INVESTING to OPTIMIZE retirement income

AUTORITÉ DES MARCHÉS FINANCIERS

question retraite

Partners for Retirement Financial Security

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Table of contents

After lending part of his assets to the inhabitants of Sainte-Adèle and acquiring most of the buildings in the village, Séraphin Poudrier[1] thought about all his money crammed into burlap bags and asked himself if he could have done even better. Since he did not have access to a registered retirement savings plan (RRSP), he quickly decided that the answer to his question was "no". What about you? Are you sure that you will know what to do with all the financial instruments available to you?

You have a broad range of investment choices: stock shares, bonds, mutual funds, etc. To choose wisely among all the possibilities, you must first of all determine your tolerance for risk. Your investments should not make it hard for you to get a good night's sleep.

This booklet is intended to illustrate the advantages of investing in an RRSP. For various types of investments, we compare the amounts accumulated after a certain number of years, depending on whether or not the investment is made inside an RRSP. As you will see, tax rules are very important in this context since they have an effect on the sums that will be available to you when you retire. By helping you better understand, we hope you will be able to make better investment choices and accumulate more savings for your retirement.

This brochure does not cover the tax-free savings account (TFSA). For further information in regards to that matter, visit Question Retraite or l'Autorité des marchés financiers Web site.

[1] Fictional character created by Claude-Henri Grignon.

Throughout this booklet, we will consider the case of a worker who invests a net amount of $1,000. Unless otherwise indicated, we assume that the worker's marginal tax rate[2] is 40%. For comparison purposes, we also assume that all the worker's investments will be liquidated as soon as he or she retires. Rates for returns on investments and interest are given as examples. We chose them to illustrate market conditions but they are only estimates of future returns that you may or may not actually get on your investments.

[Did you know?]

RRSPs were created in 1957. At that time, the maximum annual RRSP contribution was 10% of earned income but not more than $2,500.

1. Registered retirement savings plans (RRSPs)

An RRSP is a savings plan with tax advantages that encourages investments for retirement purposes. An RRSP can include several types of investments: stock shares, bonds, guaranteed investments certificates, etc. The amount invested in an RRSP is deducted from your net income, which lowers your taxes, and the growth of the RRSP over time is not taxed. However, withdrawals from an RRSP are taxable income.

2 Taxation rate applied to the last dollar of taxable income.

Did you know?

When you have money invested in an RRSP, the type of income generated (interest, dividends, capital gains) is unimportant because all withdrawals are treated as if they were employment income.

You can now contribute to an RRSP until December 31 of the year in which you reach **age 71**.

For any taxation year, you can contribute to an RRSP throughout the year and even during the first 60 days of the following year. If you have the means, you should think about contributing to your RRSP early in the year instead of waiting until the end of the contributory period. Sums contributed early will increase, tax-free, over a longer period. You can also make periodic contributions throughout the year.

To find out how much you can contribute to your RRSP, consult the Notice of Assessment[3] that you received from the Canada Revenue Agency. Since 1991, your RRSP deductions are never lost if you do not use them in a particular year; they can be carried over indefinitely.

[3] This is a document indicating that your tax return has been processed. It confirms the amounts on the return and indicates the amount of your refund or the balance you must pay to the Receiver General of Canada. It also shows the unused contributions available to you for your RRSP.

As RRSP's date of expiry

You must terminate your RRSP no later than December 31 of the year in which you reach age 71. Three options are available: withdraw all the money from your RRSP (this is almost never advantageous), purchase an annuity or convert your RRSP into a registered retirement income fund (RRIF). You can also combine the options. An RRIF is similar to an RRSP. You can transfer your RRSP holdings directly to an RRIF, without having to make any changes in your investments. The main difference is that you must make a certain minimum withdrawal from an RRIF every year.

Important!

If you exceed the maximum excess contribution of $2,000 for an RRSP, you will have to pay a penalty of 1% a month on the excess up to the date on which you withdraw the excess from the RRSP or until your contribution room has increased enough to cover the excess.

In the following pages, we compare the net accumulated values (after taxes) for various investments depending on whether or not they are held inside an RRSP.

2. Investments that earn interest

The main interest-bearing investments are Treasury bonds, guaranteed investment certificates (GICs) and savings bonds. Those investments can be held inside an RRSP.

▪ Outside your RRSP

You must pay income tax every year on your interest income as if the interest earned was employment income. Suppose you invested $1,000 outside your RRSP for one year and that investment earned interest the rate of 5%. You would receive $50[4] in interest and you would pay $20[5] in taxes. Therefore, after taking the taxes into account, you would be left with only $30[6].

▪ Inside your RRSP

Your RRSP contributions give you a tax reduction. For an after-tax investment of $1,000, you can invest more inside your RRSP than outside. For example, if you invest $1,667 in your RRSP, you will be entitled to a tax reduction of $667[7]. Thus, your after-tax net cost will be $1,000[8]. Moreover, the interest accumulated over time in the RRSP will not be taxed until you make withdrawals from the RRSP. Since you will not have to pay any tax each year on the interest earned, you will get the benefit of compound interest, which means that your investments will grow more than if you were holding them outside your RRSP, as shown in Chart 1.

Example

Suppose you invest an after-tax amount of $1,000 and hold the investment until you retire, in10 years. Suppose that the annual rate of return on your investment is 5%.

[4] 5% X $1,000 = $50
[5] 40% X $50 = $20
[6] $50 - $20 = $30
[7] 40% X $1,667 = $667
[8] $1,667 - $667 = $1,000

- **Outside your RRSP**

Each year, you will have to pay income tax on your interest income and at the end of the 10-year period you will have accumulated \$1,344.[9]

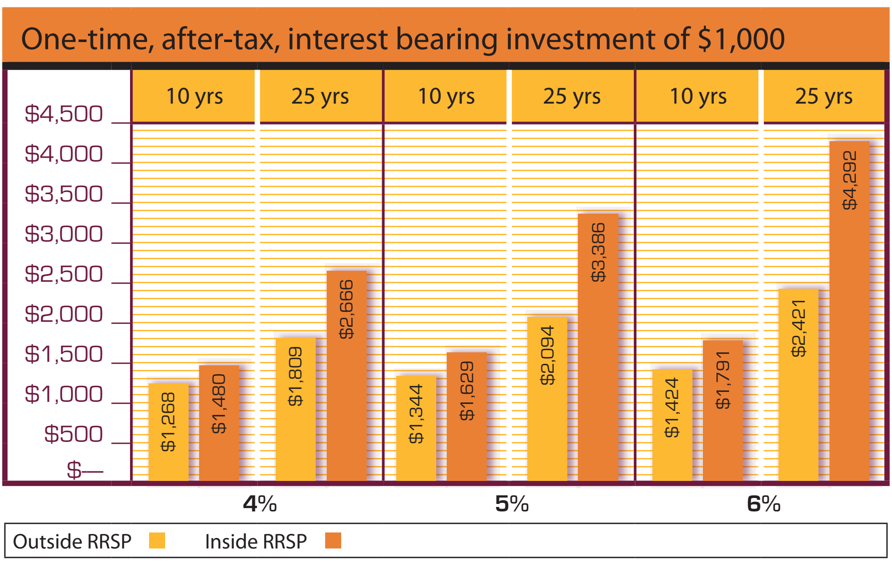
- **Inside your RRSP**

At the end of the 10-year period, you will have accumulated \$2,715[10] in your RRSP. You will not have to pay any income tax until you withdraw your accumulated sums. The income tax at that time will be \$1,086[11]. After taxes, you will be left with \$1,629, which is \$285 more than you would have for the same after-tax investment of \$1,000 held outside your RRSP. By holding the investment inside your RRSP, you will have 21%[12] more.

As the chart shows, it is more advantageous to invest inside your RRSP than outside if:

- the rates of return are higher;
- your investment horizon is longer.

CHART 1



This chart is based on the following assumptions: a one-time after-tax contribution of \$1,000 and an average annual compound rate of return of 4%, 5% or 6%. The chart is for illustrative purposes only and is not an indication or a guarantee of any future results.

9 \$1,000 X (1+5% X (1-40%))^{10} = \$1,344
10 \$1,667 X (1+5%)^{10} = \$2,715
11 40% X \$2,715 = \$1,086
12 \$285 / \$1,344 = 21%

3. Investments that produce capital gains

An investment produces capital gains when it is sold at a price higher than the price initially paid to acquire it.

▪ Outside your RRSP

Unlike interest income, which is fully taxable, only 50% of capital gains are taxable. Moreover, the tax is generally paid only when you sell your investments. For example, if you purchase a stock share for $1,000 and sell it later for $1,050, you will have to pay tax on 50% of a capital gain of $50. If your tax rate is 40%, you will pay $10 in tax. Your net gain will be $40 ($50 less the tax of $10).

▪ Inside your RRSP

Remember that when you hold an investment inside your RRSP, the type of income produced doesn't matter (interest, dividends or capital gains) because it will be tax sheltered until you make a withdrawal and then will be treated as if it were employment income.

Example

Suppose you invest an after-tax net amount of $1,000 and hold the investment until you retire, in 10 years. Suppose that your annual rate of return is 5%.

- **Outside your RRSP**

You will accumulate a total of $1,629[13] and have capital gains of $629 on which you will have to pay taxes of $126[14]. After taxes, you will be left with $1,503.

- **Inside your RRSP**

As we saw in the previous example, at the end of the 10-year period, you will have accumulated $2,715[15]. If you liquidate your RRSP on time and pay taxes of $1,086[16], you will be left with $1,629[17], that is $126 more than you would have for the same after-tax amount of $1,000 held outside your RRSP.

[13] $1,000 X (1+5%)^{10} = $1,629
[14] 40% X 50% X $629 = $126
[15] $1,667 X (1+5%)^{10} = $2,715
[16] 40% X $2,715 = $1,086
[17] $2,715 - $1,086 = $1,629

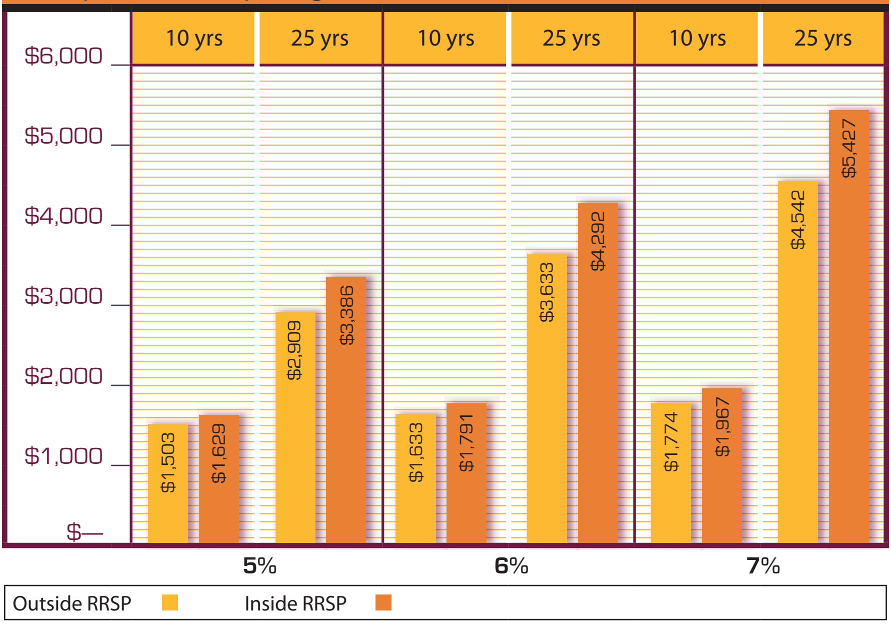
If we suppose that your marginal tax rate will not change, your investment in an RRSP corresponds to an investment of $1,000 whose yield is tax-free.

As the chart shows, it is more advantageous to invest inside your RRSP than outside if:

- the rates of return are higher;
- your investment horizon is longer.

CHART 2

Growth of a one-time after-tax investment of $1,000 that produces capital gains



This chart assumes that the investor holds his or her investment until he or she retires and liquidates it at that time. In reality, not very many investments produce only capital gains. This chart is also based on the following assumptions: a one-time after-tax contribution of $1,000 and an average annual compound rate of return of 5%, 6% or 7%. The chart is for illustrative purposes only and is not an indication or a guarantee of any future results.

The rates of return shown in Chart 2 are higher than the ones used for interest-bearing investments because investments that generate capital gains are often more risky than those that bear interest. While they generally have a higher long-term yield potential, investments that produce capital gains can also generate lower yields or even negative yields (losses).

For more information on investments, consult the booklets entitled *Choose the Investments that Suit You* and *Short Investment Glossary*, which are available on-line from the Autorité des marchés financiers, at www.lautorite.qc.ca.

If you hold some investments inside your RRSP and others outside, consider giving priority to putting interest-bearing investments in your RRSP and leave those that produce capital gains outside your RRSP. For the same before-tax yield, investments outside your RRSP that produce capital gains cost less in taxes than interest-bearing investments.

Paying off a mortgage

Paying off a home mortgage or investing in an RRSP are equivalent options if the interest rate on the mortgage and the rate of return on the investment are the same. However, if you would have to take risks to get a rate of return on your investment that corresponds to the interest rate on your mortgage, it could be preferable for you to give priority to paying off your mortgage.

4. Labour-sponsored investment funds

Labour-sponsored investment funds are composed of ordinary shares in a mutual fund. They are intended to stimulate economic development in Québec by contributing to creating and maintaining jobs by means of investments in small business. They are a source of risk capital. Such funds allow investors to get tax credits of 30% to 40% on the sums invested. That is why they are subject to special rules.

All examples suppose that accorded tax credits totalize 30% of the invested amounts.

For example, you cannot sell your shares except in specific circumstances, including at the time of your retirement[18]. You can contribute up to $5,000 to this funds to obtain tax credits. Additional contribution to this amount will not provide tax credits.

Tax credits accorded by governments with respect to a contribution to a labour-sponsored fund represent an immediate advantage that adds to the yield generated by your shares in the fund. Thus, in spite of a more modest yield, investors may accumulate more as a result of the tax advantages. However, it is rarely recommended to make an investment just for its tax advantages. You should also take into account your profile as an investor. An investment in a labour-sponsored fund has a certain level of risk and withdrawals from a fund are subject to stringent conditions.

Regardless of the type of investment that you want to make, BEFORE investing, carefully read the documents that you receive about the fund. Never make an investment that you are not familiar with or do not understand.

[18] For more information, you should read the fund's prospectus

- ## Outside your RRSP

Your yield will be composed of the tax credits to which you are entitled and your capital gains. (Generally no dividends will be paid.) As we have already seen, capital gains are taxable at only 50% and you will not have to pay taxes on them until you sell your investment.

- ## Inside your RRSP

In addition to getting tax credits of 30% to 40% on the sums invested, you will be entitled to a 40% tax deduction because you hold your fund shares in your RRSP. Therefore, your total tax reduction will be 70% to 80%.

Example

- **Outside your RRSP**

Suppose you invest $1,429, which will cost you only $1,000 because you are entitled to a tax credit of $429[19] on shares purchased in a labour-sponsored fund. If we assume that you will get an annual rate of return of 3%, you will accumulate a total of $1,920 on which you will have to pay taxes of $98.[20] You will thus be left with $1,822.

- **Inside your RRSP**

Suppose you invest $3,333 in shares in a labour-sponsored fund and you hold the investment inside your RRSP until you retire, in 10 years. You will be entitled to a tax reduction of $1,333[21] for investing in an RRSP and to tax credits totaling $1,000[22] for purchasing shares in a labour-sponsored fund. If we assume that your annual rate of return is 3%, you will accumulate $4,480[23] in your RRSP.

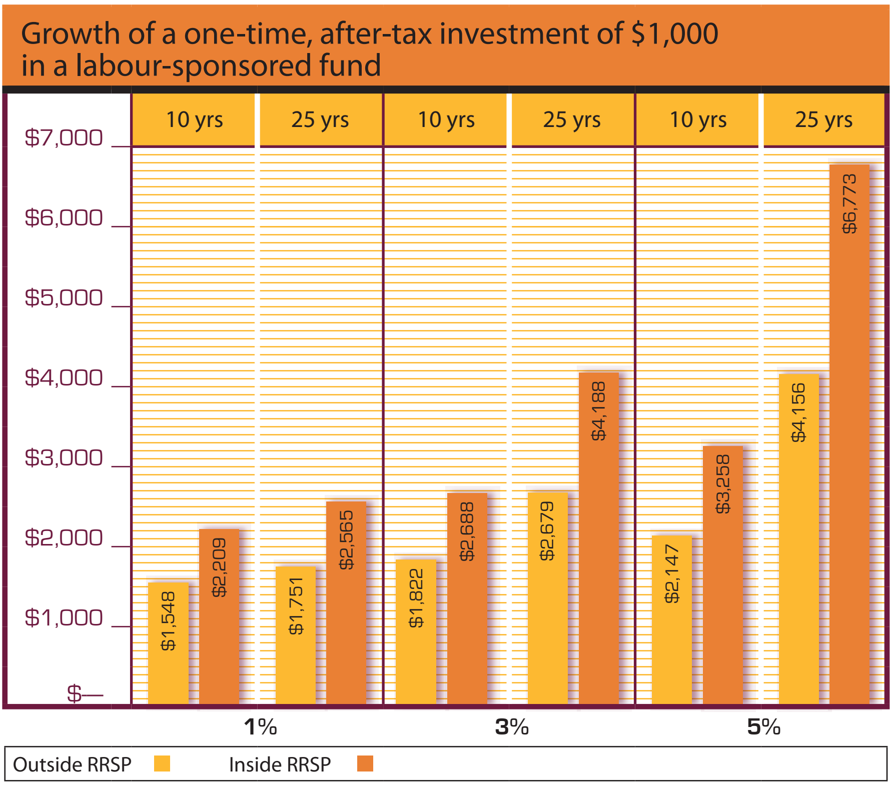
19 30% X $1,429 = $429
20 Gain en capital : $1,920 - $1,429 = $491
Impôt : $491 X 50% X 40% = $98
21 40% X $3,333 = $1,333
22 30% X $3,333 = $1,000
23 $3,333 - $1,333 - $1,000 = $1,000

You will pay taxes of $1,792[24] when you withdraw that amount from your RRSP. Therefore you will be left with $2,688, which is $866 more than you would have gotten for the same after-tax investment held outside your RRSP.

As the chart shows, it is more advantageous to invest inside your RRSP than outside if:

- the rates of return are higher;
- your investment horizon is longer.

CHART 3



This chart is based on the following assumptions: a one-time, after-tax contribution of $1,000 and an annual compound interest rate of 1%, 3% or 5%. The chart is for illustrative purposes only and is not an indication or a guarantee of any future results.

24 $3,333 X $(1+3\%)^0$ = $4,480

5. Effects of a lower tax bracket after retirement

Throughout this booklet, we have assumed a tax rate of 40%. In fact, tax rates change over time. It is therefore impossible to know with certainty what your tax rate will be after you retire. However, your tax rate will have an impact on the sums they accumulate, unless you have interest-bearing investments outside your RRSP.

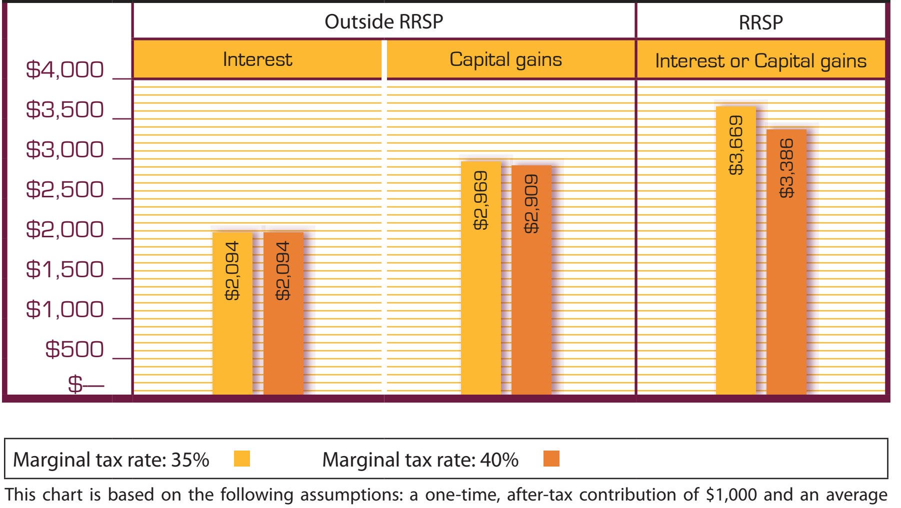
Chart 4 shows the sums that you would accumulate from a one-time, after-tax investment of $1,000, held for 25 years, with an annual rate of return of 5% and depending on whether your marginal tax rate remains at 40% after you retire or goes down to 35%.

If your tax rate goes down after you retire, the after-tax amount that you will have accumulated will be higher in the following cases:

- for an investment outside your RRSP that produces capital gains;
- for any type of investment held inside your RRSP.

CHART 4

After-tax amounts accumulated over a 20-year period, depending on the marginal tax rate



This chart is based on the following assumptions: a one-time, after-tax contribution of $1,000 and an average annual compound rate of return of 5%. We suppose that investment in labour-sponsored funds will entitle tax credits totalizing 30% of the amount of the contribution. The chart is for illustrative purposes only and is not an indication or a guarantee of any future results.

▪ Outside your RRSP

Since interest income is compounded each year, tax rates after retirement are irrelevant in calculating accumulated amounts. That is why the results are the same, that is, $2,094, regardless of the retirement tax rate.

In the case of capital gains, taxes are generally payable when an investment is sold. We have assumed that such investments are sold when retirement is taken. Thus, if the tax rate at retirement is lower, the accumulated sums are slightly higher.

▪ Inside your RRSP

For an investment held inside your RRSP, the accumulated sums are taxable only when they are withdrawn. Thus, if your tax rate is lower after retirement, an investment held inside an RRSP is more advantageous than an investment of $1,000 whose yield is tax-free.

Generally, tax rates increase as income increases. Since most people's income is lower after retirement, it is quite probable that their tax rate will also be lower. As indicated in Chart 4, an RRSP is even more advantageous if your tax rate goes down after retirement.

Conclusion

If Séraphin Poudrier had lived in our time, he would have certainly preferred keeping his money in an RRSP instead of in burlap bags. As we have seen, it is generally preferable to hold investments inside an RRSP rather than outside. An RRSP is even more advantageous if your tax rate is lower after retirement than when you made your RRSP contributions, if the rates of return are higher and if you have invested over a long period.

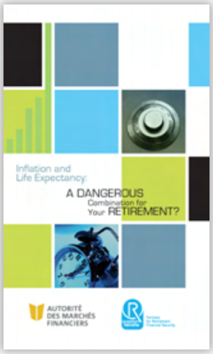
Remember that the analyses given in this booklet provide general information for a specific case, that of a worker whose marginal tax rate is 40% and who invests an after-tax amount of $1,000 in various investment instruments for certain periods of time. The amounts that you will invest are up to you. If you are able to invest more than the $1,000 used in our examples, bravo! If not, begin to invest as soon as possible, even if the amounts are smaller. Time is on your side. An investment of $100 made by Séraphin in 1870 at an annual rate of return of 5% would have a before-tax value today around $88,000.

It is important to discuss all the possibilities with an investment expert who can provide you with advice adapted to your situation and your investment profile.

Question Retraite and l'Autorité des marchés financiers

If you wish to continue your reading about retirement financial planning, you may visit Question Retraite Web site at www.questionretraite.com or l'Autorité des marchés financiers Web site at www.lautorite.qc.ca.

You will find the following publications:



Inflation and life expectancy: A dangerous combination for your retirement?

This brochure explains the consequences of inflation and life expectancy on the financial planning of your retirement.

Are you a first-home buyer? Benefit from the HBP while staying on course for retirement!

This brochure explains how the HBP works and answers many important questions such as:

- Once I have paid the minimum HBP amount, is it advisable to make additional HBP repayments or to contribute to my RRSP?
- What is best? Using the down payment directly to buy the house or placing it in an RRSP and then withdrawing it under the HBP?
- What happens if I don't repay my HBP?

Question Retraite is a public private consortium dedicated to the promotion of financial security at retirement. It is an association of partners who encourage and organize activities to educate and inform Quebekers about the importance of financial security at retirement. Its members guide the public on how to achieve their planning goals. Among the activities sponsored by Question Retraite are the publication of the *Guide to Financial Planning for Retirement* and the presentation of Financial Planning for Retirement Month, each year in October.

The members of Question Retraite are:

- Régie des rentes Québec
- AQRP – Association québécoise des retraité(e)s des secteurs public et parapublic
- Autorité des marchés financiers
- Bâtirente – La force de notre épargne
- Caisse de dépôt et placement du Québec
- Cégep Marie-Victorin – Le Cégep du nord-est de l'île de Montréal
- Centre Louis-Jolliet
- Université Laval – Chaire d'assurance et de services financiers L'Industrielle-Alliance
- Université Laval – Chaire Groupe Investors en planification financière
- Commission administrative des régimes de retraite et d'assurances Québec
- CSN Confédération des syndicats nationaux
- CPQ Conseil du patronat du Québec
- Desjardins Sécurité financière
- Épargne Placements Québec
- Fédération des chambres de commerce du Québec (fccq)
- Fédération des travailleurs et travailleuses du Québec (FTQ)
- Fondaction CSN pour la coopération et l'emploi
- Fonds de solidarité FTQ
- Institut québécois de planification financière
- RJCCQ Regroupement des jeunes chambres de commerce du Québec

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