Negative Effects of the GIS Clawback and Possible Mitigating Alternatives

By Diana Chisholm

Abstract

In Canada, there are three main sources of government-provided retirement income: the Canada/Quebec Pension Plan (C/QPP), which have benefits and contributions based on earnings up to the Yearly Maximum Pensionable Earnings; Old Age Security (OAS), which is a fixed amount for most but does include a `clawback' of benefits for high-income individuals; and the Guaranteed Income Supplement (GIS), which is designed to supplement those with extremely low income. The annual GIS benefit is reduced, or clawed back, by 50 cents for every dollar of annual income the person has in retirement, including C/QPP and income from Registered Retirement Savings Plans (RRSP) and other savings. OAS benefits are not included in determining the GIS clawback.

The result of this is that low-income individuals who attempt to enhance their retirement replacement ratio actually see a decrease in government-provided support the more they save for retirement. In fact, savings in an RRSP can effectively be taxed at more than 100% through corresponding reductions in the GIS, social housing, home care, GAINS (Ontario's Guaranteed Annual Income Supplement), and other benefits which are based on one's personal retirement income.

This paper explores a basic GIS exemption, a GIS clawback rate of lower than 50%, and various combinations of the two as alternative policies for the GIS. The goal is to improve the fairness of the GIS and reduce the disincentive to save for retirement, without increasing the overall cost of the program significantly.

Table of Contents

1.0 Introduction

How to adequately save for retirement is a problem that every Canadian faces. How to ensure that the government programs that provide retirement income are both fair and solvent is extremely important to the Canadian government. As has been stated (Brown [1], 2006), there are significant differences between Canada and the United States in their retirement income programs. In particular, the welfare benefit for extremely low-income Canadians is very important and bears further investigation. This report examines this issue.

First, Section 2 outlines the current retirement income provided by the Canadian government. Section 3 discusses the problems associated with the current GIS clawback and defines the assumptions in the model used to investigate mitigating alternatives in the rest of this report. Section 4 examines three possible alternative scenarios to the present GIS clawback: a basic exemption, a clawback of less than 50%, and a combination of these two.

In Section 5, some further applications of this research are considered, including determining an optimal strategy for an individual Canadian nearing retirement, projecting the cost of the GIS using demographic information, and making more complicated and realistic assumptions about personal savings in the model. Finally, section 6 provides conclusions that can be drawn from this research and recommendations for how to proceed.

2.0 Retirement Income in Canada

In Canada, there are three main sources of government-provided retirement income: the Canada/Quebec Pension Plans (C/QPP), Old Age Security (OAS), and the Guaranteed Income Supplement (GIS). In addition to these sources, most Canadians also have other savings, in the form of a Registered Retirement Savings Plan (RRSP), a Registered employer-sponsored pension plan or simply personal savings and investments. Registered plans bring significant tax incentives to the participant.

2.1 Canada/Quebec Pension Plan

The C/QPP pay an income-based benefit. They provide a 25% replacement rate on average pre-retirement earnings up to the Yearly Maximum Pensionable Earnings (YMPE). The YMPE is indexed to average wages and the 2007 value is $43,700 annually. No benefit accrues in a year where earnings are less then the Year's Basic Exemption (YBE) which is $3500 constant. (Treasury Board of Canada [6], 2007) Thus, an individual's annual C/QPP benefit accrual is

$$C/QPP = \begin{cases} 0 & if \quad income < 3,500 \\ 0.25(income) & if \quad 3,500 \leq income \leq 43,700 \\ 10,925 & if \quad income > 43,700 \end{cases}$$

The C/QPP program is partially funded, and employees make contributions to the plan, until they retire.

2.2 Old Age Security

OAS is a demogrant-type benefit provided to all Canadians meeting a residence requirement with a fixed benefit for most but a `clawback' for extremely high-income

individuals. The OAS benefit as of June 2007 is $431.93 monthly, or $5,903.16 annually. If an individual's net annual income in retirement (including OAS) is above $63,511, they must repay part of the OAS amount, at a clawback rate of 15%. Thus, the OAS amount is eliminated entirely with a retirement income of $102,865. (Service Canada [4], 2007)

2.3 Guaranteed Income Supplement

The GIS is a welfare benefit designed to supplement retirees (mostly aged 65+) who have extremely low retirement income. The GIS benefit is clawed back at a rate of 50 cents for every dollar of personal annual retirement income from C/QPP and any personal savings, including RRSPs, but not OAS. The June 2007 GIS benefit for single Canadians is $620.91 monthly or $7,450.92 annually. There are slightly different rates for married couples who are both pensioners, and couples where one person is a pensioner and the other is not. In these cases, the total retirement income from both people is used to determine the clawback amount. The GIS ignores the first 20% of income or $500, whichever is less, is the latter being the same as the deduction for employment expenses in the Canadian income tax act. (Service Canada [2], 2007)

3.0 Problems with GIS

The main problem with the GIS clawback is that it provides a disincentive for poorer Canadians to save for retirement. As Shillington ([5], 2006) notes, personal savings can be taxed at effectively more than 100%, because so many social benefits, including GIS, depend on retirement income. Besides the GIS, income-tested benefits include home care, social housing, meals on wheels and Ontario's GAINS (Guaranteed Annual Income Supplement). Most generic financial literature advises Canadians to put money into their RRSPs, but for poorer Canadians, saving money in an RRSP is the last thing they should be doing, because they will actually lose more than a dollar for every dollar they have in retirement income.

3.1 Model Assumptions

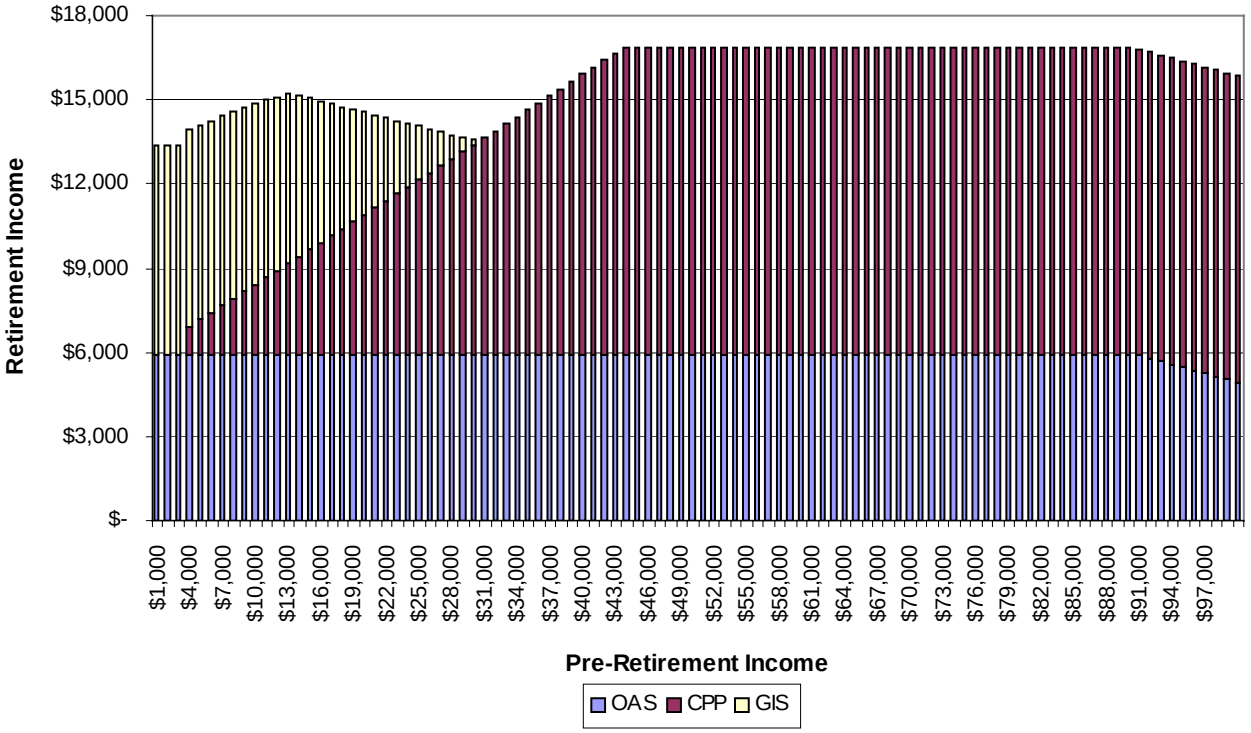
The model used to investigate alternative policies for the GIS clawback is based on some simplifying assumptions. All payment rates used are the most recently available. Only unmarried GIS rates are considered, but the essential results would be similar for married couples.

The most important and sensitive assumption is how much Canadians will save privately. The model assumes that Canadians who do not receive a 70% replacement ratio from government sources (C/QPP+OAS) will make up the difference through personal savings. That is, all Canadians are assumed to be aiming for a 70% replacement ratio at retirement.

3.2 Current Results

Under this model and the current GIS benefit formula, the sum of the various government sources of income can be graphed (Figure 1) for different levels of pre-retirement income.

Figure 1: 2007 Canadian Retirement Income

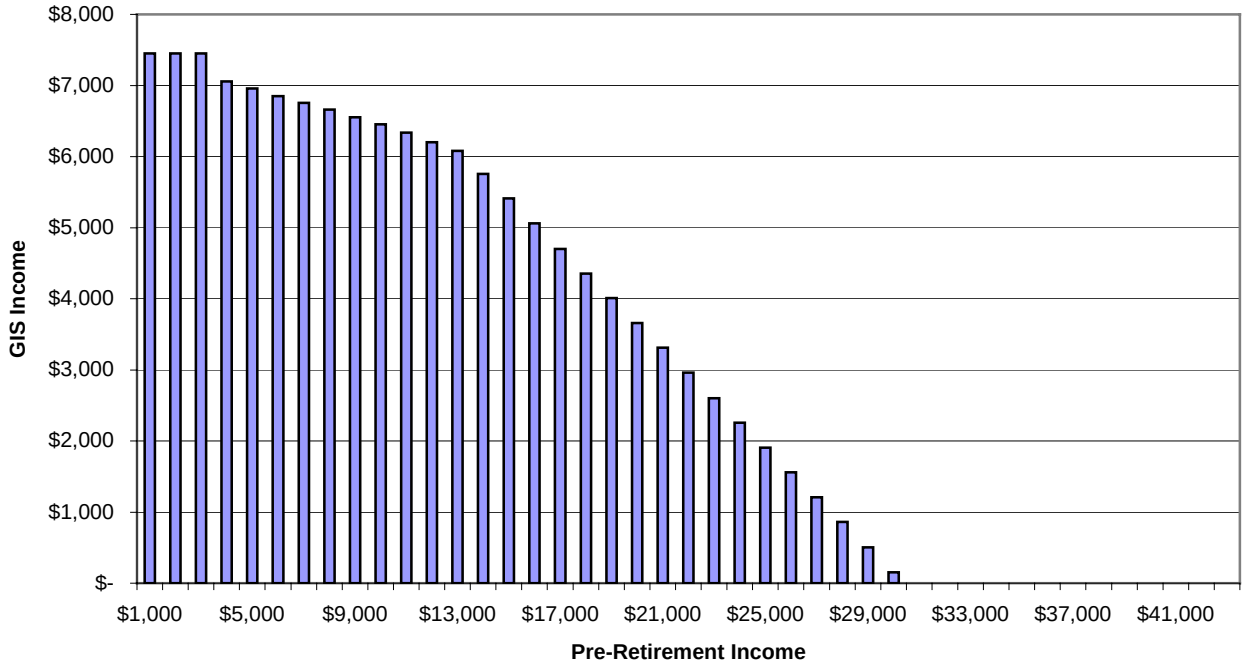


Many factors can be seen easily from this graph. Canadians with pre-retirement income between the YMPE and $91,000, get a total of $10,925 + $5,903.16 = $16,828.16 annually from government sources. At a pre-retirement income of $91,000, the 70% replacement ratio assumed means that retirement income exceeds $63,511 and thus the OAS clawback comes into effect. If the graph were to continue to the right, the OAS would be entirely eliminated at a pre-retirement income of $147,000. At that point, the only government-provided income would be the C/QPP, at the flat rate of $10,925. This is in contrast to retirement income systems such as the United States Social Security (OASDI), where the amount of government income is strictly increasing with pre-retirement earnings, albeit at a very low marginal rate in the upper levels.

At the other end of the scale, the C/QPP begins when the pre-retirement income is greater than $3500, and increases at an annual accrual rate of 25%. The GIS benefit is largest for the lowest incomes, and decreases quickly due to the 50% clawback rate and is completely eliminated for pre-retirement incomes of $31,000 and above. This is where the GIS policy,

combined with OAS and C/QPP, results in a peculiar feature of the graph: a distinctive V-shape in total income provided in the pre-retirement income range of $13,000 to $44,000. Because in this graph the baseline of the GIS is changing, examining the GIS portion of income alone (Figure 2) can lead to a clearer picture of what is happening.

Figure 2: 2007 GIS Income



At a pre-retirement income levels over $3500 per year, C/QPP is beginning to be paid, and that income is effectively taxed at 50% through the GIS clawback. Up to pre-retirement income of $13,000, the combined OAS and C/QPP are sufficient to provide a 70% replacement ratio, so the model assumes no additional savings. However, at pre-retirement income of $14,000, private savings begin, and the combined C/QPP and private savings are both effectively taxed at 50% due to the GIS clawback. This results in the change of slope seen in the graph between $13,000 and $14,000. The GIS is quickly eliminated by the time pre-retirement earnings reach $31,000. Note that at this point, individuals are living on $21,700 per year, and do not qualify for the GIS welfare benefit.

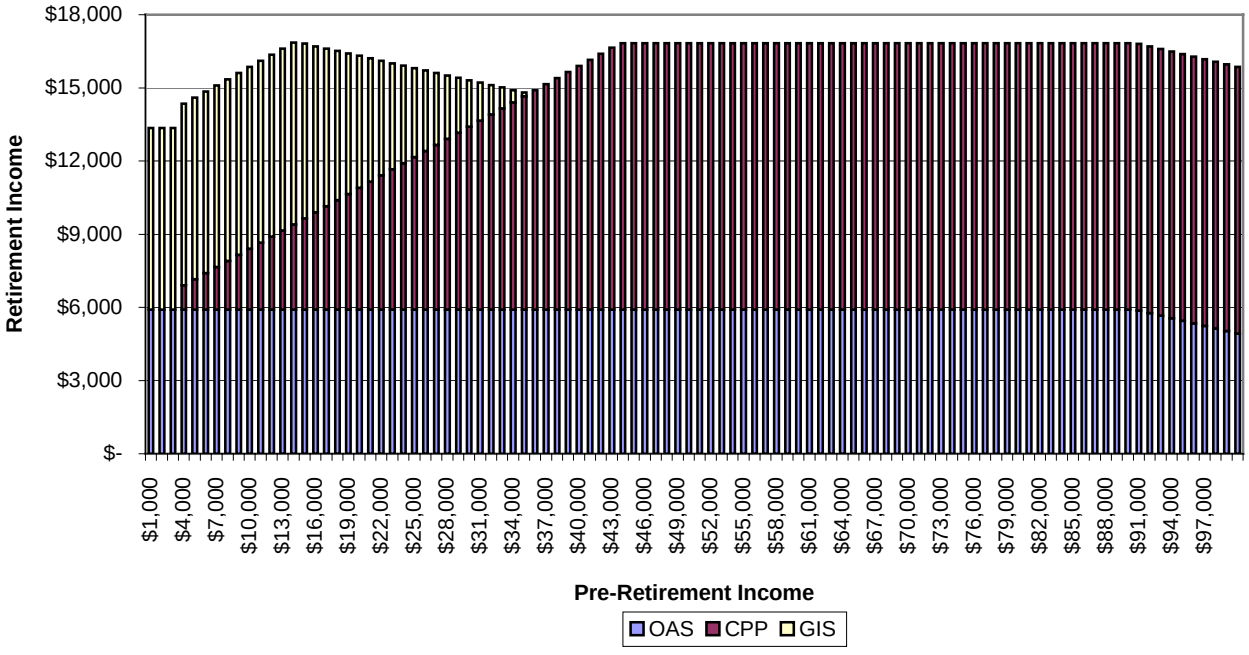
4.0 Possible Mitigating Alternatives

Because the current GIS policy results in a disincentive for poorer seniors to save for retirement (and punishes them if they do) and because of the strange 'V' shape in total government-sponsored benefits, several mitigating alternatives are considered.

4.1 Exempt Income

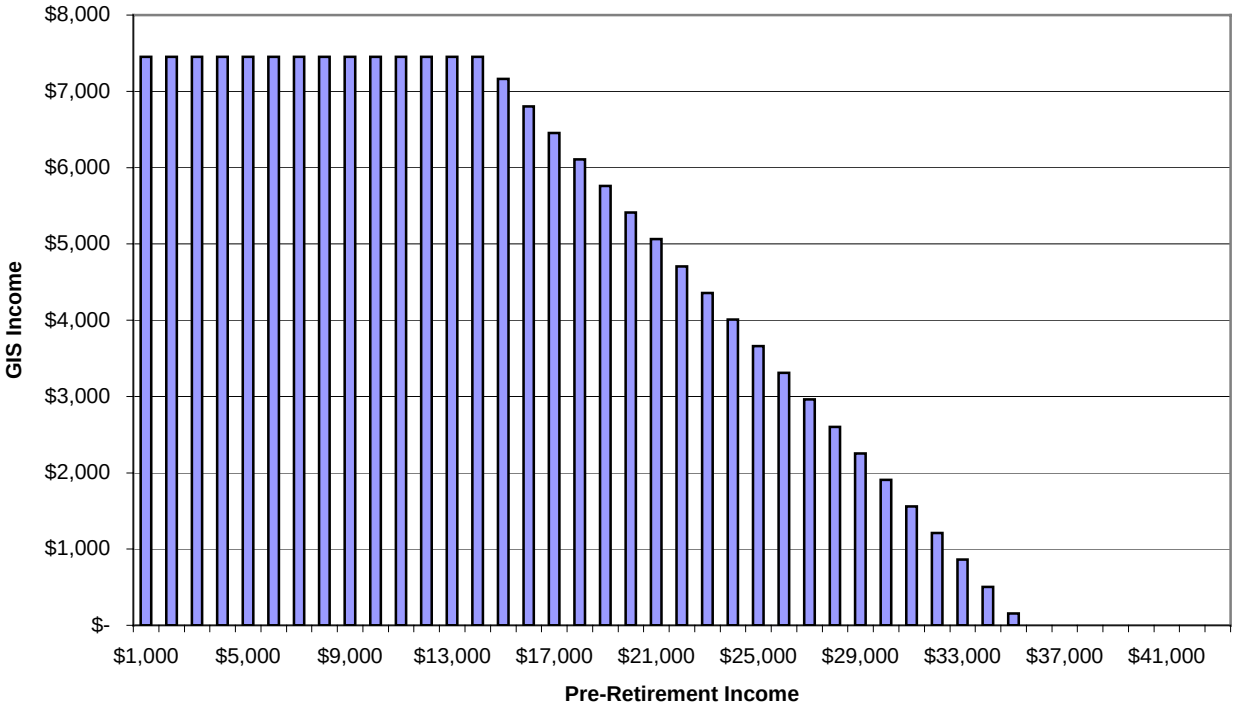
The GIS currently ignores the first 20% of income or $500, whichever is less, but this amount is not significant in reducing the disincentive to save. An exemption on the first $n of income beyond the $500 deduction for employment expenses available to all Canadian workers is considered here. Several values of 'n' were considered to try to eliminate the V-shape without excessively increasing the overall cost of the GIS. In addition, the model limits total government-provided income to no more than $16,828.16, the amount paid at higher levels of income. With GIS exempt income of $3500, found numerically, (which is coincidentally the same as the C/QPP YBE), in addition to the existing $500 exemption, the effect of the V is slightly lessened and the overall benefit limit is achieved (Figure 3). However, the V is not entirely eliminated.

Figure 3: Retirement Income with $3500 GIS Exempt Income



Looking at the GIS portion only in this scenario (Figure 4), the differences between this and the current policy are clear. The GIS benefit is flat for pre-retirement income levels up to $14,000, where C/QPP and OAS are not sufficient to provide a 70% income replacement. Then, with C/QPP and private savings over $3500, the GIS again reduces at a 50% rate. Here, the GIS is completely clawed back at a pre-retirement income level of $36,000, as opposed to $31,000 currently.

Figure 4: GIS Income with $3500 GIS Exempt Income

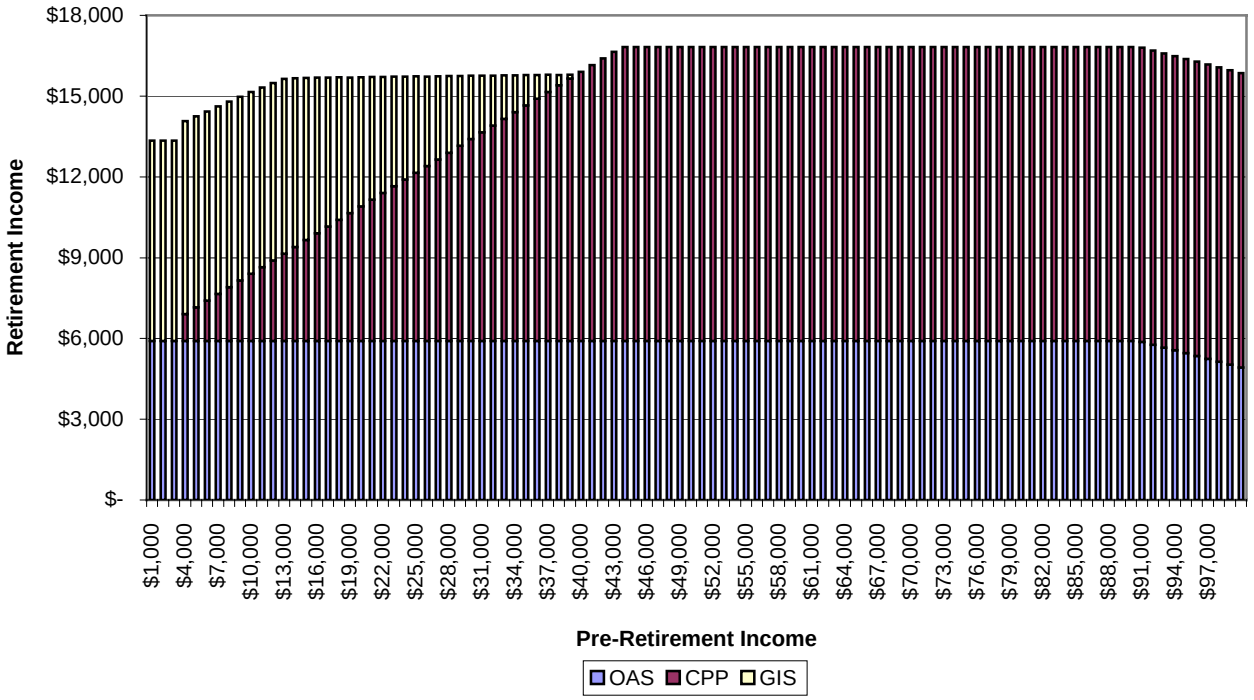


Although allowing individuals to save so that the first $3500 of their retirement income per year is unreduced, is a step in the right direction, the fact remains that beyond this amount, the clawback rate is still 50%. The V-shape cannot be eliminated with a deduction (i.e., exempt income), no matter how large. Thus, lowering the clawback rate itself is the next logical alternative to consider.

4.2 A Lower Clawback Rate

Another possibility is to have no personal exemption beyond the $500 employment expenses equivalent, but to have a clawback rate of x%, where x < 50. Again, several values of x were considered to try to eliminate the V-shape while keeping the total GIS cost as low as possible. Two particular values of x are discussed here: 35% and 31%, and each are significant in a different way.

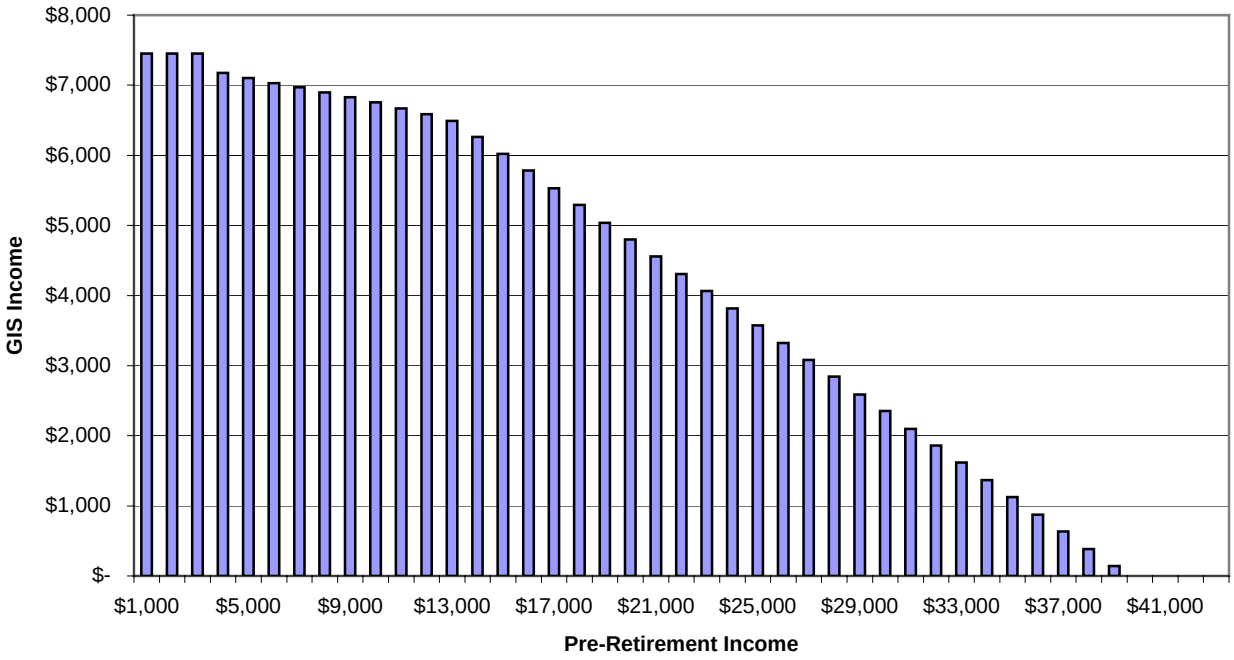
Figure 5: Retirement Income with 35% GIS Clawback Rate



A clawback rate of 35% is the highest rate, found numerically, that results in the total income provided from government sources being non-decreasing in the lower income range (Figure 5). Thus, the V-shape is entirely eliminated, and individuals with pre-retirement income ranging from $14,000 to $39,000 all receive essentially the same total amount of government income. This is a vast improvement over the current situation. Looking at the GIS portion alone in this scenario (Figure 6), the slope still changes twice – once when the C/QPP start being paid, and again when personal savings are needed to reach 70% replacement – as with the current 50%

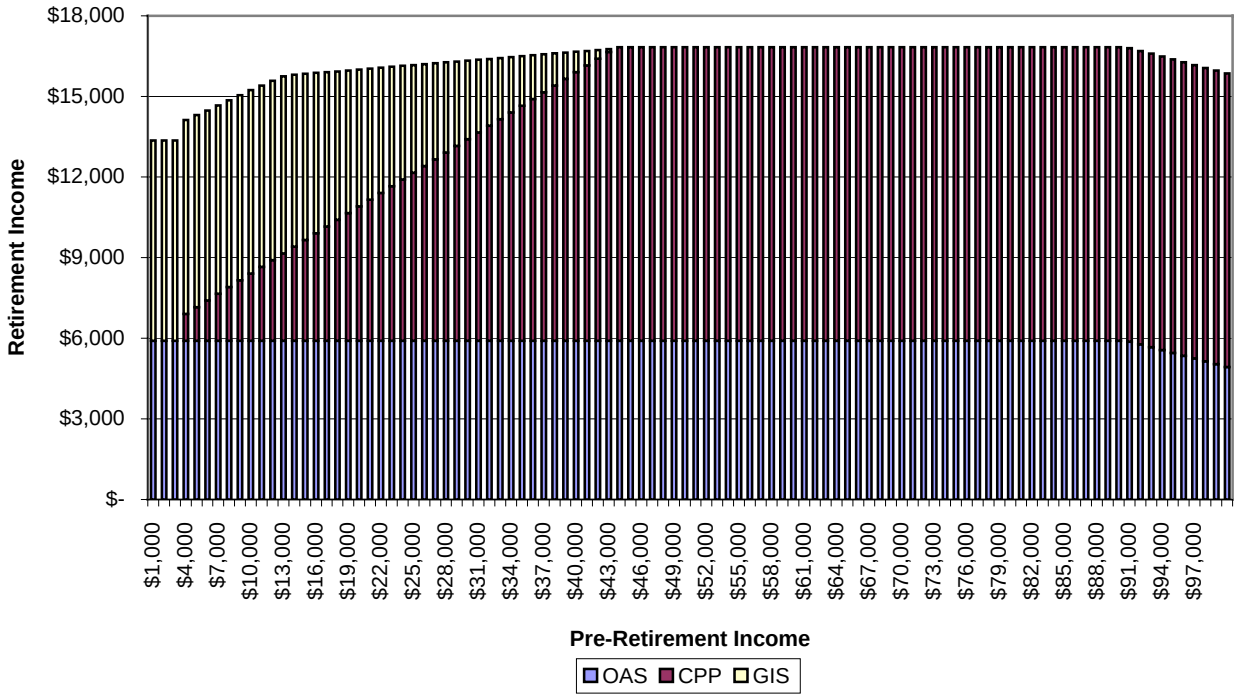
clawback rate. However, the slope is less steep, and the GIS is only entirely clawed back at a pre-retirement income of $40,000, as opposed to $31,000.

Figure 6: GIS Income with 35% GIS Clawback Rate



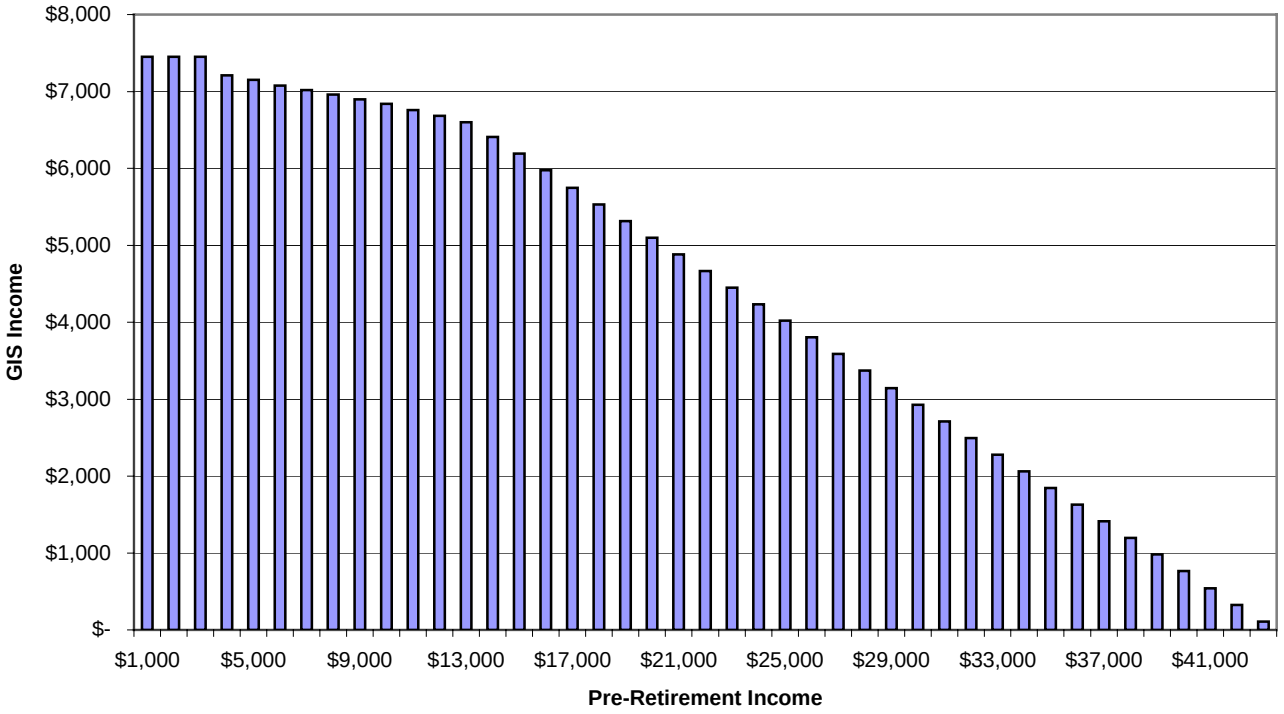
With a clawback rate of 31%, again found numerically, the total income provided forms a smooth curve through all of the lower income ranges (Figure 7), up to the YMPE of $43,700.

Figure 7: Retirement Income with 31% GIS Clawback Rate



There is a slight advantage of the 31% rate over the 35% alternative in that the total amount of funding is strictly increasing, rather than non-decreasing but constant over a range of incomes. However, this comes at a cost of 4% of all private savings for low-income Canadians (i.e. 35% – 31%). The GIS income graph for this scenario (Figure 8) looks almost identical to that for the 35% rate, except the GIS is now completely eliminated at $44,000 of pre-retirement income and the two slopes are both slightly less steep than before.

Figure 8: GIS Income with 31% GIS Clawback Rate



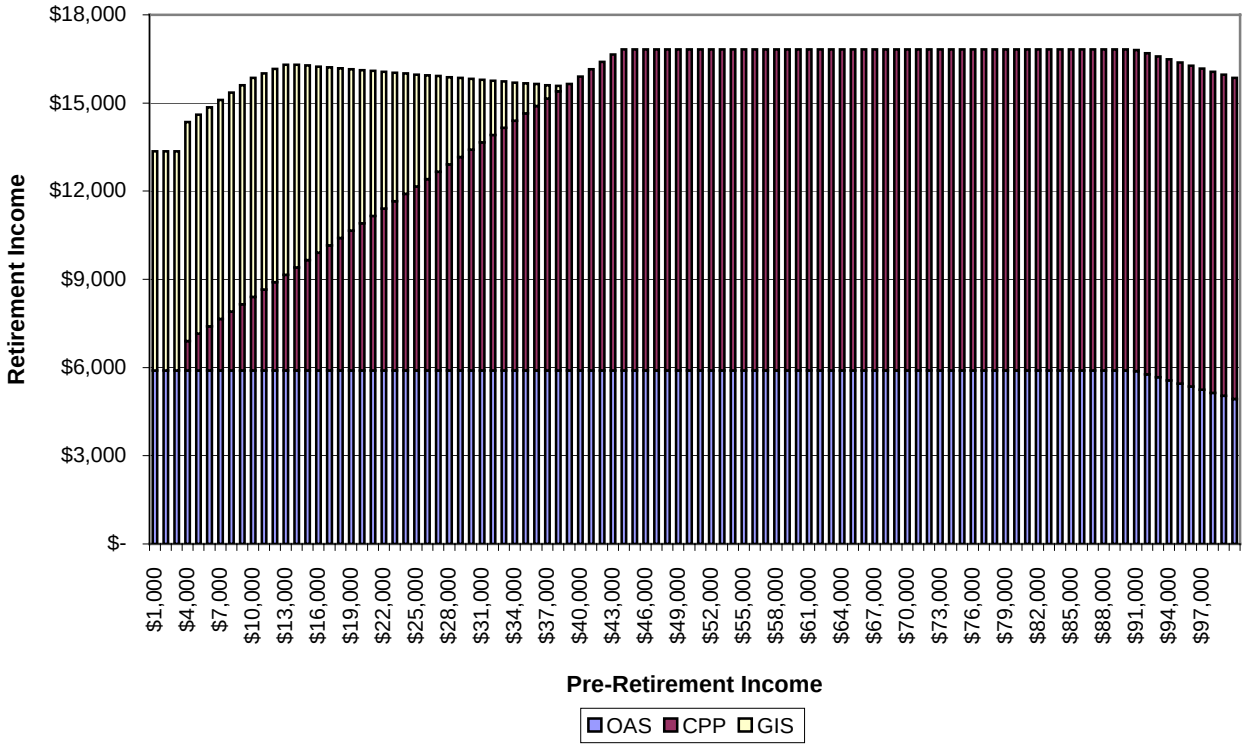
Lowering the GIS clawback rate is a much more effective way to reduce the disincentive to save and smooth out the total government income provided to Canadian seniors. Any clawback rate between 31% and 35% would be reasonable, since that range is where the total income is non-decreasing over the entire income range (not including wealthier Canadians who face the 15% OAS clawback). There is still one more possibility to consider: combining exempt income with a lower clawback rate.

4.3 Combination of Exempt Income and Lower Clawback Rate

Two kinds of modifications have already been examined: a large reduction in the clawback rate, and a significant increase in the exempt income. Here a compromise is reached by performing a moderate change in both items in a single model. If the previous models were simply combined (for example, $3500 exempt income and a clawback rate of 35%) the cost would be prohibitive. Hence, each change must be reduced slightly when they are combined together.

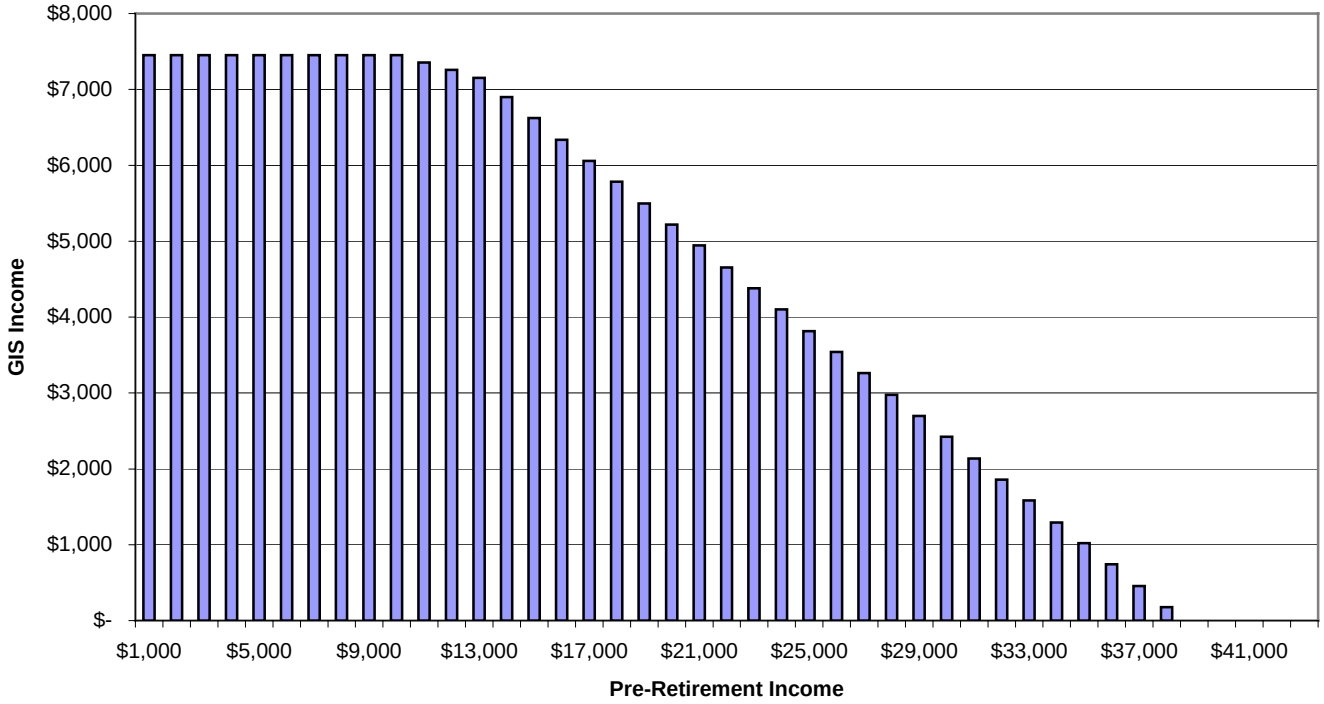
An exempt income of $2000 in addition to the $500 (a compromise between $500 and $3500 + $500) and a clawback rate of 40% (a compromise between 50% and 31% or 35%) are used in this model. An initial disadvantage of this model would be that it is more complex to explain to retirees.

Figure 9: Retirement Income with $2000 GIS Exempt Income and 40% GIS Clawback Rate



As it turns out, the combination is not as effective as simply lowering the clawback rate to 35% or 31%. The V-shape is still present (Figure 9), and to make the total income provided by the government be non-decreasing, the total cost of the GIS would have to be higher with the income exemption than without.

Figure 10: GIS Income with $2000 GIS Exempt Income and 40% GIS Clawback Rate



The graph of the GIS alone in this scenario (Figure 10) shows a similar pattern to the pure $3500 exemption, but with a slightly less steep slope and an earlier drop-off point. In this scenario, the GIS is eliminated at $39,000 of pre-retirement income.

Of all the scenarios, the ones with no additional exempt income and a clawback rate of between 31% and 35% appear to be the most effective at removing the anomaly in the total government income graph present with today's GIS formulation.

5.0 Extensions of Research

Over the course of this project, several interesting potential extensions developed.

5.1 Cost of GIS program

The total cost of the GIS program is an important consideration when discussing new policies. Calculating the approximate total cost is not as simple as the area under the GIS curve, however: the number of Canadian retirees in each income bracket needs to be taken into account. Thus, the total cost of the GIS, given our model assumptions, would be

$$\sum_{i=1}^{43} n_i GIS_i,$$

where n_i is the number of Canadians in retirement who had pre-retirement earnings of between $\$(i-1),000$ and $\$i,000$ and GIS_i is the amount of GIS calculated by the model for income bracket i. Unfortunately, at the time of writing, this information of the approximate number of Canadians in each income bracket was unavailable.

5.2 Optimal Strategies

Consider the current GIS regime. For a particular individual, is there an optimal strategy as to the amount to save? At what point does saving in an RRSP become advantageous, even with the clawback and reduction in other benefits? The answer depends on many things, including the marginal tax rate that the individual would be saving by putting money into RRSPs.

5.3 Alternative Savings Assumptions

The assumption that all Canadians, regardless of pre-retirement income level, will aim for a 70% replacement ratio and actually be able to achieve it is not entirely realistic. Individuals with lower pre-retirement income will generally have less disposable income and therefore be less equipped to save for retirement at all.

6.0 Conclusions

This report examined the best way to correct the GIS system to reduce the disincentive to save that is present in the current GIS regime. By ensuring that it is always in a Canadian retiree's best interest to save more for retirement, more Canadians will do so and thus be less reliant on government funding.

Lowering the clawback rate on the GIS is the simplest and most effective way to achieve this goal. The clawback rate can be lowered such that the total funding from government sources is non-decreasing with respect to pre-retirement income. The clawback rate that achieves this is 35% rather than the existing 50%.

Acknowledgements

I would like to thank my supervisor, Dr. Rob Brown, for suggesting this topic for my research and giving me the resources and encouragement to complete it. I would also like to thank the participants at the 42nd annual Actuarial Research Conference, whose insightful questions after my presentation on this topic gave me more ideas of how to extend this research.

Bibliography

[1] Brown, Robert L. (2007) *Actuarial Issues in the Design of an Optimal Social Security System.* International Actuarial Association, PBSS conference proceedings. Retrieved from IAA website: http://www.actuaries.org/PBSS/Colloquia/Helsinki/Papers/Brown.pdf on June 12, 2007.

[2] *OAS/GIS/Allowance Table of Rates.* (2007) Retrieved from Service Canada website: http://www.hrsdc.gc.ca/en/isp/oas/pdf/tabrates2007.pdf on June 12, 2007.

[3] Office of the Chief Actuary. (2003) *7th Actuarial Report on the Old Age Security Program.* Retrieved from Office of the Superintendent of Financial Institutions website: http://www.osfi-bsif.gc.ca/osfi/index_e.aspx?DetailID=500 on July 19, 2007.

[4] *Old Age Security Payment Rates: April – June 2007.* (2007) Retrieved from Service Canada website: http://www1.servicecanada.gc.ca/en/isp/oas/oasrates.shtml#tab on June 12, 2007.

[5] Shillington, Richard (2006). *Retirement Planning for the Rest of Us*. Retrieved from: http://www.shillington.ca/Financial_Planning/Index.htm on June 12, 2007.

[6] *The Co-ordination of the Public Service Pension Plan with the Canada Pension Plan or Quebec Pension Plan.* (2007) Retrieved from Treasury Board of Canada website: http://www.tbs-sct.gc.ca/pubs_pol/hrpubs/Pensions/crprfp-cpspp01_e.asp on June 12, 2007