# The Feeling's Not Mutual

The High Costs of Canada's Mutual Fund Based Retirement System

David Macdonald

www.policyalternatives.ca RESEARCH ANALYSIS SOLUTIONS





### ISBN 978-1-77125-190-7

This report is available free of charge at www. policyalternatives.ca. Printed copies may be ordered through the CCPA National Office for \$10.

#### PLEASE MAKE A DONATION...

## Help us to continue to offer our publications free online.

With your support we can continue to produce high quality research—and make sure it gets into the hands of citizens, journalists, policy makers and progressive organizations. Visit www.policyalternatives.ca or call 613-563-1341 for more information.

The CCPA is an independent policy research organization. This report has been subjected to peer review and meets the research standards of the Centre.

The opinions and recommendations in this report, and any errors, are those of the authors, and do not necessarily reflect the views of the funders of this report.



#### **ABOUT THE AUTHOR**

David Macdonald is a Senior Economist with the Canadian Centre for Policy Alternatives.

- 5 The Feeling's Not Mutual
- 5 Executive Summary
- 6 Introduction
- 8 Declining Pension Coverage
- 10 The Fee Gap
- 11 Delayed Retirement: A Case Study
- 15 Conclusion and Recommendations
- 17 Appendix 1
- 20 Notes

# The Feeling's Not Mutual

The High Costs of Canada's Mutual Fund **Based Retirement System** 

## **Executive Summary**

The primary vehicles Canadians have for managing their savings are pension plans and mutual funds, and in 2014 each held over \$1 trillion in assets. Over the past two decades, policy-makers have promoted Registered Retirement Savings Plans (RRSPs) as the best option, with much of those personal savings going into mutual funds. Traditional pension funds are in decline. They covered 43% of workers in 1977 but now cover only 27%.

In 2014, weighted pension plan fees were 0.38% of assets while comparable mutual fund fees were 2.1%. In both cases, investors do not pay those fees directly, nor do they have a choice in the matter. The fees are withdrawn from their fund returns without the investor ever seeing the exact amount.

If the higher fees on mutual funds (2.1%) seem small, we must remember that compound interest can work against an investor as easily as it helps them. Over a lifetime of contributions, the average mutual fund investor will have to work until age 72 to accumulate the same amount as the pension plan holder had by age 65 due to this seemingly small fee difference.

The comparison of averages belies larger variation in mutual fund fees. Across the major mutual fund families, Canadians can expect to work between two and 11 years beyond age 65 to offset higher fees than they would face in a pension plan. For example, in fund families at Investors Group, AGF and IA Clarington, an investor would have to work past age 75 to match what pension fund holders have saved at age 65. MD Management, Beutel Goodman and Phillips Hager & North also have higher fees than pension plans, but their mutual fund holders would only have to work to age 68 or 69 to overcome the difference.

It is not in most people's power to reduce mutual fund fees, expand the Canada Pension Plan or start a company pension plan. Their choices are limited. But policy-makers have more options; their choices could help everyone retire more comfortably.

For instance, trailer fees, the portion of the mutual fund fee paid back to financial advisors, could be capped or banned, forcing financial advisors to get paid explicitly by investors. This would reduce fees but likely not to the level of pensions plans. Alternatively, the expansion of workplace pensions, or the expansion of the Canada Pension Plan and other public options, could reduce the anxiety of ordinary Canadians baffled by the endless choice and high fees of the present RRSP (mutual fund) model.

#### Introduction

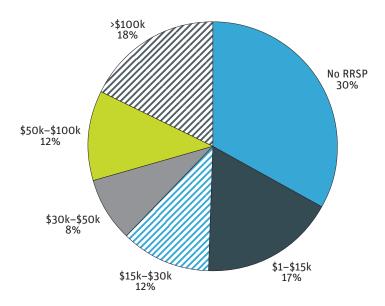
A lot of Canadians probably rushed to make their RRSP contributions by March 2<sup>nd</sup>. There are a myriad of incentives to do so, from the tax rebate to the onslaught of ads from the financial industry. Once money is in an RRSP, Canadians have an almost endless choice of where they will put it to use. On top of the nearly 2,000 retail mutual funds and 500 exchange-traded funds representing stand-alone managed investments, there are funds of funds (FOFs) that combine individual mutual funds into still more products.

Every February, Canada's RRSP holders face this tyranny of options and hope (given the complexity of it all) they've chosen the "right" mutual fund. Choosing correctly will allow them to retire at 65. Any mistakes and they may need to work well past the standard retirement age. Despite these high stakes, how to make the "right" choice is not at all clear, with each financial company promising they are offering the best match for the consumer's needs.

There is role for public policy in attempting to improve the odds of retiring in comfort. The real "right" system, would ensure adequate income in retirement while keeping contributions affordable and investment anxiety low.

Whether someone has a workplace pension or not is wholly dependent on their workplace offering one to begin with. Though this used to be the

FIGURE 1 RRSP Savings for 45–64 Year Olds in Canada



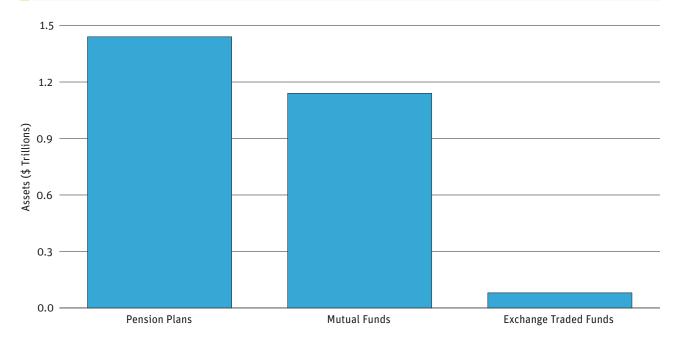
Source 2005 Survey of Financial Security<sup>1</sup>

norm, in most cases today, particularly in the private sector, those saving for retirement have only the RRSP option. Current public policy is encouraging this shift away from workplace pensions towards individual tax-sheltered accounts (RRSP) that are dominated by mutual funds. There are consequences to that shift.

Despite relentless advertising of RRSPs on the part of the financial industry, and the substantial tax incentive for saving this way, Canadians do not have nearly enough saved in RRSPs to make them a mainstay of retirement income. The results experienced today are likely indicative of the best that can be expected in terms of utilization, suggesting a failure of the RRSP system to create an adequate and secure source of retirement savings.

In order for a person's RRSP savings to play a significant role in funding retirement, they would have to be worth at least \$100,000. However, four out of five Canadian families with a member aged 45-64 have less than that in their RRSP. And in 2005, one third of Canadians aged 45-64 had no RRSP savings at all, as shown in Figure 1. For people concerned they don't have enough stored away in their RRSP, they are clearly not alone. The fact is most Canadians nearing retirement age do not have anywhere near enough in their RRSP to rely on it for a steady stream of retirement income.

FIGURE 2 Assets in Various Managed Funds Types (Canada, 2014)



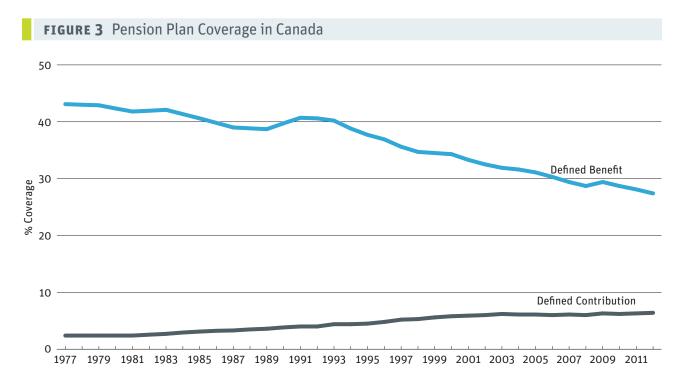
Source Canadian ETF Association, Statistics Canada & Investment Funds Institute of Canada<sup>2</sup>

Instead of being a source of retirement income, RRSPs act more like a small savings account that could pay for a vacation or home renovation in a person's later years. This is clearly not their intended purpose.

## **Declining Pension Coverage**

RRSPs are a particular tax structure that allows assets to increase in value, tax-free, while also providing a tax rebate on contributions. Once money has been transferred into an RRSP, something must be done with those funds. Stocks can be directly purchased in an RRSP. But, for the retail investor, managed funds are a more likely scenario. Mutual funds, pension plans and exchange-traded funds (ETFs) put an investment manager at the helm. These people select the stocks, bonds and other assets they think will best deliver what investors need (and charge a fee for their trouble). The benefit of a managed fund is it allows ordinary investors to avoid the problem of trying to pick the right stocks.

The two dominant types of managed funds in Canada are pension plans and mutual funds, as shown in Figure 2. Exchange-traded funds, although



Source Labour Force Survey

they tend to have lower fees than mutual funds, occupy a very small proportion of Canadian's managed fund holdings. Mutual funds dominate holdings in managed funds, although the value of all mutual funds in Canada is still somewhat lower the value of all pension funds (excluding the Canada Pension Plan).

While pension plans still hold more assets than mutual funds and ETFS combined, the proportion of Canadians who have a workplace pension, particularly the traditional defined benefit plan (DB), has been steadily declining, as shown in Figure 3.

In 1977, 43% of working Canadians had a traditional DB workplace pension plan. However, traditional pension coverage has declined in almost every year since, hitting 27% in 2012, the most recent year for which there is data. Defined contribution plans, where your benefits upon retirement are not known, have increased somewhat over this period. However, even with the decline of the traditional workplace pension, defined contribution plans remain a minor factor in Canada's pension landscape.

### The Fee Gap

Mutual funds and pension plans are the mainstays of savings in Canada, each with over \$1 trillion in assets in 2014. While roughly equivalent in assets, they come with substantially different fees for investors. Both pensions and mutual funds hire investment managers to manage the stocks, bonds and other assets they believe will best meet the goals of investors. There are also administrative requirements to managing funds, namely recording how much Canadians have contributed and how much they are owed.

These services do not come cheap and the costs are withdrawn from the overall assets of the fund. Fees are presented as the percentage of all fund assets that need to be withdrawn over a year to pay for the fund's administration. For mutual funds, this ratio is known as the Management Expense Ratio (MER). If a mutual fund's MER is 2%, for instance, then 2% of what investors have in the fund is withdrawn annually and paid to the fund's managers. This is done without being explicitly reported to mutual fund holders who never see a receipt for these charges. They are, in effect, invisible.

The difference in management fees between pension plans and mutual funds is dramatic, as shown in *Table 1*. The average workplace pension plan withdrew only 0.38% of all its assets in 2014 to pay its managers. At 2.1% of assets, the average mutual fund withdrew much more for the same task in 2014. Put another way, mutual fund investors are paying their managers six times more on average to do the same thing as pension fund managers.

Traditional (DB) pension plans have even lower fees, which in 2012 stood at 0.36% of assets. Management fees for the average defined contribution plan were almost double that amount (0.69%) in 2012.3

While ETFs have much lower fees than mutual funds do, often close to defined contribution pension plans, their asset levels remain small. This is not where the majority of Canadians invest their RRSP money. As such, this report focuses on mutual funds that remain the dominant private retirement savings vehicle for ordinary Canadians.

While a six-fold difference in fees seems large, the actual percentages charged (0.38% and 2.1%) both appear quite small, or even irrelevant, at first glance, we need to keep in mind we are talking about long-term retirement savings: small charges add up over 40 years of contributions.

Compound interest can be a powerful aid for retirement savings, particularly if one can save early. Putting away small amounts in one's 20s can make a much bigger difference than putting away large amounts in one's 50s. However, compound interest works both ways. It can build wealth, but

#### TABLE 1 Annual Mutual and Pension Fund Fees (Asset Weighted Average 2014)

Pension	ı Plan Fee¹	Mutual fund fee (MER) <sup>2</sup>
0.	38%	2.1%
Defined benefit fee (2012)	Defined Contribution fee (2012)	
0.36%	0.69%	

Source Fundata Canada (Nov 2014), Statistics Canada Cansim 280-0002 & 280-0004 (Q2 2014)

seemingly small charges can also have a profoundly negative impact on savings over a lifetime.

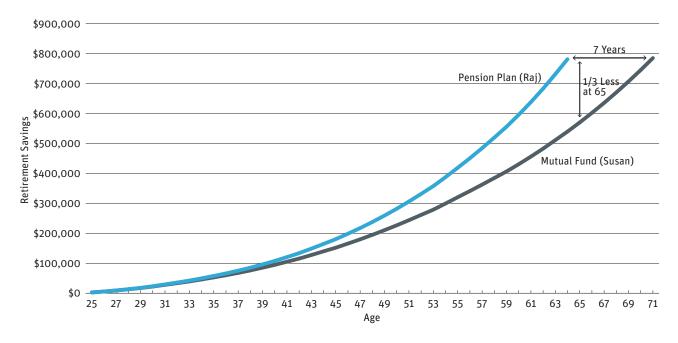
### **Delayed Retirement: A Case Study**

*Figure 4* illustrates the dramatic impact that these small fees can have over an investment's lifespan. For this case study, each year from age 25 onward, 10% of the average Canadian's salary that year is put into either a mutual fund or a pension plan. Each year, average fees are charged and receives a 6.2% nominal return, identical to the long-term assumptions of the Canada Pension Plan.<sup>6</sup> It is almost impossible for either pension fund or mutual fund managers to outperform a simple index that a grade-schooler could create, after fees are charged. Managed funds consistently underperform their index over the long term despite the research managers conduct.<sup>7</sup>

To further illustrate the impact of fees, let's imagine two Canadians, Raj and Susan, on different retirement savings paths. Each just graduated from college and went to work at age 25. Raj's workplace has a pension plan to which he contributes 5% of his salary, matched by his employer, for a total contribution of 10%. At age 25, Raj makes \$25,200 a year (the average for his age in Canada), so his pension plan receives \$2,520 in contributions in year one. This grows to \$2,668 by the end of the year. At age 26 Raj makes \$28,000 because of a promotion and an inflationary pay increase (the average for 26-year-olds in Canada). Again, 10% is contributed to his pension, and this goes on until Raj retires at age 65. Over the years he and his employer have contributed \$240,000 to the pension plan. But because of good returns, the pension is actually worth \$780,000, providing a strong stream of income for Raj's retirement

Susan also gets a job at age 25 and makes the same as Raj (\$25,200). Her workplace doesn't have a pension plan, although they have an RRSP match-

FIGURE 4 Savings Using Average Pension and Mutual Fund Expenses for 2014



Source See Appendix 1

ing program. Like Raj, Susan puts away 5% of her salary with her company matching it, which totals \$2,520 in the first year. Susan invests her RRSP money in an average mutual fund. At the end of the first year, her RRSP is worth \$2,625, slightly less than Raj's pension of \$2,668. Susan, like Raj, gets paid \$28,000 at age 26 due to a promotion and an inflationary pay increase. This goes on until age 65.

That small difference that Susan saw her first year compared to Raj, due to high mutual fund fees, grows over time. When Susan turns 65, she and her company have contributed the same as Raj and his company, \$240,000. Also, Susan was a dutiful investor, picking a fund that earned the same returns as Raj's pension plan (6.2% yearly). However, her RRSP is only worth \$540,000 at age 65-\$240,000 less than Raj's pension plan due to the higher mutual fund fee she was paying. She could retire with \$540,000 at 65 but this may not be enough so she decides to match Raj's amount. She works another seven years until age 72 to make up the difference.

It is important to note many mutual funds charge more than the average fee in *Figure 4*. The sample in this report excludes nearly a third of mutual fund assets that are held in a fund of funds (FOF), where several mutual funds are grouped together, additional fees are put on top, and the new

TABLE 2 Mutual Fund Company Fees, 2014 (MER)

Fund Company Name	Additional Brand Names	Assets (\$Bil)	Asset Weighted Fees (MER)		
			Equity	Balanced	Bond
Investors Group	IG	\$67	2.9%	2.8%	1.9%
RBC Global Asset Mgmt Inc.	BlueBay	\$62	1.8%	1.7%	1.3%
CI Investments Inc.	Cambridge, Merret,Lawrence Park, Black Creek	\$42	2.4%	2.2%	1.8%
BMO Mutual Funds		\$34	2.1%	2.2%	1.8%
TD Asset Management Inc.	Epoch	\$31	2.1%	1.8%	1.2%
Mackenzie Group of Funds	Quadrus	\$28	2.4%	2.3%	1.9%
Invesco Canada Ltd.	Trimark, PowerShares	\$26	2.4%	2.2%	1.4%
CIBC Asset Management		\$21	1.9%	1.6%	1.4%
Dynamic Mutual Funds	DMP	\$19	2.3%	2.3%	1.7%
National Bank of Canada	Jarislowsky Fraser, Westwood	\$16	2.2%	2.0%	1.6%
Scotia Mutual Funds		\$15	1.8%	1.8%	1.4%
Renaissance Investments		\$15	2.6%	2.0%	1.7%
Desjardins Funds	Melodia, SocieTerra	\$15	2.6%	2.2%	1.7%
Beutel Goodman		\$14	1.4%	1.2%	0.8%
AGF Funds	Primerica	\$13	2.7%	2.5%	1.9%
Sentry Investments		\$12	2.6%	2.2%	2.2%
Manulife Financial		\$10	2.5%	2.3%	2.0%
MD Management Limited		\$9	1.6%	1.6%	1.0%
SEI Investments Canada Company	1	\$8	2.4%		1.9%
Phillips, Hager & North	PH&N, BonaVista	\$7	1.1%	0.8%	0.7%
Franklin Templeton Investments	Franklin, Bissett	\$7	2.5%	2.3%	2.0%
HSBC Funds		\$6	2.2%	1.6%	1.4%
IA Clarington		\$6	2.7%	2.4%	1.9%

Source Fundata Canada and Author's calculations<sup>11</sup>

product is resold. As such, mutual fund fee estimates in this report are likely lowballed. Other international studies have placed Canadian equity fund fees higher than 2.1%.8 In fact, Canada has the highest equity mutual fund fees in the world.9 On the other hand, Canada's workplace pension plan fees are in the mid-range, sitting in 10th lowest place among 26 countries in the OECD with comparable data.10

Companies apply different fees to the various types of funds they offer. As seen in *Table 2*, they are generally highest on equity funds that hold mostly stocks, and lower on balanced funds holding both stocks and bonds. Bond

(or fixed income) funds have the lowest fees in this sample and hold mostly bonds. Money market and specialty funds were excluded from *Table 2*, as they are relatively small categories, although the former can have quite low fees and low returns.

Within this sample, the largest fund family by assets is Investors Group, which manages \$67 billion worth of assets in 2014. Its average asset-weighted fund fees are also the highest of any fund family: 2.9% on equity funds and 2.8% on balanced funds. At the other end, the Phillips, Hager & North (PH&N) fund family has the lowest fees: 1.1% on equity and 0.8% on balanced funds. Even these much lower fees are still two to three times higher than pension fund fees. Despite PH&N's low fees, they represent only \$7 billion in assets in this sample, making them one of the smallest fund companies in Canada.

As demonstrated above, small difference in annual fees can have a dramatic impact on the size of a person's retirement savings. The compounding of high fees takes its toll over time. *Table 3* calculates the impact on retirement date and percentage difference in retirement savings for each company in Table 2 compared to an average pension plan. Specifically, the right-hand column shows the age at which a person would have to stop contributing to a particular fund family in order to accumulate the same amount as they would have accumulated by age 65 with identical contributions to a pension plan. The column next to that (% less savings at 65) shows how much less a person would have earned by age 65 in a particular fund family compared to the earnings of an average pension plan investor with identical contributions

The most expensive fund family in this sample is Investors Group whose equity funds charge an average fee of 2.9% a year. This does not seem like much, even compared to the average pension plan fee of 0.38% a year. But over 40 years the impact is dramatic. The average equity fund investor in an Investor Group fund would have to keep working and contributing until age 76 to save as much as they would have with identical contributions to the average pension plan. Alternatively, that Investors Group investor could retire at 65, but would do so with 41% less than they would have had with identical contributions to the average pension plan.

The fund company with the lowest fees in this sample, Phillips, Hager & North, comes closer to replicating the benefits of a standard pension plan. But even then, mutual fund investors here would have to work until age 68, or retire at age 65 with 16% smaller savings compared to a pension plan.

TABLE 3 Equity Mutual Fund Companies Fee Impact Compared to Pension Plans, 2014

Fund Company Name	Assets \$(bil)	% Less Savings at 65	Work Until Age
Investors Group	\$67	-41%	76
AGF Funds	\$13	-40%	75
IA Clarington	\$6	-39%	75
Renaissance Investments	\$15	-38%	74
Sentry Investments	\$12	-38%	74
Desjardins Funds	\$15	-38%	74
Franklin Templeton Investments	\$7	-37%	74
Manulife Financial	\$10	-37%	74
Mackenzie Group of Funds	\$28	-36%	74
SEI Investments Canada Company	\$8	-36%	74
CI Investments Inc.	\$42	-36%	74
Invesco Canada Ltd.	\$26	-35%	73
Dynamic Mutual Funds	\$19	-35%	73
National Bank of Canada	\$16	-33%	72
HSBC Funds	\$6	-33%	72
TD Asset Management Inc.	\$31	-32%	72
BMO Mutual Funds	\$34	-31%	72
CIBC Asset Management	\$21	-28%	71
RBC Global Asset Mgmt Inc.	\$62	-27%	70
Scotia Mutual Funds	\$15	-27%	70
MD Management Limited	\$9	-24%	69
Beutel Goodman	\$14	-20%	69
Phillips, Hager & North	\$7	-16%	68

Source Fundata Canada and Author's calculations<sup>12</sup>

Most Canadian savers would have to work into their 70s or retire at 65 with 20% to 40% less money compared to pension plans if mutual funds were their primary retirement income source.

#### **Conclusion and Recommendations**

While individual Canadians have little choice between mutual fund based RRSPs and a workplace pension plan, policy-makers can make choices that would improve retirement options for everyone. Over the past two decades,

financial institutions and governments have promoted individual savings accounts (RRSPs) as the preferred savings vehicle for retirement where a workplace pension does not exist. Because the RRSP option is clearly failing, and workplace pensions depend on employers offering them, a third choice has gained traction in recent years: the expansion of public pension plans like the Canada Pension Plan, or the creation of provincial alternatives like the planned Ontario Retirement Pension Plan.

The decisions that policy-makers take with respect to the broad design of retirement savings systems shape the options that Canadians have. Allowing for the steady decline of the workplace pension plan while encouraging the mutual fund/RRSP industry forces most Canadians, particularly in the private sector, to choose between mutual funds, not between mutual funds and pension plans. While there is plenty of choice of between mutual funds, even in the best case scenario management fees remain several times higher than they are for pension plans. The practical result is that Canadians today will have to work many more years beyond age 65 (if they can) or retire with substantially smaller savings than if they had pension plans.

The anxiety this creates during RRSP season—Have I saved enough? Have I picked the "right" mutual fund? Will my savings be wiped out in a down market? — is a feature of the RRSP retirement system itself, not a personal failing. A retirement system with high fees, and delayed retirement dates to make up for them, is not a foregone conclusion. Policy-makers have a choice of retirement systems even if more retail investors do not.

As a stopgap measure, trailer fees, the portion of the mutual fund fee that goes back to the advisor, could be capped. The trailer fee could also be unbundled or banned with individual investors deciding whether their financial advisor's advice deserves a portion of their savings ever year. These suggestions were tabled recently by the Canadian Securities Administrators.13 These changes have the potential to reduce fees, although it's unlikely they would ever reach the low level of pension funds. Supporting the expansion of workplace pension plans, or public pension plans like the CPP or its Ontario derivative, is also a viable alternative.

# **Appendix 1**

Lifetime Contributions to a Pension or Mutual Fund

THROUGHOUT THIS REPORT the final accumulated savings of mutual fund and pension plan investors are compared either in dollar terms or years worked. In those comparisons the following methodology is used.

The average investor, and their 10% annual contributions, is created from the average income of each age between 25 and 64.14 After age 64, the income used is the average income from ages 62 to 64, as sample size drops off dramatically after retirement kicks in. This is likely an overestimate of earning potential after age 65, which declines after peaking in the early 50s, often due to health issues.

The average market income for each age is not adjusted for inflation, and recent trends do show average income is increasing at the rate of inflation. To correct for that, the average market income for each age receives inflation increases of 2% a year. So at age 26 the salary is \$27,501×1.02 = \$28,051. However, at age 35, the inflationary increases add up:  $40,634 \times (1.02)^10 =$ \$49,532, as shown in *Table 4*.

Each year a contribution of 10% of salary is made.

Both the accumulated pension and accumulated mutual fund columns follow the same approach, although with different fees. They assume 6.2% annual growth, in line with the CPP. 15 Fees are deducted from annual growth. They assume that new contributions are made over the course of the year and therefore receive half of the growth minus fees.

 TABLE 4
 Annual Contributions by Year, Mutual Fund Vs Pension

Age	Average Market Income	Inflation Adjusted Average Market Income	Contribution	Accumulated Pension (MER 0.38%)	Accumulated Mutual Fund (MER 2.1%)
25	25214	25214	\$2,521	\$2,668	\$2,625
26	27501	28051	\$2,805	\$5,710	\$5,597
27	30527	31760	\$3,176	\$9,311	\$9,070
28	33414	35459	\$3,546	\$13,502	\$13,063
29	33442	36199	\$3,620	\$18,013	\$17,298
30	37243	41119	\$4,112	\$23,293	\$22,209
31	42298	47634	\$4,763	\$29,551	\$27,988
32	37237	42774	\$4,277	\$35,672	\$33,509
33	37693	44163	\$4,416	\$42,293	\$39,401
34	40239	48090	\$4,809	\$49,704	\$45,936
35	40634	49532	\$4,953	\$57,694	\$52,889
36	39101	48617	\$4,862	\$66,055	\$60,035
37	41328	52413	\$5,241	\$75,293	\$67,864
38	41368	53514	\$5,351	\$85,182	\$76,129
39	44479	58689	\$5,869	\$96,179	\$85,263
40	42844	57663	\$5,766	\$107,711	\$94,670
41	46729	64148	\$6,415	\$120,581	\$105,127
42	43254	60567	\$6,057	\$133,832	\$115,651
43	48734	69604	\$6,960	\$148,784	\$127,531
44	47775	69599	\$6,960	\$164,606	\$139,902
45	41286	61350	\$6,135	\$180,499	\$151,942
46	48864	74061	\$7,406	\$198,626	\$165,776
47	45548	70416	\$7,042	\$217,432	\$179,809
48	47169	74381	\$7,438	\$237,741	\$194,827
49	46723	75152	\$7,515	\$259,312	\$210,544
50	44725	73376	\$7,338	\$281,955	\$226,729
51	45410	75989	\$7,599	\$306,185	\$243,848
52	43061	73500	\$7,350	\$331,569	\$261,421
53	37618	65494	\$6,549	\$357,606	\$278,902
54	49502	87907	\$8,791	\$387,465	\$299,393
55	47221	85535	\$8,553	\$418,818	\$320,488
56	39746	73435	\$7,343	\$450,750	\$341,220
57	37836	71303	\$7,130	\$484,322	\$362,590
58	35733	68688	\$6,869	\$519,578	\$384,575
59	29936	58695	\$5,870	\$555,858	\$406,449

 TABLE 4
 Annual Contributions by Year, Mutual Fund Vs Pension

Age	Average Market Income	Inflation Adjusted Average Market Income	Contribution	Accumulated Pension (MER 0.38%)	Accumulated Mutual Fund (MER 2.1%)
60	36513	73022	\$7,302	\$595,723	\$430,688
61	36693	74849	\$7,485	\$638,097	\$456,115
62	36152	75220	\$7,522	\$682,975	\$482,630
63	39411	83641	\$8,364	\$731,332	\$511,099
64	33411	72327	\$7,233	\$781,339	\$539,590
65	36325	80206	\$8,021		\$570,061
66	36325	81810	\$8,181		\$601,955
67	36325	83446	\$8,345		\$635,332
68	36325	85115	\$8,512		\$670,259
69	36325	86818	\$8,682		\$706,802
70	36325	88554	\$8,855		\$745,031
71	36325	90325	\$9,033		\$785,020

## Notes

- 1 Statistics Canada, Survey of Financial Security (2005) PUMF and author's calculations. Includes those families with a 45-64 year old, excludes those who've already retired.
- 2 Statistics Canada Trusteed Pension Funds Cansim: 280-0002 Q2 2014, Canadian ETF Association December 2014 (http://www.cetfa.ca/infocentre/stats.html) and Investment Funds Institute of Canada December 2014 (https://www.ific.ca/en/stats/)
- 3 Cansim 280-0006, Cansim 280-0005 and author's calculations
- 4 Pension fund includes both defined benefit and defined contribution funds, although defined benefit funds were 6 basis points below the average in 2012. More recent data differentiating DB and DC plans is not yet available.
- 5 Includes only mutual funds (excludes segregated, wrap, LSVCC and pooled funds), includes only parent funds and not child (clone) funds, includes only funds with initial investment under \$10,000.
- 6 The Office of the Superintendent of Financial Institutions Canada estimates real returns for all assets at 4.2% over the long term. The author has assumed 2% inflation, leading to nominal returns of 6.2% per year over the long term. See Office of the Superintendent of Financial Institutions Canada, 26th Actuarial Report on the Canada Pension Plan as at 31 December 2012, Table 62  $(www.osfi-bsif.gc.ca/eng/oca-bac/ar-ra/cpp-rpc/pages/cpp26.aspx\#Toc-tbl62\,)$
- 7 Pension funds can fare somewhat better. For a recent analysis of international mutual fund performance see: Ferreira, Miguel A., Aneel Keswani, Antonio F. Miguel, and Sofia Brito Ramos. "The Determinants of Mutual Fund Performance: A Cross-Country Study." July 27, 2011. Swiss Finance Institute Research Paper No. 31.
- 8 Khorana, Ajay, Henri Servaes, and Peter Tufano. "Mutual fund fees around the world." Review of Financial Studies 22.3 (2009): 1279-1310.
- 9 Khorana, Ajay, Henri Servaes, and Peter Tufano. "Mutual fund fees around the world." Review of Financial Studies 22.3 (2009): 1279-1310.

- 10 OECD (2013), Pensions at a Glance 2013: OECD and G20 Indicators, OECD Publishing. Table 8.11, http://dx.doi.org/10.1787/pension\_glance-2013-en
- 11 Includes only mutual funds (excludes segregated, wrap, LSVCC and pooled funds), includes fund families where assets are >\$5 billion, includes only parent funds and not child (clone) funds, includes only funds with initial investment under \$10,000. Figures are for November 2014
- 12 Includes only mutual funds (excludes segregated, wrap, LSVCC and pooled funds), includes fund families where assets are >\$5 billion, includes only parent funds and not child (clone) funds, includes only funds with initial investment under \$10,000. Figures are for November 2014. See Appendix 1 for methodology
- 13 For a discussion of these issues see: Canadian Securities Administrators, Discussion paper and request for comment 81-407: Mutual fund fees, December 13, 2012 (www.osc.gov.on.ca/en/ NewsEvents\_nr\_20121213\_csa-dis-paper-mutual-fund-fees.htm)
- **14** Derived from the Survey of Labour and Income Dynamics (2010) PUMF.
- 15 The Office of the Superintendent of Financial Institutions Canada estimates real returns for all assets at 4.2% over the long term. The author has assumed 2% inflation, leading to nominal returns of 6.2% per year over the long term. See Office of the Superintendent of Financial Institutions Canada, 26th Actuarial Report on the Canada Pension Plan as at 31 December 2012, Table 62 (www.osfi-bsif.gc.ca/eng/oca-bac/ar-ra/cpp-rpc/pages/cpp26.aspx#Toc-tbl62)

