate increases, the rate of return will decrease for future generations of contributors.

Furthermore, as Table 12 shows, female contributors and beneficiaries represent a greater benefits burden than their male counterparts with regard to QPP internal returns, largely due to the difference in longevity. For every cohort studied, the internal rate of return is therefore higher for women than it is for men. The difference is declining for more recent cohorts, but it is estimated

36. These rates are based on the assumptions used in the *Actuarial Valuation of the Québec Pension Plan as at 31 December 2012*, and Plan historical data.

that, due to greater longevity, women born in 2000 will still draw 13% more under the Plan than men born the same year.

– **Main risks affecting QPP funding**

Various risks can influence QPP funding. They are similar to the risks facing other pension plans. The main risks that can have a negative effect on Plan funding are listed below.

- **Economic and financial risks**
  - Financial markets
  - Interest rates
  - Inflation
  - Number of workers and contributors
  - Productivity and its effect on future growth of salaries
  - Investment policy

- **Demographic risks**
  - Life expectancy
  - Fertility
  - Immigration

In reality, the Plan's financial situation depends mainly on worker productivity, which affects the growth of the contributory payroll (the workforce and salaries). In 2015, the Québec government collected $13.1 billion in contributions and paid out $12.9 billion in benefits. As at 31 December 2015, the QPP reserve was $57 billion, which is equal to just over four years of benefits.

Plan funding therefore hinges on intergenerational solidarity and the redistribution of contributions paid by the current generations of workers to previous generations who are now beneficiaries. If contributions are insufficient to fund the Plan, the contribution rate must be raised, as the Québec government has done several times since 1987. Since an automatic contribution rate adjustment mechanism will apply as of 2018, the risks related to the QPP are shouldered solely by contributors and employers.

MAIN OBSERVATIONS FROM CHAPTER 4

6. Given the popularity of early retirement at age 60, the income replacement rate under the Plan for most beneficiaries is between 16% and 17.5% of average career earnings, compared with 25% if payment begins at age 65.

7. Economic, financial and demographic risks can affect Plan funding. Therefore, the Plan's contribution rates may need to be increased in the future, which would reduce the rate of return for future generations of contributors.

8. The Plan's automatic adjustment mechanism means risks are shouldered solely by contributors and employers.

Summary of observations on retirement in Québec

1. The transition towards complete retirement from the labour force is taking many different forms in Québec as life expectancy grows.

2. The labour force participation rates for people aged 50 or over is rising. However, the rates for people aged 60 to 69 are lower than in the rest of Canada, the United States and elsewhere in the world.

3. The Québec retirement financial security system generally meets its objectives with respect to the income of seniors. However, the situation could change in the future, especially since the value of the federal OAS pension will continue to erode. In addition, nearly half of low-income workers will not have access to the GIS because their wages or other household income will increase.

4. The "normal" retirement age is increasing in most OECD countries. Once all pension reforms are completed, the retirement age will be 67 or later.

5. The income replacement rate under public pension plans has decreased since the QPP came into effect, mainly due to early retirement and the erosion of the value of the OAS pension.

6. Given the popularity of early retirement at age 60, the income replacement rate under the Plan for most beneficiaries is between 16% and 17.5% of average career earnings, compared with 25% if payment begins at age 65.

7. Economic, financial and demographic risks can affect Plan funding. Therefore, the Plan's contribution rates may need to be increased in the future, which would reduce the rate of return for future generations of contributors.

8. The Plan's automatic adjustment mechanism means risks are shouldered solely by contributors and employers.

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